Effectiveness of Best Management Practices in Southwest Florida

LEE COUNTY
SOUTHWEST FLORIDA

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JOHNSON
ENGINEERING

EXECUTIVE SUMMARY

The objective of this project was to evaluate the pollutant removal efficiencies of stormwater best management practices (BMP) currently being permitted in southwest Florida, specifically, how they compare to State treatment requirements and how they compare to the removal efficiencies summarized in *Evaluation of Current Stormwater Design Criteria within the State of Florida (Evaluation of Stormwater Criteria)* by Harvey H. Harper , Ph.D., P.E. and David M. Baker, P.E (Evaluation of Stormwater Criteria). Results from this study will provide a better understanding how these BMPs function in southwest Florida.

A literature review performed by Johnson Engineering identified few stormwater BMP studies that have been completed in southwest Florida. As a result, few local historical data sets exist to evaluate pollutant removal efficiencies of existing stormwater BMPs. Wet detention systems comprise the vast majority of stormwater BMPs permitted and constructed in southwest Florida. Accordingly, the monitoring program for this project focused on evaluating the effectiveness of wet detention systems.

Three (3) wet detention systems located in three (3) different land use categories were identified through the BMP Process Selection phase of this project. The sites are; The Brooks (golf course/residential), Laguna Lake (residential) and Wal-Mart at Six Mile Cypress Parkway and US-41 (commercial).

All three (3) sites use wet detention systems to treat and attenuate the site's runoff. The specific project sites were selected based on: 1) Ability to isolate drainage areas, 2) One outfall structure, 3) Project at or near build out, 4) Ability to isolate land uses, 5) Ability to contact owner, 6) Willingness of owner to participate and allow testing, 7) Site access and security.

Each site was monitored to determine the quality and volume of runoff into the system and discharge from the system. The monitoring involved collecting rainfall measurements, water level data, and inflow and outflow data at each site. Flow composited water quality samples were collected from the inflow and outflow locations at each of the three (3) sites during 15 qualifying rainfall events. The 15 rainfall events occurred over an 18-month period. The water quality samples collected from the sites were laboratory analyzed for chlorophyll-a, total Kjeldahl nitrogen, ammonia, nitrate + nitrite, total nitrogen, ortho-phosphorus, total phosphorus, total suspended

solids, copper, dissolved copper, cadmium and dissolved cadmium. Concentrations of these parameters, along with the measured flow volumes, were used to evaluate the BMP removal efficiencies within each of the stormwater management systems.

The Wal-Mart and Brooks systems generally performed better than the Laguna Lakes system. The Wal-Mart system reduced both mass and concentration loading for all parameters. Efficiencies varied from a high of 99% for ortho-phosphorus concentration to a low of 6% for dissolved cadmium concentration. The Brooks system showed better mass removal efficiency (high of 99%, low of 26%). However, the Brooks system showed an increase in chlorophyll a and dissolved cadmium concentrations, although the cadmium concentrations remained below the drinking water standard of 5 ppb.

Laguna Lakes showed a higher mass loading in the outflow than that in the inflow for all parameters except ammonia, nitrate + nitrite and ortho-phosphorus. The concentrations showed a decrease for half of the parameters: chlorophyll a, total Kjeldahl nitrogen, ammonia, nitrate + nitrite, total suspended solids (TSS), ortho-phosphorus and cadmium. During data collection, the use of reclaimed water for irrigation and excessive aquatic weed growth within the lakes were noted. This could explain the increase in nutrient and copper concentrations and mass loadings within the system. The reclaimed water may have introduced additional nutrients into the lakes (that were not included in the tested stormwater runoff) that increased nutrients and promoted aquatic plant growth. The increase in copper concentrations may be attributed to herbicides used to control the aquatic plants.

State (CH 62-40 F.A.C.) water quality standards specify stormwater treatment system goals of an 80% reduction in pollutants. The Brooks system achieved this mass removal efficiency for seven (7) out of the twelve (12) analyzed parameters and four (4) of the concentration parameters. The Wal-Mart system only achieved the 80% reduction for two (2) mass parameters and one (1) concentration parameter. The Laguna Lakes system achieved the reduction goal for one (1) mass parameter and two (2) concentration parameters.

Loadings calculated using the pollutant loading methodology outlined in the *Evaluation of Stormwater Criteria* over estimate runoff concentrations and under estimate runoff volumes when compared to those determined in this report. The results for mass loading and removal efficiency comparisons are much less uniform as the *Evaluation of Stormwater Criteria* methodology over estimated some parameters in some locations and under estimated others. A pattern could not be identified.

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1.0 INTRODUCTION

In December 2004, Johnson Engineering contracted with Lee County Natural Resources to research and develop local data to document the performance of locally permitted common Best Management Practices (BMP). This will allow Lee County to compare regional data to the performance required by State water quality standards and the performances summarized in *Evaluation of Stormwater Criteri*a, which is the basis of the proposed new State of Florida water quality rule.

The State of Florida's stormwater rule was adopted in 1982 and required all new development and redevelopment projects to include site appropriate BMPs to treat stormwater (Bateman *et al*, 1998). The program established a performance standard of removing at least 80% of the average annual post-development loading of total suspended solids (TSS) for stormwater discharged to most waters and a reduction of pollutant loadings by 95% for discharges to Outstanding Florida Waters (*e.g.*, Estero Bay tributaries).

The State is currently working on a new stormwater rule that will utilize the methods outlined in *Evaluation of Stormwater Criteria* to determine required water treatment. Generally, the *Evaluation of Stormwater Criteria* utilizes estimated loadings per land use and estimated load reductions per BMP to establish existing and proposed pollutant loadings. The proposed loading must be less than or equal to the existing loading to comply with the new rule.

In order to evaluate the effectiveness of BMPs common to southwest Florida, the following tasks were performed:

- Literature Research – Research available local, State and regional sources for studies that address pollutant loadings and BMP removal efficiencies, specifically in southwest Florida.

- BMP Process-Site Selection – If sufficient literature is not available, identify best management practices and land uses that could be analyzed to determine pollutant loadings and removal efficiencies

- Monitoring – Create and implement a monitoring program for each land use and BMP selected.

- Analysis – Analyze the monitoring results and compare them to the State Standards and performances summarized in *Evaluation of Stormwater Criteria*

The project is funded through grant money from the Charlotte Harbor National Estuary Program (CHNEP) and the United States Environmental Protection Agency (USEPA).

2.0 LITERATURE REVIEW

The first task of this project consisted of a comprehensive literature review of ongoing and completed research on stormwater BMPs in Florida. The review was performed by contacting staff at the South Florida Water Management District (SFWMD), Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (FDEP), and other agencies in Florida. The review was also performed by reviewing documents available in the International Stormwater BMP database, University of Central Florida Stormwater Academy, Big Cypress Basin – Estero Bay Regional Research Database, Southwest Florida Regional Restoration Coordination Team, Stormwater Resources Library, Low Impact Development Center, United States Geological Survey, and the United States Environmental Protection Agency. A variety of structural and non-structural BMP research throughout Florida and southwest Florida was evaluated as part of the literature review.

This review identified numerous studies throughout the State of Florida that included the following BMPs:

- Detention
- Wetland Systems
- Filtration Systems
- Vegetation (Boifilter) Systems
- Infiltration Systems
- Minimized DCIA

- Vender Systems
- Treatment Trains
- Non-Structural BMPs

Only a limited amount of stormwater treatment BMP research was discovered specific to southwest Florida. The available information included studies/reports on green roofs, pervious pavement, littoral plantings, deep & shallow lakes, roadway wet detention and floc logs.

The following is a list of known stormwater treatment BMP research in southwest Florida.

Green Roof at Shadow Wood Preserve, Lee County, Florida

The objective of this project was to develop a green roof model for south Florida that shares many of the characteristics of so-called ‘extensive’ green cover systems developed in Europe. The experimental green roof was installed in 2003 to evaluate the ability of various plants to reduce the volume and increase the quality of storm water runoff. The project, one of several in an ongoing partnership between Bonita Bay Group, the Florida Department of Environmental Protection (FDEP) and Johnson Engineering, was the first non-irrigated experimental green roof in Florida and is now in its second phase with more than 1,200 new plants.

Most of the original plants were replaced after it was learned that a green roof in Florida does not function well without an irrigation system. Valuable information on plant viability was developed, resulting in modified plantings. As a result of phase one of the study, a cistern was installed and is now the source of irrigation water for the roof, using runoff that would have otherwise made its way to the waterways. The cistern increases the effectiveness of the green roof by reducing runoff by as much as 80 percent.

The knowledge learned from the Bonita Bay green roof and the subsequent University of Central Florida green roof is being used in the new statewide stormwater treatment rule under the direction of Eric Livingston of FDEP. The team members of this public/private partnership have also evaluated several other low impact development practices. As a result, stormwater treatment credits will be provided for low impact design practices including green roofs, permeable pavement, stormwater reuse, and Florida-friendly landscaping.

In addition to the plant assessments, storm event water quality samples were collected from the green roof downspouts. ISCO refrigerated, programmable samplers were used to collect flow composite samples from three separate sections of the green roof. The samplers were triggered by specific rainfall intensities that generated runoff. Flow composite sampling was accomplished by interconnecting the ISCO samplers with pressure transducers located in the bottom of PVC “rain barrels” with precisely measured orifices. A total of 48 sample sets were collected from the downspouts over a time period from February 25, 2004 to September 14, 2008. In addition to the runoff water quality samples collected from the green roof, rainfall water quality samples were also collected. Each of the water quality samples were laboratory analyzed for cadmium, chromium, copper, zinc, dissolved copper, ammonia, nitrite, nitrate, orthophosphate, total phosphorus, total Kjeldahl nitrogen, total nitrogen, and total suspended solids. Sample results have been turned over to staff at Florida Gulf Coast University for additional analysis.

Reference: Johnson Engineering, Inc., Ongoing

Porous Pavement Evaluation at Shadow Wood Preserve, Lee County, Florida

The project assessed reductions in stormwater runoff and pollutant loading from porous concrete pavement versus asphalt pavement at Shadow Wood Preserve in Lee County, Florida. The project site was the parking lot of a temporary golf course clubhouse which had been divided into distinct areas of standard asphalt paving and porous concrete pavement. Each area had its own distinct drainage basin and stormwater inlet, which allowed for comparison of runoff and flow behavior. Sampling was accomplished using ISCO refrigerated, programmable samplers to collect flow composite samples from the two separate stormwater inlets. The inlets were fitted with V-notched fiberglass inserts to enable flow calculations. The samplers were triggered by specific rainfall intensities that generated runoff.

Ten stormwater runoff water quality samples were collected from each pavement type, (20 total) over a time period from December 16, 2003 to February 2, 2005. Each of the water quality samples were laboratory analyzed for cadmium, chromium, copper, zinc, dissolved copper, ammonia, nitrite, nitrate, orthophosphate, total phosphorus, total Kjeldahl nitrogen, total nitrogen, and total suspended solids

Of particular note is the substantial reduction in discharge volumes from the porous system compared to the standard asphalt system. During the initial onset of a storm event, essentially all of the runoff generated in the porous area percolated through the porous concrete into the subsurface system and entered the groundwater table. Runoff only occurred under very high rainfall intensities that exceeded the infiltration rate of the porous pavement. Under normal to low rainfall intensities, a 30-minute delay was observed before water entered the catch basin in the porous area versus the catch basin in the standard asphalt area. Total runoff from the porous area was calculated to be from 30% to 65% of the total potential runoff based on the amount of the rainfall. Water quality analysis results yielded mixed comparisons. Concentrations of some of the parameters monitored, such as total suspended solids, were lower in the pervious samples while concentrations of other parameters were similar for both pavement types monitored.

Reference: Shadow Wood Preserve Pervious vs. Impervious Pavement Stormwater Runoff Water Quality Monitoring Report, Johnson Engineering, Inc. November 2005

Littoral Plantings Project at Bonita Bay Lake 62, Lee County, Florida

The objective of this project was to document the pollutant removal efficiency of a planted littoral zone in a wet detention system in southwest Florida. Copper sulfate was regularly applied to this system to control algal growth. The effectiveness of the littoral plantings were evaluated by monitoring water quality in the system before and after the littoral zone was constructed.

The project involved the collection of water quality samples during multiple rainfall events that produced discharge. The water quality samples were collected by refrigerated, programmable samplers outfitted at each sample location. The project also involved the tracking and quantifying of the copper sulfate application during the project duration. This was accomplished by the documentation of the time, date, and volume of copper sulfate applied at the project site.

The wet detention system consists of adjacent lakes within a typical residential/golf course community. The system receives runoff from residential lawns, roadways, and golf course areas. Initially, the automated samplers collected composite samples to represent the background water quality prior to construction of the littoral shelf. After the littoral shelf was established, it was allowed to stabilize before the water quality sampling resumed. The water quality samples were laboratory analyzed for sulfate, cadmium, chromium, copper, zinc, dissolved copper, ammonia, nitrite, nitrate, orthophosphate, total phosphorus, total Kjeldahl nitrogen, total nitrogen, and total suspended solids. In addition to the laboratory analysis performed on the water quality samples, YSI 6600 water quality data sondes were deployed to collect a series of physical parameters at 15 minute intervals. Those parameters included pH/oxidation reduction potential, temperature, conductivity, dissolved oxygen, total dissolved solids and chlorophyll-a.
Instances of water discharging from the outfall control structure during this study were rare, resulting in very few sample sets from which to evaluate littoral removal efficiencies. Outfall occurred during only on a few short periods, even in the wet season. This is likely related to the local geologic conditions including soil transmissivity and presence of porous subsurface rock. Samples were collected every other week in the absence of stormwater events that produced discharge. Analysis of the water quality data did not show increased removal rates due to littoral plantings. Low water levels are believed to have prevented the littoral plantings from reaching full viability, which limited their ability to assimilate the water quality pollutants.

Reference: Littoral Plantings Bonita Bay Lake 62, Johnson Engineering, Inc. January 2008.

Deep and Shallow Wet Detention Ponds Water Quality at The Brooks, Lee County, Florida.

The primary objective of this study was to evaluate differences in the water quality of wet detention ponds of various depths under aerated and non-aerated conditions. The secondary objective of the study was to determine if the presence or absence of aeration in the wet detention ponds had an impact on stratification characteristics of the ponds. This is the second of two such studies completed at The Brooks. The first study was conducted during the dry season in the fall of 2004 when water levels in the lakes were low. This most recent study was conducted during the rainy season in the summer of 2006, when water levels in the lakes were higher (above the outfall structure control elevation). The higher water levels allowed for flow through the lake system while water was discharging from the site. The results of the 2004 and 2006 study were compared to determine differences in water quality during static and dynamic flow conditions. This project is a part of a group of Best Management Practice studies funded by the Florida Department of Environmental Protection.

Wet detention systems are ponds that have a permanent pool of water and collect stormwater runoff. These systems are a popular stormwater management technique in southwest Florida and facilitate pollutant removal processes. The depth of wet detention systems in southwest Florida is typically limited to about 12 feet because of the belief that harmful anaerobic conditions occur in the water column and pond sediments as the depth of the pond increases. Anaerobic conditions are detrimental to most biologic processes and can result in system disruptions including fish kills and poor water quality. However, recent research indicates that anaerobic conditions and stratification may not always occur in aerated deep wet detention systems in southwest Florida.

This study compared dissolved oxygen levels and other water quality data in aerated and non-aerated wet detention ponds of various depths within The Brooks residential development in Bonita Springs, Florida. Ponds with depths greater than 13 feet were considered deep and ponds with depths less than 13 feet were considered shallow. The study utilized a variety of methods to monitor water quality and environmental data including state of the art programmable automated water quality sondes, portable multi-parameter water quality meters, and traditional field sampling and laboratory analysis. The results from the various sampling methods were also compared to determine the most accurate and efficient sampling methodology.

Results from this study demonstrated that during the dynamic flow conditions observed during phase one, aerated ponds had higher daily average dissolved oxygen levels than the non-aerated ponds, regardless of pond depth. However, during phase two of the 2006 study, there was no significant difference in the daily average dissolved oxygen levels between the aerated and non-aerated ponds, regardless of pond depth. The secondary objective was to determine whether or not stratification of the water column occurs in ponds when flow is occurring within the lake system. During phase one, stratification occurred in the non-aerated lakes but did not occur in the aerated lakes. Stratification did not occur in either the aerated or non-aerated lakes during phase two of this study.

Reference: The Brooks Deep and Shallow Wet Detention Ponds, Johnson Engineering, Inc. February 2007.

Roadway Runoff and Wet Detention Pond Water Quality Assessment, Lee County, Florida

The objective of this project was to evaluate the quality of water runoff from State-managed roadways similar to that of the proposed expansion of Metro Parkway. The water quality results were analyzed to characterize stormwater runoff and treatment efficiency of wet detention ponds. Results indicated that the Richard Road Wet Detention Pond was very effective at removing metals and total suspended solids from runoff received from SR 78. The pond also successfully removed nutrients, especially phosphorus, but not as efficiently as the presumed 80% removal rate.

Reference: FDOT District One Richard Road Wet Detention Pond, Johnson Engineering, Inc. December 2006.

Stormwater and Nutrient Loadings from FDOT Roadways in Southwest Florida

This project evaluated stormwater runoff and pollutant removal efficiency of wet detention ponds that treat stormwater from FDOT roadways in Lee, Collier, and Hendry counties. Four State roadways with varying levels of service were selected to be monitored, along with their associated water quality ponds. Automated samplers, inlet boxes, flowmeters, rain gauges, water level indicators and rainfall collection devices were installed to monitor flows into and out of each system. Storm event water quality samples were collected from roadway inlets, pond inlet pipes, and pond outfall structures during both wet and dry seasons. The water quality samples were laboratory analyzed for nutrients, metals and total suspended solids. Results indicated that concentrations of many parameters tested in the roadway runoff water (particularly nutrients) were lower than those cited by Harper for similar highway/transportation studies.

Reference: FDOT District One Wet Detention Pond Studies, Johnson Engineering, Inc. May 2009.

Leitner Creek By-Pass Canal BMPs, Lee County, Florida

Leitner Creek By-Pass Canal is an annual public works maintenance project to ensure flood control in Lee County, Florida. The County maintains this ,4,400-plus foot canal by removing sediment and stabilizing canal banks. The canal discharges to an Outstanding Florida Water body (OFW) tributary emptying into Estero Bay. Typical problems in the past have been high turbidity levels from maintenance efforts, lengthy turbidity plumes moving downstream causing environmental and visual impairment, odor complaints associated with organic sediment and vegetation removal, and conflicts between the need for permit compliance and flood control maintenance. The County now uses APS 706b Floc Logs along with 712 powder to provide flocculation and chelation of the fine mucky soil particles generated from the maintenance activities. Odor complaints were significantly reduced. A tremendous visual improvement was apparent in the canal. Turbidity values in the work area ranged between 423 - 1,000 NTUs. Two hundred feet downstream of the work area, turbidity was down to 7.5 NTUs. These levels continued to remain low and resisted resuspension, so that even more than 1,000 feet downstream of the work area, turbidity levels were between 10 - 13.5 NTUs.

Reference: Applied Polymer Systems, Inc., Outstanding Florida Water body, Innovations in Stormwater Control, www.swfwc.org/EBNMP/BonitaSpringsCaseStudy1.doc, 2 p.

Florida Gulf Coast University (FGCU)

Students and staff at FGCU are performing a water quality study of wet detention ponds in Lee County. According to Win Everham (*personal comm.*), the one-year study consists of collecting water quality samples from twenty-two wet detention ponds and laboratory analyzing total nitrogen, phosphorus, ortho-phosphorus, and chlorophyll-a. The wet detention ponds are of varying ages, sizes, depths, riparian zones (planted littoral and riprap), and surrounding land uses. The study will also include hourly sample collection during the rainy season from a subset of the ponds.

Reference: Edwin Everham, Florida Gulf Coast University, Ongoing

Ten Mile Canal Filter Marsh

Johnson Engineering began working with the Lee County Department of Natural Resources in 2007 on the Ten Mile Canal Filter Marsh to characterize water quality entering and exiting the treatment system. A water quality monitoring program was implemented in February 2007 and continued through the 2008 monitoring period.

The project site is located in central Lee County, adjacent to and on the east side of Ten Mile Canal between Daniels Road and Six Mile Cypress Parkway. Ten Mile Canal is a major drainage feature in Lee County providing drainage and flood protection for portions of Fort Myers and Lee County. It was originally constructed in the 1920's by the Iona Drainage District as a dike project and was substantially enhanced in the 1970's. It is a linear drainage feature that starts at Hanson Street in Ft. Myers and discharges to Mullock Creek, then to Estero Bay in South Lee County.

The Ten Mile Filter Marsh is approximately 6400 linear feet and has an average cell width of 30 to 35 feet top width. The filter marsh consists of multiple cells designed to treat a portion of the flow stream from Ten Mile Canal that has been diverted to the filter marsh. Two (2) sample locations within the Ten Mile Filter Marsh are outlined in the Florida Department of Environmental Protection (FDEP) Environmental Resource Permit (ERP). The first location characterizes water quality entering the north end of the filter marsh and the second location characterizes water quality at the south end of the filter marsh, just before it discharges back into the Ten Mile Canal.

Johnson Engineering has installed automated samplers at each sample location to collect quarterly rain event flow composite water quality samples. Water quality samples have been taken at inflow and outflow locations in 2007, 2008, and 2009. Significant reductions in mass loadings for total nitrogen and phosphorus have been documented during this period.

Annual reports for the 2007 and 2008 calendar years for the Ten Mile Canal Filter Marsh were done by Johnson Engineering, Inc. and are available upon request.

Reference: Ten Mile Canal Filter Marsh Monitoring by Johnson Engineering, Inc.

A more detailed discussion of each project (except the Ten Mile Canal Filter Marsh) is included in *Literature Review of Stormwater Treatment Best Management Practices Research in Florida* provided in Appendix N.

In general, there was only limited information available within southwest Florida. Most of the projects did not contain information that would be comparable to State treatment performance standards or the information within *Evaluation of Stormwater Criteria*. Only the *Roadway Runoff and Wet Detention Pond Water Quality Assessment* and *Stormwater and Nutrient Loadings from FDOT Roadways in Southwest Florida* are comparable to the *Evaluation of Stormwater Criteria.* The FGCU work samples the water quality of stormwater ponds but does not sample inflow quality, or inflow or outfall volumes. Therefore, removal efficiencies cannot be calculated.

Additional information is required to compare stormwater treatment efficiencies to State water treatment performance standards and determine the applicability of *Evaluation of Stormwater Criteria* for southwest Florida.

3.0 BMP/SITE SELECTION

A stormwater treatment BMP is a technique, measure or structural control that is used for a given set of conditions to manage the quantity and/or improve the quality of storm water runoff in the most cost-effective manner (EPA, 1999). BMPs can be either engineered and constructed systems ("structural BMPs") that improve the quality and/or control the quantity of runoff, such as detention ponds and constructed wetlands, or institutional, education or pollution prevention practices designed to limit the generation of storm water runoff or reduce the amounts of pollutants contained in the runoff ("non-structural BMPs") [EPA, 1999].

Structural stormwater treatment BMPs are commonly used in Florida. According to Strecker *et al* (2004), 171 structural BMPs are listed in the International Stormwater BMP database of which 24 are found in Florida. The following categories of structural BMPs are taken and modified from the American Society of Civil Engineers (ASCE) National Stormwater BMP Database. The following descriptions of the structural BMP categories are intentionally brief. The reader is encouraged to review the ASCE National Stormwater BMP database for more information.

Retention Systems

These systems are designed to capture a volume of runoff and retain that volume until it is displaced in part or in total by the next runoff event. Pollutant removal in these systems occurs primarily by sedimentation (gravity settling), but also by biological uptake of nutrients by plants and algae, volatilization of organic compounds, uptake of metals by plant tissue, and biological conversion of organic compounds. Examples of retention systems include: 1) retention ponds and 2) retention tanks, tunnels, vaults, and pipes.

These systems are included in the *Evaluation of Stormwater Criteria*. However, they are often not applicable within southwest Florida due to high ground water table and slow percolating soils.

Detention Systems

These systems are designed to intercept a volume of storm water runoff and temporarily impound the water for gradual release to the receiving systems. Detention systems are designed to empty out between runoff producing events. Examples of detention systems include: 1) detention ponds and 2) underground vaults, pipes, and tanks.

These systems are the most widely used within southwest Florida and are included in *Evaluation Stormwater Criteria*.

Wetland Systems

These systems incorporate the natural functions of wetlands to aid in pollutant removal from storm water. Limitations of these systems include maintaining a water level that mimics a natural hydro period for that type of wetland. Additionally, sediment pretreatment needs to be employed to prevent sediment build-up in the constructed wetland system to prevent degradation of the wetland system.

Wetland systems are becoming more common within southwest Florida but are still not widely utilized.

Filtration Systems

These systems use a media such as sand, gravel, peat, or compost to remove a fraction of the constituents found in storm water. Filtration systems are primarily a water quality control device designed to remove particulate pollutants and are most commonly used to treat runoff from small sites (*e.g.*, parking lots, small developments), areas with high pollution potential (*e.g.*, industrial areas), and highly urbanized areas where land availability is limited. Examples of filtration systems include: 1) surface sand filters, 2) underground vaults sand filters, and 3) biofiltration/bioretention systems.

Filtration systems are not typically used within southwest Florida due to the high ground water table and the large storage volume required to attenuate larger storm events.

Vegetated Systems (Biofilters)

These systems use vegetation to filter storm water and provide some degree of treatment, storage, and infiltration. Examples include grass filter strips and vegetated swales.

Biofilters are becoming more popular within southwest Florida but are not yet commonly utilized.

Infiltration Systems

These systems are designed to capture a volume of storm water runoff, retain it, and infiltrate that volume of water into the ground. Advantages of this type of system include water quantity control by reducing discharges, increased recharge of the surficial aquifer, and water quality control through soil filtration and biodegradation. Disadvantages include potential contamination migration in areas where the surficial aquifer is used as a primary source of drinking water. Performance of infiltration systems is limited by the infiltration capacity of the soil. Types of infiltration systems include: 1) infiltration basins, 2) porous pavement systems, and 3) infiltration trenches and wells.

Infiltrations systems are not typically used within southwest Florida due to the high ground water table and slow percolating soils.

Minimizing Directly Connected Impervious Surfaces

This system involves a variety of practices designed to limit the amount of storm water runoff that is directly connected to the storm drainage system. Runoff is instead directed to landscaped areas, grass buffer strips, and grassed swales to reduce the velocity of runoff, reduce runoff volumes, attenuate peak flows, and encourage filtration and infiltration of runoff (UDFCD, 1992).

This is applicable within southwest Florida; however, it is not widely utilized. The benefits of this are included within *Evaluation of Stormwater Criteria*.

Miscellaneous and Vendor-Supplied Systems

These systems include a variety of devices that are used for urban storm water management and incorporate a combination of filtration media, hydrodynamic sediment removal, oil and grease removal, or screening.

Vendor supplied systems are typically only utilized within southwest Florida as a last resort. Permitting agencies typically only approve them for retrofit projects where other BMP are not practical

Treatment Train Systems

These systems employ a combination of structural stormwater treatment BMPs commonly in series. Research of BMPs containing BMPs from two or more categories is listed as a treatment train system in this report.

Treatment train systems are utilized with southwest Florida, specifically on commercial sites where SFWMD requires dry pre-treatment prior to wet detention.

Non-Structural stormwater treatment BMPs include institutional and pollution prevention type practices designed to prevent pollutants from entering storm water runoff. Examples include public education programs (*e.g.*, storm drain stenciling), oil recycling programs, and litter control programs. While non-structural BMPs can be effective in controlling pollution generation at the source, research of their pollutant removal efficiency is difficult without well-defined boundaries (*e.g.*, inlets, outlets). Non-structural BMPs are geographically interspersed with many pollutant sources and are virtually impossible to monitor or at best can be evaluated using trend monitoring (ASCE, 2002).

To best comply with the project objective to compare results to State water quality standards and the *Evaluation of Stormwater Criteria*, wet detention was the BMP chosen to be analyzed for this project. Wet detention systems are by far the most commonly used and typically provide the best performance within southwest Florida. Other BMPs such as dry retention are not as frequently used in southwest Florida due to the high groundwater table. Dry detention systems are common within southwest Florida. However, according to *Evaluation of Stormwater* they are typically inefficient at improving water quality.

The next task was to determine potential BMP sampling sites. The site selection process included close coordination with County staff regarding study requirements. Meetings were held at Lee County offices to review the site selection process and other project activities. With the funds available, it was determined that three sites could be monitored an analyzed. In an effort to obtain the most useful information, it was decided to obtain information for the three most comment land use types within the County: golf course residential, residential and commercial.

The initial list of potential monitoring sites included the following:

Golf Course Residential: Bonita Bay, The Brooks, Renaissance, Worthington, Wildcat Run, Gulf Harbor, Pelican Marsh, Country Creek, Stoneybrook, Legends and Heritage Palms

Residential: Danforth Lakes, Beachwalk Isles, Island Walk, Laguna Lakes, Reflection Lakes, Cross Creek Estates.

Commercial: Page Field Commons, Publix, Wal-Mart, Lowes, Home Depot, Promenade Shoppes, Sweet Bay and Miramar Outlets.

The following criteria were used to narrow each category down to one site from each category:

- Ability to isolate drainage areas
- One outfall structure for the basin monitored
- Project at or near build out
- Ability to isolate land uses
- Ability to contact owners

- Willingness of owners to participate and allow testing
- Site access and security

The design for each surface water management system was reviewed using aerial photographs and SFWMD records. Those projects that had more than one outfall structure per drainage basin were eliminated first. Next, those projects that did not have isolated drainage basins by land use were eliminated. This narrowed the preliminary list down to only a few. The owners and/or operators for each of the remaining projects were contacted until willing participants were found.

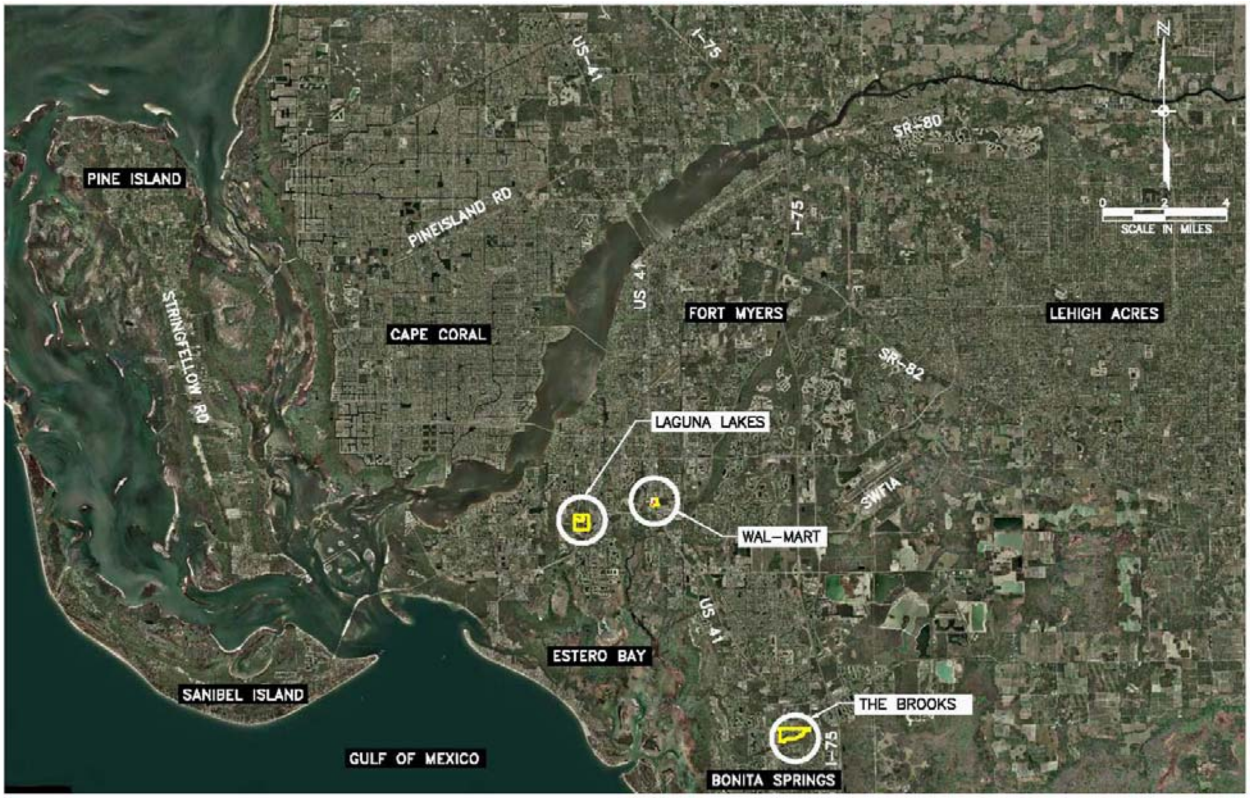
The three (3) sites that were selected are Laguna Lakes (single/multi-family residential), The Brooks (residential/golf course), and Wal-Mart (commercial). Figure 1 shows the location of each monitoring site.

Some challenges were experienced obtaining final approval from each owner/operator. The Brooks surface water management system is owned and operated by The Brooks CDD, while the Bonita Bay Group owned the adjacent golf course from which access would be required. Both were willing participants; however, they did express some concern about possible enforcement action if the results did not come back favorable. Lee County provided a letter that outlined how this was a data gathering effort and not intended for enforcement. This was able to alleviate some of their concerns.

Between the time of initial contact with the Laguna Lake's developer and installation of the sampling equipment, the project began its turn over maintenance of the system to the homeowners association. After several conversations with the management company, we were able to obtain their approval with little delay to the project.

Once approvals from the landowners and management associations were obtained, site visits were conducted with Lee County staff to assess the drainage conditions, general maintenance conditions and to determine site-specific details that would be important in final operations. Locations and sizes of inlet pipes and outfall structures were documented as part of this process. These site visits were completed December 7, 2005.

FIGURE 1 - MONITORING SITE LOCATIONS



Laguna Lakes Site Description

Laguna Lakes is a residential community with no associated golf course facilities. The community occupies approximately 150 acres in western Lee County, Florida, situated south of Gladiolus Drive and east of Bass Road. It is a planned community developed by Transeastern Homes. The community was completely sold out at the start of the project with only a handful of lots remaining without constructed residences. Shortly after sampling began, the community was built out.

There are approximately 33 acres of interconnected lakes within the project that discharge to a manmade conveyance system known as the Iona Drainage District (IDD), a now defunct entity operated currently by Lee County. Ultimate discharge of the runoff is to Cow Slough then to the Caloosahatchee River or to Estero Bay, depending on conditions. All lakes at the Laguna Lakes site contain fountains, which aid in the aeration of the water. These are typically installed as aesthetic devices, but are required by local regulatory agencies for deep lakes.

Laguna Lakes contains three areas of single-family residences: Monterey, Beverly Hills, and Santa Barbara. Monterey has 128 lots, typically of 0.1 acres per lot. Beverly Hills has 53 lots of approximately 0.18 acres per lot. Santa Barbara has 166 lots of approximately 0.14 acres per lot. The development has one distinct area of multifamily dwellings, the Pebble Beach area. This area contains 25 condominium buildings with 118 total units. These units are all concentrated in the northwestern quadrant of the development.

One internal lake within the Laguna Lakes system provides reclaimed water storage and is not part of the surface water management system. This lake only discharges under emergency conditions. This lake was not included in any of the analysis for this system.

There are two inflow samplers (one in the multi-family residential area (LLIN1) and one in the single-family residential area (LLIN2)) and one outflow sampler (LLOUT). The sampler locations are shown on Figure 2.

LLIN1 – Site runoff was sampled at an inflow into the 1.8 acre wet detention area in the northwest quadrant of the project. This delivers runoff from a higher intensity multi-family area. The treatment train associated with this sample location is three lakes in series with a total area of 8.2 acres at control elevation (3.8 NGVD).

LLIN2 - Site runoff was sampled at the inflow into the six acre wet detention area in the southeast quadrant of the project. This wet detention area contains runoff from a typical single-family area where the individual lots are approximately 0.18 acres in size. All available lots are developed in this area. The treatment train associated with this sample location is two lakes in series with a total area of 10.5 acres at control elevation (3.8 NGVD).

The sampling locations are not able to pick up the runoff from the rear of the lots adjacent to the lakes. The runoff from these areas flow directly into the lake. This small area is not anticipated to significantly impact the results.

FIGURE 2 - LAGUNA LAKES SITE PLAN

Both of the inflow locations flow into a series of interconnected wet detention areas before reaching the final outfall control structure (S-91) located on the east side of the project at the east end of a 4.5 acre wet detention lake. Samples were collected from this outfall location (LLOUT). The sample locations are shown on Figure 2.

Wal-Mart Site Description

The Wal-Mart site is an example of a larger commercial site that employs wet detention as the BMP for treatment and attenuation of the site's runoff. This site is located near the intersection of U.S. 41 and Ben C. Pratt/Six Mile Cypress Parkway. The site has extensive paved parking areas and large roof surface areas that discharge into a large wet detention pond. Runoff from the roof and the parking lot discharges directly into drains that are piped to the detention ponds.

Discharge from the site is to a County maintained drainage ditch flowing to the west into Hendry Creek, which discharges into Estero Bay.

FIGURE 3 - WAL-MART SITE PLAN

The surface water inflows to the wet detention area were monitored in two locations (WMIN1 and WMIN2).

WMIN1 – Site runoff was sampled at the north culvert from the parking area, discharging to the wet detention area. This site receives flow from the parking area adjacent to the store.

WMIN2 – Site runoff was sampled at the south culvert discharging to the wet detention area. This represents a flow stream composed of both runoff from paved parking area and a significant contribution from roof run-off.

The outfall location (WMOUT) was the third monitoring location at the Wal-Mart site, being near the southwest corner of the project site, just north of the entrance off US 41. This location was selected to sample water as it discharged from the site. The sample locations are shown on Figure 3.

The Brooks Site Description

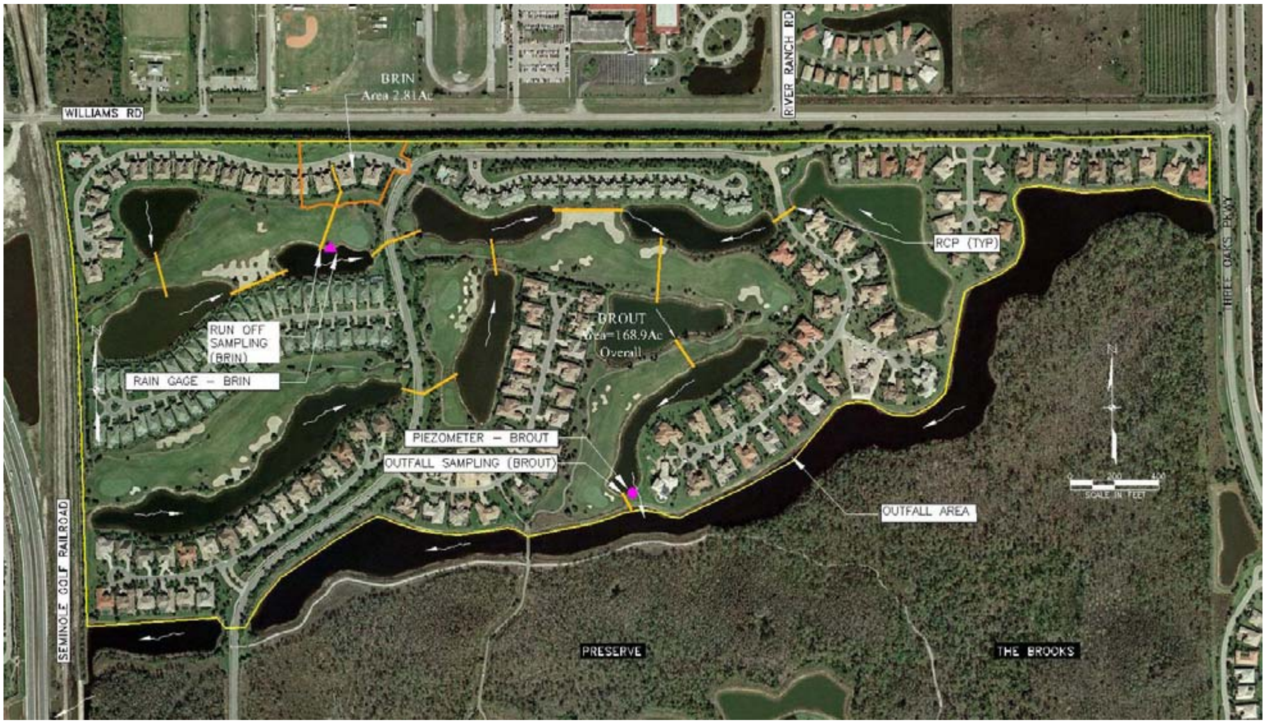
The Brooks is a 2,532 ac mixed use residential community with four 18-hole golf courses, and over 400 acres of preserve. The community occupies approximately four square miles in south Lee County, Florida, situated south of Corkscrew Road and between Interstate 75 and US 41. The Brooks is a master planned community developed by Bonita Bay Group with some of the first site work being done shortly after 1997. The site selected for the BMP monitoring program is located in the northern portion of the development known as Shadow Wood at The Brooks. This is drainage subbasin 2A

The subbasin includes a drainage area of 169 acres with ten treatment lakes totaling 29 acres. The remaining area is single-family home sites, golf course area and internal roadways. All lakes have bottom fed bubbler style aeration systems. Discharge from the study area is into a regional conveyance system located to the south. The conveyance flows into Halfway Creek, which eventually discharges into Estero Bay. The BMP project study area is located in the northwest portion of the development as shown on Figure 4

While the overall Brooks water management system often incorporates herbaceous wetlands as a part of the system design, the site selected for BMP monitoring does not.

One of the reasons this site was selected was that it is an example of a very well maintained wet detention system. The developer, the two existing Community Development Districts and the homeowners associations give a high level of attention to maintenance of the water management system facilities. The Brooks has received awards on both the local and State levels and should represent optimum conditions for the performance of the wet detention system.

FIGURE 4 - BROOKS SITE PLAN



The inflow monitoring and sampling for this site (BRIN) was performed at a drainage pipe located at the fairway of golf course hole # 5. This pipe delivers water into wet detention lake IIA-2. This lake flows through a system of four more lakes in series before discharging through a control structure (CS-2A) at the outlet of lake IIA-6 into a flow way.

The outflow (BROUT) was tested as flow discharges from control structure known as CS-2A into a flow way. The flow way continues to the west and ultimately off site. The sample locations are shown on Figure 4.

4.0 MONITORING PLAN

A series of FDEP monitoring plans were reviewed and assessed to guide the creation of the Monitoring Plan for this project. The plans reviewed include one for littoral plantings in a wet detention system at the Bonita Bay development and one for a pervious/impervious pavement study at Shadow Wood Preserve and a dissolved oxygen study done for FDEP, all in southern

Lee County. The monitoring plan for this study addresses background, equipment, objectives, methodology, site conditions, operational details, event triggers, sample parameters, sampling procedures and quality assurance.

A draft monitoring plan was prepared and submitted to Lee County, Charlotte Harbor National Estuary Program (CHNEP), South Florida Water Management District (SFWMD) and Florida Department of Environmental Protection (FDEP) for review. Comments were incorporated into the final monitoring plan. A copy of the final plan is included in Appendix K.

To assess the treatment efficiency of each stormwater management system, the water volumes and water quality concentrations entering and leaving the system are required. To obtain this information, rain gauges, flowmeters, water level transducers, data loggers and sampling units were installed at each site. Descriptions of each unit follow:

Sampling Unit – Avalanche Series 6712 Automatic Sampling Unit - This is a programmable, refrigerated automatic sampling unit manufactured by ISCO, Inc. It is capable of interfacing with multiple external sensing devices and storing up to 512 KB of data. A deep cycle marine battery with a 50-watt solar panel provides power to each unit. These units were installed at each inflow and each outflow location sampled. This includes two locations at The Brooks and three locations each at Wal-Mart and Laguna Lakes, for a total of eight units.

Each unit was programmed to begin sampling after 0.10 inches of rainfall occurred within a 30 minute period and flow was detected both into and out of the lake system. The sampling units were outfitted with cell phone modems to provide remote text notification to Johnson Engineering staff each time sampling was initiated. Composite samples were collected during each qualifying rainfall event. Each composite sample consisted of up to ten evenly distributed aliquots.

FIGURE 5 - AVALANCHE SERIES 6712 AUTOMATIC SAMPLING UNIT

Rain Gauge – ISCO Series 974 Rain Gauge - This is a tipping bucket style device capable of recording rainfall events as small as 0.01 inches. This rain gauge equipment was directly connected to the sampling units and was remotely accessible via phone modem connection. The connection to the sampling unit sets one of the sampling triggers, 010 inches of rainfall. The modem connection allows remote downloading of data and detection that a trigger event has occurred. One rain gauge was installed at each site.

FIGURE 6 - ISCO SERIES 674 RAIN GAUGE

Flowmeter – ISCO Series 2150 AV Acoustic Doppler Flowmeter. These meters use sound waves to measure the direction and magnitude of the velocity of the water. They are also outfitted with pressure transducers to determine the extent to which the pipes are full. The flowmeters were programmed with the proper pipe size to calculate the actual flow rate. Flowmeters were installed in the inlet pipes at each inflow location: WMIN1, WMIN2, LLIN1, LLIN2 and BRIN1.

Water Level Transducer – ISCO Series 720 Water Level Transducer – These transducers are absolute pressure sensors that generate a 4-20 mv output. The transducers are pressure sensitive and react to very small increases in water levels above the transducer by varying electrical output. This output is converted to feet of head above the transducer and the water levels are continuously recorded at programmed intervals. These water level transducers were directly connected to the automated sampling units to provide water level data with respect to control elevation. This data set, combined with the outfall structure dimension data programmed in the sampling unit, was used to provide flow composite sampling.

FIGURE 7 - ISCO SERIES 720 WATER LEVEL TRANSDUCER

Datalogger – Infinities USA Water Level Datalogger – These dataloggers are similar in design to the above described ISCO Series 720 water level transducers and operate on the same principles. The dataloggers were housed in PVC pipes and suspended just above the pond bottom at each installation location; WMOUT, LLOUT and BROUT. Midway through the project additional water level dataloggers were installed downstream of WMOUT and LLOUT to quantify any impacts submerged flow may have on discharges from the stormwater management system.

Data from the rain gauge, flowmeters and data loggers were downloaded regularly to ensure data were not lost due to malfunctioning equipment, data device memory overflow or to vandalism. This was accomplished by accessing the automated sampling units remotely and downloading the data following each monitored rain event. Data that could not be downloaded remotely were downloaded in the field at the time of sample collection.

The water quality samples were collected in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOP) 001/01. After each qualifying rainfall event, the composite samples were placed on ice and delivered to the Lee County Environmental Laboratory (Florida Department of Health Number E45049) following chain-of-custody procedures. The samples were laboratory analyzed for the following parameters using the indicated method and minimum detection limit (MDL):

TABLE 1 - PARAMETER METHOD AND MDL

Parameter	Method Code	MDL
Total Kjeldahl Nitrogen	EPA 351.2	0.05 - 0.1 mg/L as N
Nitrate + Nitrite	EPA 353.2	0.01 mg/L as N
Total Nitrogen	Calculations	0.05 - 0.11 mg/L as N
Ammonia - N	EPA 350.1	0.01 - 0.017 mg/L as N
Chlorophyll -a	SM 10200 H	0.5 mg/M^3
Total Phosphorus	EPA 365.2	0.004 mg/L as P
Dissolved Phosphorus	EPA 365.1	0.006 - 0.01 mg/L as P
Total Suspended Solids	EPA 160.2	0.6 mg/L
Total Copper	SM20 3111B	0.56 - 1 µg/L
Total Cadmium	SM20 3111B	0.05 - 0.4 µg/L
Dissolved Copper	SM20 3113B	0.56 - 1 µg/L
Dissolved Cadmium	SM20 3113B	0.05 - 0.4 µg/L

Parameters including temperature, pH, turbidity, conductivity, and dissolved oxygen were measured in the field prior to sample collection using a properly calibrated multi-parameter meter.

Developed concurrently with the Monitoring Plan was an EPA required Quality Assurance Project Plan (QAPP). The plan covered some of the same items as the Monitoring Plan did. However, it was formatted in a way acceptable to EPA staff. Charlotte Harbor NEP staff reviewed this document prior to completion. This document has been supplied to County staff for review and transmitted to Catherine Corbett for review and submittal to EPA staff. We are not aware at this time of any comments from EPA staff on the QAPP. The plan is attached in Appendix L to this report and available upon request from the Lee County Division of Natural Resource staff.

5.0 SAMPLING

Once the Monitoring and Quality Assurance Plans were in place, sampling equipment was purchased and installed at the three BMP sites. Sampling began in the summer of 2006 and ended October 2008. During the sampling period, a rainfall event measuring at minimum 0.1 inches with flow through the outfall structure defined qualifying sample events. This helped to reduce the number of dry run sample events that occur with minimal rainfall. There were 33 sampled rain events resulting in 118 individual sample sets throughout the project duration as shown in Table 1, starting with the first sample set taken June 25, 2006 and the latest sample set taken October 6, 2008. All data are shown in attached appendices. Due to varying water levels in the storage lakes and varying amounts of regional rainfall across the area, not all events trigger outflow and sampling at every sampling station. This is shown in the following Table 1.

TABLE 2 - SAMPLE DATES

Event No.	Date	The Brooks			Laguna Lakes				Wal-Mart			
		Rain (in)	BRIN	BROUT	Rain (in)	LLIN1	LLN2	LLOUT	Rain (in)	WMIN1	WMIN2	WMOUT
1	6/25/06				0.42	X	X	X	0.79	X	X	X
2	7/2/06				2.31	X	X	X	2.57	X	X	X
3	7/6/06				0.4	X	X	X				
4	7/13/06	0.3	X	X								
5	7/18/06	0.23	X	X								
6	7/31/06	0.5	X	X								
7	8/7/06	0.73	X	X								
8	8/14/06	1.43	X	X	0.66	X		X	1.13	X	X	X
9	8/30/06				0.49	X		X	0.41	X	X	X
10	9/13/06				0.63	X	X	X	1.02	X	X	X
11	1/25/07	0.33	X		0.2	X	X		0.22		X	
12	4/10/07	0.54	X		0.71	X	X		0.67		X	
13	7/21/07								1.24	X	X	X
14	7/26/07								0.84	X	X	X
15	8/1/07				1.58	X		X	0.98	X		X
16	8/8/07				0.17	X	X	X				
17	9/2/07				1.55	X	X	X	1.78	X		X
18	9/20/07				0.66	X	X	X	0.68	X	X	X
19	10/21/07				0.25	X		X				
20	6/23/08				0.13	X		X				
21	7/8/08				0.38	X	X	X	0.4	X	X	X
22	7/9/08	0.64	X	X								
23	7/12/08								2.36	X	X	X
24	7/15/28	1.9	X	X								
25	7/16/28								0.64	X	X	X
26	7/28/08	0.35	X	X								
27	8/6/08				0.62	X	X	X				
28	8/12/08				0.19	X	X	X	0.15	X	X	X
29	8/19/08	5.47	X	X					3.52	X	X	X
30	9/9/08	0.37	X	X								
31	9/22/08	0.76	X	X								
32	9/29/08	1.21	X	X								
33	10/6/08	0.43	X	X								

X - qualifying sample obtained at this sampling location

The Monitoring Plan was modified several times throughout the sampling period. The results from the first few storm events showed poor removal efficiencies at both Laguna Lakes and Wal-

Mart and only marginal removal at the Brooks. This was initially a concern because the reason for the poor performance was not known. Further investigation into each site revealed that there was the potential for the Laguna Lakes and Wal-Mart outfall structures to become submerged. This could reduce the actual discharge volumes and nutrient mass loadings below the values calculated without submerged flow. This would affect the discharge volumes but would not explain the poor performance for concentration. Water level transducers were installed downstream of the Laguna Lakes and Wal-Mart outfall structures during 2007. The data obtained during 2007 and 2008 revealed tailwater elevations did create infrequent submerged flow for relatively short periods of time. This did not significantly affect the discharge volumes from the sites.

During this investigation, it was also noted that Laguna Lakes utilizes reclaimed water for virtually 100% of its irrigation. The added nutrients from the irrigation water could explain the poor performance at Laguna Lakes. The Brooks also utilizes reclaimed water for irrigation, however at a much reduced level, less than 20% of its irrigation needs.

Lee County staff expressed concerns about using one runoff coefficient (percent runoff) for each site. Larger storm events will have a higher percentage of runoff than smaller storm events. The calculations were revised to take into about different runoff coefficients. This change did not affect the removal efficiencies.

It was determined, and later confirmed after additional data were obtained, that the reason for the poor performance at this early point in the project was the limited amount of data that had been obtained. The sampling began during the middle of the wet season and did not take into account the volume of water that is retained in the lakes during the dry season and beginning of the wet season.

The original Monitoring Plan called for samples to only be taken while discharge from the system occurred. During meetings with Lee County staff, it was decided that it would be beneficial to obtain some dry season samples to determine if there is any measureable difference in the runoff water quality. No samples at the outfalls were taken during these dry season sampling events because no discharge occurred. Dry season samples were taken January 25, 2007 and April 10, 2007.

Samples at each of the outfall structures were collected only during discharge from the wet detention system. Outfall from The Brooks discharged through a single rectangular orifice. The Laguna Lakes outfall structure includes a v-notch cutout immediately below the weir crest. The Wal-Mart outfall structure was originally observed to have only a single narrow rectangular orifice on the front of the structure. However, on closer inspection it was determined that a small circular orifice on the side (below the crest elevation of the rectangular orifice) had become buried. The excess fill was removed to allow the structure to perform as originally intended.

The rainfall received during 2007 was much less than during an average year. In fact, according to records it was the driest year since 1976. The 2007 rainfall total was approximately 36.34 inches (Lee County mean value) compared to an average year value of approximately 61 inches based on Lee County data for the 1991-2009 time period. Due to this low rainfall total The Brooks surface water management system did not discharge once during the entire year and no wet season samples were obtained. This extended the sampling period beyond the originally anticipated one year period.

In an effort to save costs due to the extended sampling period, the sampling units were set in hibernation mode for the 2007-2008 dry season. The units were taken out of hibernation mode once the wet season rainfall began and the stages within the water management systems rose closer to the control elevation.

6.0 ANALYSIS

The original project scope called for the analysis to include only discussion and calculations for the event mean concentration (emc). In an effort to provide a better picture of the BMP performance, Johnson Engineering recommended expanding the scope of include analysis on both the concentration and mass loading. Lee County staff agreed that this additional scope would provide useful additional information.

The rainfall, water quality, stage and flow data obtained at each location were used to estimate the loadings (concentration and mass) to the surface water management system and the loadings (concentration and mass) that discharge from the surface water management system. These inflow and outflow loadings were then used to determine the percent reduction for each parameter. The loadings were calculated using the following methodology:

Runoff Calculations:

Water Quality Concentration (Con_R):

The average of the sampling concentrations obtained at each runoff station

Rainfall Amount (R):

The total rainfall measures at each location.

Percent Runoff (C_R):

Percent runoff was estimated using the rainfall amount and runoff volume for each sampling event. To account for variations in runoff volume by different rainfall amounts per event, the percentages were broken into four categories. The categories are rainfall events less than 0.05 inches, between 0.05 inch and 0.5 inches, between 0.5 inches and 1.5 inches and storm events greater than 1.5 inches.

A runoff percentage was first calculated for each storm event. Several flows were discarded due to suspect information that could have been caused by equipment malfunction. These events are identified in the runoff percent calculations. The percent runoff was calculated by dividing the measured runoff volume by the rainfall amount multiplied by the drainage areas. The percent runoff values were then averaged with other percentages for storm events with similar rainfall amounts. Rainfall events of less than 0.05 inches were estimated to have no runoff.

The percent runoff calculations are included in Appendix B.

Runoff Volume (V_R):

The runoff volumes were first calculated at each sampling station for each of the four (4) percent runoff categories. This was accomplished by multiplying the drainage area by the percent runoff (C_R) and rainfall amount (R). The value was then converted to cubic feet.

The runoff volume calculations are included in the loading calculations located within Appendix A of this report.

Runoff Mass Loading (M_R):

The mass loadings were calculated by multiplying the water quality concentration (Con_R) by the runoff volume (V_R). The total runoff mass loading is the sum of all percent runoff category loadings.

The runoff mass loading calculations are included in the loading calculations located within Appendix A of this report.

Discharge Calculations:

Water Quality Concentration (Con_D):

The average of the sampling concentrations at the outfall.

Discharge Volume (V_D):

The discharge volume was calculated using the recorded upstream stages at the outfall structure and the orifice/weir flow equations. The geometry of the outfall structures and the head recorded at each time interval were used to calculate the discharge from the system.

The discharge volume calculations are included in Appendix C.

Discharge Mass Loading (M_D):

The mass loadings were calculated by multiplying the water quality concentration (Con_D) by the discharge volume (V_D). The discharge mass loading is the sum of all rainfall amounts.

The discharge mass loading calculations are provided in Appendix A.

Load Reduction Calculations:

Removal:

The concentration and mass removed by the stormwater management systems were calculated by subtracting the total lake discharge (Con_D; M_D) from the total flowing into the lakes ($Con_{R;}$ M_R).

Percent Removal:

The percent removal was calculated by dividing the removed concentration or mass by the total concentration or mass flowing into the lakes (in).

The supporting documentation and results of the calculations are summarized in Appendix A.

7.0 RESULTS

Generally, the Wal-Mart and Brooks surface water management systems functioned well, with reductions in mass and concentrations for all parameters except chlorophyll-a concentration and cadmium concentration at the Brooks. The Laguna Lakes surface water management system did not perform as well. The system experienced increases in concentration and mass loading for numerous parameters, including copper, total nitrogen, chlorophyll-a and total phosphorus. A summary of these results are included in following table.

TABLE 3 - REMOVAL EFFICIENCIES

Parameter	Removal Efficiency					
	Laguna Lakes		Wal-Mart		Brooks	
	Mass	Conc.	Mass	Conc.	Mass	Conc.
Chlorophyll-a	-32%	2%	59%	34%	33%	-45%
Total Nitrogen, Kjeldahl	-23%	1%	60%	36%	72%	40%
Ammonia	62%	62%	74%	58%	95%	89%
Total Phosphorus	-39%	-10%	79%	66%	86%	69%
Nitrate + Nitrite	83%	85%	85%	76%	92%	83%
Total Suspended Solids	-3%	11%	81%	68%	85%	68%
Ortho Phosphorus	75%	82%	99%	98%	99%	97%
Copper	-84%	-40%	76%	62%	91%	80%
Cadmium	-22%	2%	48%	15%	65%	26%
Copper, Dissolved	-58%	-20%	55%	26%	89%	77%
Cadmium, Dissolved	-25%	-2%	42%	6%	48%	-11%
Total Nitrogen	-52%	-26%	56%	28%	66%	27%

The results have also been summarized on line and bar graphs located in Appendices D & E, respectively, for ease of comparison. The line graphs compare the inflow and outflow concentration for each site. There are two line graphs, one for concentration removal efficiency and the second for mass removal efficiency. These graphs provide a visual comparison among the three sites.

The bar graphs compare the concentration, the total mass and the total mass per acre of runoff from each site to the concentration, the total mass and the total mass per acre that discharges from the wet detention system at each site. The total mass per acre graph was included to allow a better comparison between different sized sites. This provides a consistent scale for all three sites. These graphs show the total concentrations, mass and mass/acre loading, not a percent reduction. This allows for a better comparison of the actual loadings instead of a percent reduction. This better accounts for different loadings between land uses. A site could produce double the concentration or mass loading of a second site and provide 50% removal efficiency and the second site could provide 10% removal efficiency. If one only looked at the removal efficiency, the first site would look better. However, in reality the second site would actually be better because there was a lower amount of pollutant discharged from that site. This occurred for several of the parameters including, total Kjeldahl nitrogen, ammonia, total phosphorus, copper, dissolved copper and total nitrogen.

Determining the exact reasons for this low performance for Laguna Lakes is outside the scope of this project. However, during data collection, the application of reclaimed water for irrigation and excessive aquatic weed growth within the lakes were noted. This could explain the increase in nutrient and copper concentrations and mass loadings within the system. The reclaimed water may have introduced additional nutrients into the lakes (that were not included in the tested runoff) that increased nutrients within the water management system and promoted aquatic plant growth. The increase in copper concentrations may be attributed to herbicides used to control the aquatic plants.

As part of this report, 2000-2003 and 2006-2007 reclaimed water quality data from the Fort Myers Beach Waste Water Treatment Plant was reviewed. A copy of this data is included in Appendix O. The nutrient concentrations in the reclaimed water were much higher than the concentrations in the storm water runoff.

TABLE 4 - RECLAIMED WATER CONCENTRATION COMPARISONS

Parameter	Concentration (mg/L)		
	2000-2003 Data Average	2006-2007 Data Average	Runoff Average
Total Nitrogen, Kjeldahl	4.35	8.32	1.348
Total Phosphorus	2.52	-	0.116
Nitrate + Nitrite	1.30	1.77	0.570
Total Suspended Solids	-	6.04	4.240
Total Nitrogen	10.26	-	1.118

In the case of total phosphorus, the reclaimed water concentration between 2000 and 2003 was more than 20 times the concentration in the storm water runoff. For total nitrogen, the reclaimed water concentration was more than 9 times the storm water runoff concentration. These large concentration have likely contributed to the increased nutrient concentration and loading seen in the Laguna Lakes system.

It was also noted that the total calculated volume of water that flows out of the Laguna Lakes surface water management system is over 20% greater than the calculated volume of water that discharges into the system. The other two sites showed a reduction in flow from the inflow to outflow of 29% and 59% for Wal-Mart and The Brooks, respectively. The increased discharge volume could be due the project having a control elevation lower than the wet season water table. This would allow the lakes to discharge a net surplus of groundwater along with surface water through the outfall structure. This additional flow would increase the total mass loading that discharges from the system and could account for the increase in several parameters. Additional monitoring would be required to determine if the control elevation is lower than the surrounding wet season water table.

Additionally, the Laguna Lakes site has the lowest control elevation of the three sites monitored and is located closest to tidal water. As a result, the water levels in the lake system do not recede as much as those in systems with higher control elevations that are located farther inland. Consequently, there is less storage available at the beginning of the wet season to retain surface water runoff water before it reaches a level that allows discharges through the control structure.

To understand first the parameters and their concentrations, it is important to view them in context with water quality standards. The following Table 4 summarizes some of the known water quality standards for the parameters included within this study. To understand how the water quality concentrations may affect receiving waters, it is important to understand first how the concentrations obtained within this study compare to the applicable water quality standards.

TABLE 5 - PARAMETER WATER QUALITY STANDARDS

Parameter	Units	Class III Fresh Water Quality Standard	FDEP Lake Threshold Value	Typical Value for Florida's Lakes***
Total Kjeldahl Nitrogen	mg/L	no numeric value	no value	no value
Nitrate + Nitrite	mg/L	no numeric value	no value	no value
Total Nitrogen	mg/L	no numeric value	1.7	1.4
Ammonia - N	mg/L	no numeric value	no value	no value
Chlorophyll-a	mg/m3 (ug/L)	20 ug/L*	no value	18.5
Total Phosphorus	mg/L	no numeric value	0.11	0.07
Dissolved Phosphorus	mg/L	no numeric value	no value	no value
Total Suspended Solids	mg/L	no standard	no value	8
Total Copper	ug/L	(2.85 - 30.50)**	no value	no value
Total Cadmium	ug/L	(0.10 - 0.76)**	no value	no value
Dissolved Copper	ug/L	no standard	no value	no value
Dissolved Cadmium	ug/L	no standard	no value	no value

*Ch 62-303.351 Nutrients in Streams
**Based on total hardness values ranging from 25 mg/L - 400 mg/L
***"Typical Water Quality Values for Florida's Lakes, Streams and Estuaries", (Hand,1989)

In general, the development's runoff concentrations and concentrations discharging from the stormwater management systems compare favorably to the water quality standards and lake threshold values, which are routinely referenced in FDEP water quality basin assessment reports. The lake threshold values represent the 70th percentile values from the Hand,1989 document, which are used by FDEP as screening level values for the Impaired Waters Rule Assessment.

Laguna Lakes:

Total Nitrogen – Both the runoff and discharge concentrations are below the FDEP lake threshold. The discharge is approximately equal to the concentration for a typical Florida lake. The runoff is less than that of a typical Florida lake.

Chlorophyll-a – Both the runoff and discharge concentration are below the concentration for a typical Florida lake.

Total Phosphorus – The runoff concentration is approximately equal to the FDEP lake threshold. The discharge concentration is above the FDEP lake threshold. Both concentrations are above the typical Florida lake concentration.

TSS – Both the runoff and discharge concentration are below the concentrations for a typical Florida lake.

Total Copper – Both the runoff and discharge concentrations are at the low end of the Class III standard range.

Total Cadmium – Both the runoff and discharge concentrations are at the low end of the Class III standard range.

Wal-Mart:

Total Nitrogen – Both the runoff and discharge concentrations are below the FDEP lake threshold and typical Florida lake concentration.

Chlorophyll-a – Both the runoff and discharge concentration are below the concentration for a typical Florida lake.

Total Phosphorus – Both the runoff and discharge concentrations are below the FDEP threshold. The discharge concentration is below the typical Florida lake concentration. The runoff concentration is above the typical Florida lake concentration.

TSS – The discharge concentration is below the typical Florida lake concentration. The runoff concentration is above the typical Florida lake concentration.

Total Copper – Both runoff and discharge concentrations are below the Class III standard range.

Total Cadmium – Both runoff and discharge concentrations are near the middle of the Class III standard range.

Brooks:

Total Nitrogen – Both the runoff and discharge concentrations are below the FDEP threshold. The discharge concentration is below the typical Florida lake concentration. The runoff is above the typical Florida lake concentration.

Chlorophyll-a – Both the runoff and discharge concentrations are below the typical Florida lake concentration.

Total Phosphorus – The runoff concentration is above the FDEP threshold. The discharge concentration is below the FDEP threshold.

TSS – The runoff concentration is above the typical Florida lake concentration. The discharge is below the typical Florida lake concentration.

Total Copper – The runoff concentration is at the low end of Class III standard range. The discharge concentration is below the Class III standard range.

Total Cadmium – Both the runoff and discharge concentrations are near the middle of the Class III water quality standard range.

The concentrations (total nitrogen and phosphorus), runoff volumes, mass loadings (total nitrogen and phosphorus) and removal efficiencies identified for each site in this report were compared to the same values calculated using the *Evaluation of Stormwater Criteria* methodology. The inflow and outfall volumes, loadings and removal efficiencies measured as part of this report (BMP Report), and the volumes, loadings and removal efficiencies calculated using the *Evaluation of Stormwater Criteria* methodology (Evaluation) are summarized below. The detailed calculations utilizing the *Evaluation of Stormwater Criteria* methodology are included in Appendix M.

TABLE 6 - LAGUNA LAKES NUTRIENT MASS LOADING COMPARISON

Parameter	Annual Inflow to Lake		Annual Discharge from		Percent Removal	
	BMP Report kg/year	Evaluation kg/year	BMP Report kg/year	Evaluation kg/year	BMP Report	Evaluation
Total Nitrogen	237.6	375.9	361.4	154.8	-52%	59%
Total Phosphorus	23.5	66.1	32.5	4.3	-39%	93%

TABLE 7 - WAL-MART NUTRIENT MASS LOADING COMPARISON

Parameter	Annual Inflow to Lake		Annual Discharge from		Percent Removal	
	BMP Report kg/year	Evaluation kg/year	Evaluation kg/year	Evaluation kg/year	BMP Report	Evaluation
Total Nitrogen	76.9	174.4	34.2	96.8	56%	44%
Total Phosphorus	8.7	25.1	1.8	15.3	79%	39%

TABLE 8 - BROOKS NUTRIENT MASS LOADING COMPARISON

Parameter	Annual Inflow to Lake		Annual Discharge from		Percent Removal	
	BMP Report kg/year	Evaluation kg/year	Evaluation kg/year	Evaluation kg/year	BMP Report	Evaluation
Total Nitrogen	237.6	293.0	210.7	54.7	66%	81%
Total Phosphorus	90.7	45.8	12.9	2.1	86%	95%

TABLE 9 - CONCENTRATION COMPARISON

Parameter	Laguna Lakes				Wal-Mart		Brooks	
	Multi-Family		Single Family		Commercial		Golf/Residential	
	BMP Report (mg/l)	Evaluation (mg/l)	BMP Report (mg/l)	Evaluation (mg/l)	BMP Report (mg/l)	Evaluation (mg/l)	BMP Report (mg/l)	Evaluation (mg/l)
Total N	1.221	2.320	1.086	2.070	0.898	2.400	1.598	2.070
Total P	0.100	0.520	0.121	0.327	0.101	0.345	0.234	0.327

Table 10 - Annual Runoff Volume

Parameter	Laguna Lakes (ac-ft/year)	Wal-Mart (ac-ft/year)	Brooks (ac-ft/year)
BMP Report	169	69	314
Evaluation of Stormwater Criteria	143	59	115

The relative closeness between this report and the calculated flows varied significantly for both sites and parameter. The following is a summary of how the results of this report compare to the values obtained using the *Evaluation of Stormwater Criteria* methodology.

Concentrations - The *Evaluation of Stormwater Criteria* methodology over estimated both parameters at all three site by 30% to 418%. Generally the concentrations derived using the two methods were closest for the Brooks, with over estimates of 30% and 40% for total nitrogen and total phosphorus, respectively.

Annual Runoff - The *Evaluation of Stormwater Criteria* methodology under estimated the runoff volume for all three sites by 15% to 64%.

Mass Loading to Lakes - The *Evaluation of Stormwater Criteria* methodology over estimated the loading at all three sites for all parameters except total phosphorus at the Brooks. The over estimated loadings ranged from 23% to 182%. The Brooks total phosphorus loading was under estimated by 50%.

Mass Loading Discharging from Lakes - The *Evaluation of Stormwater Criteria* methodology under estimated the discharge from all sites for all parameters except total nitrogen at Wal-Mart. The under estimated loadings ranged from 57% to 87%. The over estimate for total nitrogen loading at Wal-Mart was 183%.

Treatment Efficiency - The *Evaluation of Stormwater Criteria* methodology over estimated the removal efficiency for all parameters are all three locations except total nitrogen at Wal-Mart. The over estimated loadings ranged from 10% to 132% and the under estimate for total nitrogen at Wal-Mart was 11%.

8.0 CONCLUSIONS

State (CH 62-40 F.A.C.) water quality standards include stormwater treatment system goals of an 80% reduction in pollutants. The Brooks system achieved this mass removal efficiency with seven (7) out of the twelve (12) analyzed parameters and four (4) of the concentrations. The Wal-Mart system only achieved the 80% reduction for two (2) mass parameters and one (1) concentration parameter. The Laguna Lakes system achieved the reduction goal for one (1) mass parameter and two (2) concentration parameters. The wet detention systems evaluated in this study showed the best removal efficiencies for nitrate + nitrite and ortho phosphorus. All three sites demonstrated removal efficiency near or above 80% for these parameters, with only the Laguna Lakes' ortho phosphorus mass and Wal-Mart's nitrate + nitrite concentration below 80%, both at 76%. None of the sites were able to achieve 80% removal for chlorophyll-a, total Kjeldahl nitrogen, total cadmium, dissolved cadmium or total nitrogen.

Due to the relatively small sampling of developed sites and stormwater BMPs, it is difficult to make definitive comparisons with the methodology outlined in the *Evaluation of Stormwater Criteria*. Additional sampling sites would be required to more thoroughly evaluate the performance of actual systems compared to the information presented in *Evaluation of Stormwater Criteria*. The results of this report indicate the *Evaluation of Stormwater Criteria* methodology may over estimate runoff concentrations and under estimate runoff volumes. The relatively closeness of fit for mass loading and removal efficiency are much more variable, as the *Evaluation of Stormwater Criteria* methodology over estimated some parameters in some locations and under estimated others.

The report included both wet and dry season sampling. The parameter concentrations for the two dry season samples taken at Laguna Lakes and the Brooks didn't vary significantly from the samples taken during the wet season. The concentrations were generally within the range of values obtained during the wet season. There did not appear to be a buildup of pollutants during the extended dry periods during the dry season.

The site that experienced the lowest concentration and mass removal efficiency (Laguna Lakes) utilizes reclaimed water for irrigation. The extent of the impact that the use of reclaimed water for irrigation had on the parameter concentrations and loads at Laguna Lakes is not know.

9.0 RECOMMENDATIONS

Additional local data sets are required to draw more definitive conclusions as to how closely the *Evaluation of Stormwater Criteria* estimates runoff volumes, loading rates, and removal efficiencies in southwest Florida. It is recommended that volume, loading and removal efficiencies are measured at more sites in southwest Florida to provide a larger number of comparison data sets. While the sites selected in this report are typical of local best management practices, it is unknown whether these particular study sites are in fact representative of the behavior of other similar locations utilizing similar BMP. Future studies should look at additional sites that use similar BMP to establish a range of expected behaviors for each. The single biggest limitation to understanding the efficiencies of the various systems is the lack of local data. An evaluation of possible mechanisms to generate additional sampling data from the private sector should be undertaken and implemented.

Consideration should be given to the examination of project sites existing in the southwest Florida area that have BPM systems different than those three selected for this study. This will expand the knowledge base to better understand the expected behaviors of additional systems not evaluated in this report. Additional systems could include underground storage, dry detention or dry retention.

Future studies should also consider quantifying other inputs and outputs for the BMP, including evaporation and groundwater flows. This will create a more complete mass balance of the system.

The potential surface water quality impacts associated with using reclaimed water for irrigation are not well documented or publicized. It is important to gain a better understanding of how reclaimed water use can affect BMP efficiencies and investigate more efficient ways of using reclaimed water for irrigation. It is recommended that a development that is using reclaimed water for irrigation be studied in more detail to better understand the water quality impacts. The second phase of such a study should include working with the property owner to manipulate the irrigation system to reduce nutrient loading to the storm water system. This type of study would lead to a better understand of any impacts and potentially lead to a public education program to promote responsible use of reclaimed water for irrigation.

APPENDIX A - LOADING CALCULATIONS

Laguna Lakes
Removal Efficiency Calculations

Station LLIN1

Total Drainage Area (ac) = 25.8

Total Rainfall Amount (in)= 119.14

Parameters	WQ Concentration Units	WQ Conc. (avg. conc. tested)	< 0.05 inch rainfall			>0.05 in < 0.5 in rainfall			>0.5 in <1.5 in Rainfall			>1.5 in Rainfall			Total Mass Loading (kg)
			Total Rainfall (in) = 1.97			Total Rainfall (in) = 27.11			Total Rainfall (in) = 57.60			Total Rainfall (in) = 32.46			
			% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	
Chlorophyll a, corrected for Pheophytin	mg/M3	3.563	0%	0	0.000	55%	1.393E+06	0.140	69%	3.716E+06	0.375	72%	2.182E+06	0.220	0.735
Pheophytin	mg/M3	1.663	0%	0	0.000	55%	1.393E+06	0.066	69%	3.716E+06	0.175	72%	2.182E+06	0.103	0.343
Nitrogen, Kjeldahl, Total	mg/L as N	1.298	0%	0	0.000	55%	1.393E+06	51.224	69%	3.716E+06	136.622	72%	2.182E+06	80.200	268.046
Ammonia, Automated Phenate	mg/L as N	0.478	0%	0	0.000	55%	1.393E+06	18.845	69%	3.716E+06	50.262	72%	2.182E+06	29.504	98.610
Phosphorus, Total	mg/L as P	0.100	0%	0	0.000	55%	1.393E+06	3.963	69%	3.716E+06	10.571	72%	2.182E+06	6.205	20.739
Nitrate + Nitrite	mg/L as N	0.861	0%	0	0.000	55%	1.393E+06	33.985	69%	3.716E+06	90.643	72%	2.182E+06	53.209	177.837
Total Suspended Solids	mg/L	5.390	0%	0	0.000	55%	1.393E+06	212.689	69%	3.716E+06	567.276	72%	2.182E+06	333.000	1112.965
Phosphorus, Ortho	mg/L as P	0.130	0%	0	0.000	55%	1.393E+06	5.142	69%	3.716E+06	13.715	72%	2.182E+06	8.051	26.908
Copper, AA furnace technique	µg/L	1.923	0%	0	0.000	55%	1.393E+06	0.076	69%	3.716E+06	0.202	72%	2.182E+06	0.119	0.397
Cadmium, AA furnace technique	µg/L	0.280	0%	0	0.000	55%	1.393E+06	0.011	69%	3.716E+06	0.029	72%	2.182E+06	0.017	0.058
Copper, Dissolved, AA furnace technique	µg/L	1.353	0%	0	0.000	55%	1.393E+06	0.053	69%	3.716E+06	0.142	72%	2.182E+06	0.084	0.279
Cadmium, dissolved, AA furnace	µg/L	0.375	0%	0	0.000	55%	1.393E+06	0.015	69%	3.716E+06	0.039	72%	2.182E+06	0.023	0.077
Nitrogen, Total	mg/L as N	1.221	0%	0	0.000	55%	1.393E+06	48.190	69%	3.716E+06	128.532	72%	2.182E+06	75.450	252.172

Station LLIN2

Total Drainage Area (ac) = 81.31

Rainfall Amount (in)= 119.14

Parameters	WQ Concentration Units	WQ Conc. (avg. conc. tested)	< 0.05 inch rainfall			>0.05 in < 0.5 in rainfall			>0.5 in <1.5 in Rainfall			>1.5 in Rainfall			Total Mass Loading (kg)
			Total Rainfall (in) = 1.97			Total Rainfall (in) = 27.11			Total Rainfall (in) = 57.60			Total Rainfall (in) = 32.46			
			% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	
Chlorophyll a, corrected for Pheophytin	mg/M3	6.558	0%	0	0.000	24%	1.904E+06	0.353	26%	4.462E+06	0.828	45%	4.278E+06	0.794	1.98
Pheophytin	mg/M3	2.078	0%	0	0.000	24%	1.904E+06	0.112	26%	4.462E+06	0.262	45%	4.278E+06	0.252	0.63
Nitrogen, Kjeldahl, Total	mg/L as N	1.363	0%	0	0.000	24%	1.904E+06	73.500	26%	4.462E+06	172.265	45%	4.278E+06	165.164	410.93
Ammonia, Automated Phenate	mg/L as N	0.147	0%	0	0.000	24%	1.904E+06	7.898	26%	4.462E+06	18.511	45%	4.278E+06	17.748	44.16
Phosphorus, Total	mg/L as P	0.121	0%	0	0.000	24%	1.904E+06	6.519	26%	4.462E+06	15.278	45%	4.278E+06	14.649	36.45
Nitrate + Nitrite	mg/L as N	0.481	0%	0	0.000	24%	1.904E+06	25.923	26%	4.462E+06	60.756	45%	4.278E+06	58.252	144.93
Total Suspended Solids	mg/L	3.879	0%	0	0.000	24%	1.904E+06	209.134	26%	4.462E+06	490.154	45%	4.278E+06	469.951	1169.24
Phosphorus, Ortho	mg/L as P	0.335	0%	0	0.000	24%	1.904E+06	18.052	26%	4.462E+06	42.308	45%	4.278E+06	40.564	100.92
Copper, AA furnace technique	µg/L	3.061	0%	0	0.000	24%	1.904E+06	0.165	26%	4.462E+06	0.387	45%	4.278E+06	0.371	0.92
Cadmium, AA furnace technique	µg/L	0.300	0%	0	0.000	24%	1.904E+06	0.016	26%	4.462E+06	0.038	45%	4.278E+06	0.036	0.09
Copper, Dissolved, AA furnace technique	µg/L	2.214	0%	0	0.000	24%	1.904E+06	0.119	26%	4.462E+06	0.280	45%	4.278E+06	0.268	0.67
Cadmium, dissolved, AA furnace	µg/L	0.365	0%	0	0.000	24%	1.904E+06	0.020	26%	4.462E+06	0.046	45%	4.278E+06	0.044	0.11
Nitrogen, Total	mg/L as N	1.086	0%	0	0.000	24%	1.904E+06	58.540	26%	4.462E+06	137.201	45%	4.278E+06	131.546	327.29

Parameters	WQ Concentration Units	Total Input To Lake			LLOUT			Removal			
								Mass		Concentration	
		Weighted WQ Conc. In	Total Mass Loading to Lake (LLIN1 loading + LLIN2 Loading) (kg)	Total Discharge to Lake (LLIN1 Runoff + LLIN2 Runoff) (cf)	WQ Conc. (avg. conc. tested)	Discharge Volume (cf)	Mass Loading (WQ Conc. X Discharge Volume) (kg)	Mass (In - Out) (kg)	% Removal (Removed / Total)	Conc. (In - Out)	% Removal (Removed / Total)
Chlorophyll a, corrected for Pheophytin	mg/M3	5.837	2.71	1.79E+07	5.743	2.203E+07	3.58	-0.87	-32%	0.09	2%
Pheophytin	mg/M3	1.978	0.97	1.79E+07	3.171	2.203E+07	1.98	-1.01	-104%	-1.19	-60%
Nitrogen, Kjeldahl, Total	mg/L as N	1.348	678.98	1.79E+07	1.334	2.203E+07	831.83	-152.86	-23%	0.01	1%
Ammonia, Automated Phenate	mg/L as N	0.226	142.77	1.79E+07	0.086	2.203E+07	53.55	89.21	62%	0.14	62%
Phosphorus, Total	mg/L as P	0.116	57.19	1.79E+07	0.127	2.203E+07	79.35	-22.17	-39%	-0.01	-10%
Nitrate + Nitrite	mg/L as N	0.572	322.77	1.79E+07	0.086	2.203E+07	53.47	269.30	83%	0.49	85%
Total Suspended Solids	mg/L	4.243	2282.20	1.79E+07	3.761	2.203E+07	2345.79	-63.59	-3%	0.48	11%
Phosphorus, Ortho	mg/L as P	0.286	127.83	1.79E+07	0.050	2.203E+07	31.46	96.38	75%	0.24	82%
Copper, AA furnace technique	µg/L	2.787	1.32	1.79E+07	3.895	2.203E+07	2.43	-1.11	-84%	-1.11	-40%
Cadmium, AA furnace technique	µg/L	0.295	0.15	1.79E+07	0.289	2.203E+07	0.18	-0.03	-22%	0.01	2%
Copper, Dissolved, AA furnace technique	µg/L	2.007	0.95	1.79E+07	2.404	2.203E+07	1.50	-0.55	-58%	-0.40	-20%
Cadmium, dissolved, AA furnace	µg/L	0.367	0.19	1.79E+07	0.375	2.203E+07	0.23	-0.05	-25%	-0.01	-2%
Nitrogen, Total	mg/L as N	1.118	579.46	1.79E+07	1.413	2.203E+07	881.29	-301.83	-52%	-0.29	-26%

1. Water quality concentrations are averages of the individual sample event concentrations.
2. % Runoff coefficients are the average of the event runoff coefficients as calculated using the drainage area, flow and rainfall amount.
3. Calculations do not account for possible submergence of the outfall structure. However, field measurements were taken and accounting for submerged flow would change the discharged volume by less than 1%
4. Data from May 4, 2006 to October 10, 2008 (890 days; 2.44 years)
5. Areas used in the calcualtions do not include lakes. Any loadings to the lakes are considered part of the treatment efficiency for the lake.

Wal-Mart
Removal Efficiency Calculations

Parameters	WQ Concentration Units	Station WMIN1													
		Total Drainage Area (ac) = 10.06													
		Rainfall Amount (in)= 129.17													
			< 0.05 inch rainfall			>0.05 in < 0.5 in rainfall			>0.5 in <1.5 in Rainfall			>1.5 in Rainfall			
			Total Rainfall (in) =	3.61		Total Rainfall (in) =	34.51		Total Rainfall (in) =	53.82		Total Rainfall (in) =	37.23		
		WQ Conc.	% Runoff	Annual Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	Total Mass Loading (kg)
Chlorophyll a, corrected for Pheophytin	mg/M3	4.064	0%	0	0.000	72%	9.081E+05	0.104	76%	1.496E+06	0.172	86%	1.171E+06	0.135	0.41
Pheophytin	mg/M3	2.836	0%	0	0.000	72%	9.081E+05	0.073	76%	1.496E+06	0.120	86%	1.171E+06	0.094	0.29
Nitrogen, Kjeldahl, Total	mg/L as N	0.791	0%	0	0.000	72%	9.081E+05	20.334	76%	1.496E+06	33.494	86%	1.171E+06	26.231	80.06
Ammonia, Automated Phenate	mg/L as N	0.179	0%	0	0.000	72%	9.081E+05	4.607	76%	1.496E+06	7.588	86%	1.171E+06	5.943	18.14
Phosphorus, Total	mg/L as P	0.054	0%	0	0.000	72%	9.081E+05	1.387	76%	1.496E+06	2.284	86%	1.171E+06	1.789	5.46
Nitrate + Nitrite	mg/L as N	0.116	0%	0	0.000	72%	9.081E+05	2.974	76%	1.496E+06	4.899	86%	1.171E+06	3.836	11.71
Total Suspended Solids	mg/L	7.165	0%	0	0.000	72%	9.081E+05	184.259	76%	1.496E+06	303.504	86%	1.171E+06	237.691	725.45
Phosphorus, Ortho	mg/L as P	0.013	0%	0	0.000	72%	9.081E+05	0.338	76%	1.496E+06	0.557	86%	1.171E+06	0.436	1.33
Copper, AA furnace technique	µg/L	1.839	0%	0	0.000	72%	9.081E+05	0.047	76%	1.496E+06	0.078	86%	1.171E+06	0.061	0.19
Cadmium, AA furnace technique	µg/L	0.317	0%	0	0.000	72%	9.081E+05	0.008	76%	1.496E+06	0.013	86%	1.171E+06	0.011	0.03
Copper, Dissolved, AA furnace technique	µg/L	1.136	0%	0	0.000	72%	9.081E+05	0.029	76%	1.496E+06	0.048	86%	1.171E+06	0.038	0.12
Cadmium, dissolved, AA furnace	µg/L	0.400	0%	0	0.000	72%	9.081E+05	0.010	76%	1.496E+06	0.017	86%	1.171E+06	0.013	0.04
Nitrogen, Total	mg/L as N	0.905	0%	0	0.000	72%	9.081E+05	23.273	76%	1.496E+06	38.335	86%	1.171E+06	30.022	91.63

Parameters	WQ Concentration Units	Station WMIN2													
		Total Drainage Area (ac)= 10.06													
		Rainfall Amount (in)= 129.17													
			< 0.05 inch rainfall			>0.05 in < 0.5 in rainfall			>0.5 in <1.5 in Rainfall			>1.5 in Rainfall			
			Total Rainfall (in) =	3.61		Total Rainfall (in) =	34.51		Total Rainfall (in) =	53.82		Total Rainfall (in) =	37.23		
		WQ Conc.	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	Total Mass Loading (kg)
Chlorophyll a, corrected for Pheophytin	mg/M3	7.107	0%	0	0.000	64%	8.099E+05	0.163	82%	1.606E+06	0.323	94%	1.275E+06	0.256	0.74
Pheophytin	mg/M3	2.238	0%	0	0.000	64%	8.099E+05	0.051	82%	1.606E+06	0.102	94%	1.275E+06	0.081	0.23
Nitrogen, Kjeldahl, Total	mg/L as N	0.881	0%	0	0.000	64%	8.099E+05	20.217	82%	1.606E+06	40.095	94%	1.275E+06	31.820	92.13
Ammonia, Automated Phenate	mg/L as N	0.095	0%	0	0.000	64%	8.099E+05	2.179	82%	1.606E+06	4.321	94%	1.275E+06	3.430	9.93
Phosphorus, Total	mg/L as P	0.148	0%	0	0.000	64%	8.099E+05	3.403	82%	1.606E+06	6.749	94%	1.275E+06	5.356	15.51
Nitrate + Nitrite	mg/L as N	0.757	0%	0	0.000	64%	8.099E+05	17.361	82%	1.606E+06	34.432	94%	1.275E+06	27.326	79.12
Total Suspended Solids	mg/L	9.487	0%	0	0.000	64%	8.099E+05	217.600	82%	1.606E+06	431.560	94%	1.275E+06	342.491	991.65
Phosphorus, Ortho	mg/L as P	0.472	0%	0	0.000	64%	8.099E+05	10.819	82%	1.606E+06	21.458	94%	1.275E+06	17.029	49.31
Copper, AA furnace technique	µg/L	3.729	0%	0	0.000	64%	8.099E+05	0.086	82%	1.606E+06	0.170	94%	1.275E+06	0.135	0.39
Cadmium, AA furnace technique	µg/L	0.386	0%	0	0.000	64%	8.099E+05	0.009	82%	1.606E+06	0.018	94%	1.275E+06	0.014	0.04
Copper, Dissolved, AA furnace technique	µg/L	1.739	0%	0	0.000	64%	8.099E+05	0.040	82%	1.606E+06	0.079	94%	1.275E+06	0.063	0.18
Cadmium, dissolved, AA furnace	µg/L	0.448	0%	0	0.000	64%	8.099E+05	0.010	82%	1.606E+06	0.020	94%	1.275E+06	0.016	0.05
Nitrogen, Total	mg/L as N	0.891	0.00	0	0.000	64%	8.099E+05	20.430	82%	1.606E+06	40.518	94%	1.275E+06	32.155	93.10

Parameters	WQ Concentration Units	Total Input To Lake			WMOUT			Removal			
								Mass		Concentration	
		Weighted WQ Conc. In	Total Mass Loading to Lake (WMIN1 loading + WMIN2 Loading) (kg)	Total Discharge to Lake (WMIN1 Runoff + WMIN2 Runoff)	WQ Conc. (avg. conc. tested)	Discharge Volume (cf)	Mass Loading (WQ Conc. X Discharge Volume) (kg)	Mass (In - Out) (kg)	% Removal (Removed / Total)	Conc. (In - Out)	% Removal (Removed / Total)
Chlorophyll a, corrected for Pheophytin	mg/M3	5.586	1.15	7.27E+06	3.714	4.468E+06	0.47	0.68	59%	1.87	34%
Pheophytin	mg/M3	2.537	0.52	7.27E+06	2.136	4.468E+06	0.27	0.25	48%	0.40	16%
Nitrogen, Kjeldahl, Total	mg/L as N	0.836	172.19	7.27E+06	0.539	4.468E+06	68.14	104.05	60%	0.30	36%
Ammonia, Automated Phenate	mg/L as N	0.137	28.07	7.27E+06	0.058	4.468E+06	7.36	20.71	74%	0.08	58%
Phosphorus, Total	mg/L as P	0.101	20.97	7.27E+06	0.034	4.468E+06	4.34	16.63	79%	0.07	66%
Nitrate + Nitrite	mg/L as N	0.436	90.83	7.27E+06	0.104	4.468E+06	13.18	77.65	85%	0.33	76%
Total Suspended Solids	mg/L	8.326	1717.10	7.27E+06	2.633	4.468E+06	333.08	1384.03	81%	5.69	68%
Phosphorus, Ortho	mg/L as P	0.242	50.64	7.27E+06	0.006	4.468E+06	0.73	49.90	99%	0.24	98%
Copper, AA furnace technique	µg/L	2.784	0.58	7.27E+06	1.071	4.468E+06	0.14	0.44	76%	1.71	62%
Cadmium, AA furnace technique	µg/L	0.351	0.07	7.27E+06	0.300	4.468E+06	0.04	0.03	48%	0.05	15%
Copper, Dissolved, AA furnace technique	µg/L	1.438	0.30	7.27E+06	1.057	4.468E+06	0.13	0.16	55%	0.38	26%
Cadmium, dissolved, AA furnace	µg/L	0.424	0.09	7.27E+06	0.400	4.468E+06	0.05	0.04	42%	0.02	6%
Nitrogen, Total	mg/L as N	0.898	184.73	7.27E+06	0.649	4.468E+06	82.15	102.58	56%	0.25	28%

1. Water quality concentrations are averages of the individual sample event concentrations.
2. % Runoff coefficients are the average of the event runoff coefficients as calculated using the drainage area, flow and rainfall amount.
3. Calculations do not account for possible submergence of the outfall structure. However, field measurements were taken and accounting for submerged flow would change the discharged volume by less than 1%
4. Data from May 17, 2006 to October 10, 2008 (877 days; 2.40 years)
5. Areas used in the calcualtions do not include lakes. Any loadings to the lakes are considered part of the treatment efficiency for the lake.

The Brooks
Removal Efficiency Calculations

Parameters	WQ Concentration Units	Station BRIN													
		Total Drainage Area (ac) = 139.0													
		Rainfall Amount (in)= 124.96													
		WQ Conc.	< 0.05 inch rainfall			>0.05 in < 0.5 in rainfall			>0.5 in <1.5 in Rainfall			>1.5 in Rainfall			Total Mass Loading (kg)
			Total Rainfall (in) = 2.94			Total Rainfall (in) = 37.99			Total Rainfall (in) = 59.30			Total Rainfall (in) = 24.73			
			% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	% Runoff	Runoff Volume (cf) (area x rainfall x runoff coef.)	Mass Loading (WQ Conc. X Runoff Volume) (kg)	
Chlorophyll a, corrected for Pheophytin	mg/M3	7.343	0%	0	0.00	44%	8.421E+06	1.75	61%	1.822E+07	3.79	76%	9.506E+06	1.98	7.51
Pheophytin	mg/M3	5.412	0%	0	0.00	44%	8.421E+06	1.29	61%	1.822E+07	2.79	76%	9.506E+06	1.46	5.54
Nitrogen, Kjeldahl, Total	mg/L as N	1.801	0%	0	0.00	44%	8.421E+06	429.58	61%	1.822E+07	929.23	76%	9.506E+06	484.94	1843.75
Ammonia, Automated Phenate	mg/L as N	0.600	0%	0	0.00	44%	8.421E+06	143.20	61%	1.822E+07	309.75	76%	9.506E+06	161.65	614.61
Phosphorus, Total	mg/L as P	0.234	0%	0	0.00	44%	8.421E+06	55.76	61%	1.822E+07	120.61	76%	9.506E+06	62.94	239.31
Nitrate + Nitrite	mg/L as N	0.486	0%	0	0.00	44%	8.421E+06	115.96	61%	1.822E+07	250.84	76%	9.506E+06	130.91	497.72
Total Suspended Solids	mg/L	11.194	0%	0	0.00	44%	8.421E+06	2669.52	61%	1.822E+07	5774.48	76%	9.506E+06	3013.59	11457.59
Phosphorus, Ortho	mg/L as P	0.367	0%	0	0.00	44%	8.421E+06	87.62	61%	1.822E+07	189.53	76%	9.506E+06	98.91	376.05
Copper, AA furnace technique	µg/L	5.593	0%	0	0.00	44%	8.421E+06	1.33	61%	1.822E+07	2.89	76%	9.506E+06	1.51	5.72
Cadmium, AA furnace technique	µg/L	0.404	0%	0	0.00	44%	8.421E+06	0.10	61%	1.822E+07	0.21	76%	9.506E+06	0.11	0.41
Copper, Dissolved, AA furnace technique	µg/L	4.376	0%	0	0.00	44%	8.421E+06	1.04	61%	1.822E+07	2.26	76%	9.506E+06	1.18	4.48
Cadmium, dissolved, AA furnace	µg/L	0.401	0%	0	0.00	44%	8.421E+06	0.10	61%	1.822E+07	0.21	76%	9.506E+06	0.11	0.41
Nitrogen, Total	mg/L as N	1.598	0%	0	0.00	44%	8.421E+06	381.09	61%	1.822E+07	824.34	76%	9.506E+06	430.20	1635.63

Parameters	WQ Concentration Units	Total Input To Lake			BROUT			Removal			
								Mass		Concentration	
		Weighted WQ Conc. In	Total Mass Loading to Lake (BRIN loading) (kg)	Total Discharge to Lake (BRIN Runoff)	WQ Conc. (avg. conc. tested)	Discharge Volume (cf)	Mass Loading (WQ Conc. X Discharge Volume) (kg)	Mass (In - Out) (kg)	% Removal (Removed / Total)	Conc. (In - Out)	% Removal (Removed / Total)
Chlorophyll a, corrected for Pheophytin	mg/M3	7.343	7.51	3.61E+07	10.623	1.686E+07	5.07	2.44	33%	-3.28	-45%
Pheophytin	mg/M3	5.412	5.54	3.61E+07	4.031	1.686E+07	1.92	3.61	65%	1.38	26%
Nitrogen, Kjeldahl, Total	mg/L as N	1.801	1843.75	3.61E+07	1.089	1.686E+07	519.99	1323.76	72%	0.71	40%
Ammonia, Automated Phenate	mg/L as N	0.600	614.61	3.61E+07	0.065	1.686E+07	30.81	583.80	95%	0.54	89%
Phosphorus, Total	mg/L as P	0.234	239.31	3.61E+07	0.071	1.686E+07	34.08	205.23	86%	0.16	69%
Nitrate + Nitrite	mg/L as N	0.486	497.72	3.61E+07	0.080	1.686E+07	38.41	459.31	92%	0.41	83%
Total Suspended Solids	mg/L	11.194	11457.59	3.61E+07	3.566	1.686E+07	1702.46	9755.13	85%	7.63	68%
Phosphorus, Ortho	mg/L as P	0.367	376.05	3.61E+07	0.012	1.686E+07	5.55	370.51	99%	0.36	97%
Copper, AA furnace technique	µg/L	5.593	5.72	3.61E+07	1.117	1.686E+07	0.53	5.19	91%	4.48	80%
Cadmium, AA furnace technique	µg/L	0.404	0.41	3.61E+07	0.300	1.686E+07	0.14	0.27	65%	0.10	26%
Copper, Dissolved, AA furnace technique	µg/L	4.376	4.48	3.61E+07	1.014	1.686E+07	0.48	4.00	89%	3.36	77%
Cadmium, dissolved, AA furnace	µg/L	0.401	0.41	3.61E+07	0.446	1.686E+07	0.21	0.20	48%	-0.04	-11%
Nitrogen, Total	mg/L as N	1.598	1635.63	3.61E+07	1.165	1.686E+07	555.98	1079.65	66%	0.43	27%

1. Water quality concentrations are averages of the individual sample event concentrations.
2. % Runoff coefficients are the average of the event runoff coefficients as calculated using the drainage area, flow and rainfall amount.
3. Calculations do not account for possible submergence of the outfall structure. However, field measurements were taken and accounting for submerged flow would change the discharged volume by less than 1%
4. Data from May 4, 2006 to December 22, 2008 (963 days; 2.64 years)
5. Areas used in the calcualtions do not include lakes. Any loadings to the lakes are considered part of the treatment efficiency for the lake.

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APPENDIX B - PERCENT RUNOFF CALCULATIONS

Percent Runoff Example Calculation

% Runoff = Flow/(Rainfall * Drainage Area) * 12/43560 * 100

Flow = measure pipe flow (cf)

Rainfall = measure storm event rainfall (in)

Drainage Area = drainage area discharging to the sampling unit (ac)

12/43560 = conversion factor

Example: LLIN1 – 8/12/2008

Flow = 1009 cf

Rainfall = 0.13 in

Drainage Area = 3.8 ac

% Runoff = 1009/(0.13 * 3.8) * 12/43560 * 100 = 56%

Laguna Lakes Runoff Calculations

LLIN1 (Multi-Family)					
Event Date	Event Rainfall (in)	Inflow 1 (cf)	Drainage Area (ac)	% Runoff	Avg. % Runoff
8/12/2008	0.13	1009	3.8	56%	55%
6/11/2006	0.14	960	3.8	50%	
6/16/2006	0.17	1,260	3.8	54%	
6/18/2006	0.37	3,564	3.8	70%	
6/12/2006	0.40	3,648	3.8	66%	
8/5/2008	0.41	2891	3.8	51%	
7/6/2006	0.43	2,688	3.8	45%	
9/20/2007	0.48	3108	3.8	47%	
7/6/2006	0.60	4,524	3.8	55%	69%
9/13/2006	0.63	5,536	3.8	64%	
4/10/2007	0.70	5,430	3.8	56%	
8/14/2006	0.71	6,696	3.8	68%	
7/22/2006	0.72	7,128	3.8	72%	
6/25/2006	0.80	9,528	3.8	86%	
7/7/2006	1.05	11,196	3.8	77%	
7/22/2006	1.08	10,632	3.8	71%	
7/20/2006	1.37	12,612	3.8	67%	
9/2/2007	1.48	14,785	3.8	72%	
7/31/2007	1.58	16,219	3.8	74%	72%
7/2/2006	2.30	21,924	3.8	69%	

LLIN2 (Single Family)					
Event Date	Event Rainfall (in)	Inflow 2 (cf)	Drainage Area (ac)	% Runoff	Avg. % Runoff
12/23/2006	0.12	129	2.7	11%	24%
8/12/2008	0.19	753	2.7	40%	
4/10/2007	0.24	215	2.7	9%	
4/10/2007	0.34	413	2.7	12%	
7/6/2006	0.46	1359	2.7	30%	
6/18/2006	0.48	1866	2.7	40%	
6/25/2006	0.53	1387	2.7	27%	26%
8/5/2008	0.62	1715	2.7	28%	
6/25/2006	0.80	1738	2.7	22%	
5/16/2007	1.15	3143	2.7	28%	
8/14/2007	1.50	5861	2.7	40%	45%
9/2/2007	1.55	6496	2.7	43%	
7/2/2006	2.09	10513	2.7	51%	
6/1/2007	1.78	2605	2.7	15%	

- Not included in calculations due to apparent instrument malfunction

Wal-Mart Runoff Calculations

WMIN1					
Event Date	Event Rainfall (in)	Inflow 1 (cf)	Drainage Area (ac)	% Runoff	Avg. % Runoff
6/26/2006	0.14	2,522	2.8	177%	
8/30/2006	0.14	551	2.8	39%	72%
8/12/2008	0.18	1446	2.8	79%	
6/11/2006	0.27	2,452	2.8	89%	
6/10/2006	0.29	2,695	2.8	91%	
6/12/2006	0.38	3,008	2.8	78%	
7/8/2008	0.40	2282	2.8	56%	
8/15/2006	0.58	6,410	2.8	109%	
5/16/2007	0.57	2,858	2.8	49%	76%
7/16/2008	0.64	2962	2.8	46%	
9/20/2007	0.68	6239	2.8	90%	
6/25/2006	0.79	6,161	2.8	77%	
7/27/2007	0.79	7,400	2.8	92%	
7/31/2007	0.98	5,936	2.8	60%	
9/13/2006	1.02	8,390	2.8	81%	
8/14/2006	1.13	10,147	2.8	88%	
7/21/2007	1.16	10,237	2.8	87%	
6/24/2006	1.33	11,740	2.8	87%	
6/17/2006	1.39	13,225	2.8	94%	
7/11/2006	1.39	8,975	2.8	64%	
9/2/2007	1.78	18,243	2.8	101%	
7/20/2006	1.81	21,697	2.8	118%	
7/2/2006	2.57	26,746	2.8	102%	
8/19/2008	3.52	30841	2.8	86%	86%

WMIN2					
Event Date	Event Rainfall (in)	Inflow 2 (cf)	Drainage Area (ac)	% Runoff	Avg. % Runoff
6/11/2008	0.12	499	3.7	31%	64%
6/5/2008	0.16	1315	3.7	61%	
1/25/2007	0.21	1,015	3.7	36%	
6/11/2006	0.28	3,672	3.7	98%	
6/3/2008	0.44	5656	3.7	96%	
12/25/2006	0.59	8,980	3.7	113%	
9/20/2007	0.66	12506	3.7	141%	
8/14/2006	0.99	13,851	3.7	104%	
7/9/2007	0.84	8,483	3.7	75%	82%
7/27/2007	0.84	11,173	3.7	99%	
6/8/2008	1.01	12068	3.7	89%	
6/7/2006	1.11	14,634	3.7	98%	
6/25/2006	1.18	9,369	3.7	59%	
7/11/2006	1.39	13,095	3.7	70%	
8/19/2006	1.84	22,032	3.7	89%	94%
7/2/2006	2.55	33,723	3.7	98%	
7/20/2006	1.72	27,675	3.7	120%	

[shaded] - Not included in calculations due to apparent instrument malfunction

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The Brooks Runoff Calculations

BRIN					
Event Date	Event Rainfall (in)	Inflow 1 (cf)	Drainage Area (ac)	% Runoff	Avg. % Runoff
8/6/2007	0.11	104	2.81	9%	44%
8/5/2007	0.15	526	2.81	34%	
8/5/2007	0.15	526	2.81	34%	
7/20/2007	0.18	1,372	2.81	75%	
6/26/2006	0.27	594	2.81	22%	
7/26/2007	0.29	1,036	2.81	35%	
1/25/2007	0.32	1,229	2.81	38%	
7/25/2006	0.34	1,188	2.81	34%	
6/13/2006	0.42	3,478	2.81	81%	
10/6/2008	0.43	1683	2.81	38%	
7/7/2006	0.49	4,120	2.81	82%	
7/31/2006	0.50	2,160	2.81	42%	61%
6/17/2006	0.54	2,145	2.81	39%	
7/9/2008	0.64	4537	2.81	69%	
8/7/2006	0.73	3,997	2.81	54%	
6/30/2006	0.86	4,750	2.81	54%	
6/16/2006	1.00	5,163	2.81	51%	
7/23/2006	1.02	8,006	2.81	77%	
7/27/2007	1.20	7,111	2.81	58%	
9/29/2008	1.21	9092	2.81	74%	
7/21/2007	1.30	9,739	2.81	73%	
8/14/2006	1.42	8,745	2.81	60%	
6/25/2006	1.47	11,811	2.81	79%	
6/24/2006	1.61	9,887	2.81	60%	76%
7/15/2008	1.73	14872	2.81	84%	
9/10/2008	2.10	18008	2.81	84%	
8/19/2008	5.47	51264	2.81	92%	

- Not included in calculations due to apparent instrument malfunction

APPENDIX C - OUTFALL DISCHARGE CALCULATIONS

Outfall Discharge Example Calculation

The outfall discharge was calculated using the stages recorded at each outfall structure and the outfall structured geometry. Following are example calculations for each site.

Laguna Lakes:

Water depth above invert > 0.62 ft

Flow = $4.8 * A * H_b^{½} + 3.1 *L * H_w^{1.5}$

A = bleeder area (sf)

H_b = head above bleeder centroid (ft)

L = weir length (ft)

H_w = head above weir invert (ft)

Example 7/18/22006 12:00 am:

A = 0.44 sf

H_b = 0.69 – 0.42 = 0.27ft

L = 3.05 ft

H_w = 0.07 ft

Flow = $4.8 * 0.44 * 0.27^{½} + 3.1 *3.05 * 0.07^{1.5}$ = 1.27 cfs

Water depth above invert > 0.0 ft

Flow = $2.5 * \text{Tan} (\Theta) * H^{2.5}$

Θ = angle of v-notch divided by 2 (degrees)

H = head above invert (ft)

Example 8/12/2006 12:00 am:

Θ = 50 degrees

H = 0.27 ft

Flow = $2.5 * \text{Tan} (50) * 0.27^{2.5}$ = 0.11

Water depth above invert < 0.0 ft

Flow = 0.0 cfs

Wal-Mart:

Water depth above higher weir invert > 0.2 ft

Flow = $4.8 * A_1 * H_1^{½} + 4.8 * A_2 * H_2^{½}$

A_1 = higher bleeder area (sf)

H_1 = head above higher bleeder centroid (ft)

A_2 = lower bleeder area (sf)

H_2 = head above lower bleeder centroid (ft)

Example 9/10/2009 at 12:00 am:

A_1 = 0.56 sf

H_1 = 0.94 - .2/2 = 0.84 ft

A_2 = 0.049 sf

H_2 = 2.53-0.125 = 2.405 ft

Flow = $4.8 * 0.56 * 0.84^{½} + 4.8 * 0.049 * 2.405^{½}$ = 2.828 cfs

Water depth above higher weir invert > 0.0 ft

Flow = $3.1 * L_1 * H_1^{1.5} + 4.8 * A_2 * H_2^{½}$

L_1 = higher bleeder length (ft)

H_1 = head above higher bleeder invert (ft)

A_2 = lower bleeder area (sf)

H_2 = head above lower bleeder centroid (ft)

Example 9/11/2009 at 8:00 am:

L_1 = 2.8 ft

H_1 = 0.15 ft

A_2 = .049 sf

H_2 = 1.74 – 0.125 = 1.615 ft

Flow = $3.1 * 2.8 * 0.15^{1.5} + 4.8 * 0.049 * 1.615^{½}$ = 0.778

Water depth above higher weir invert > -1.465 ft

Flow = $4.8 * A_2 * H_2^{½}$

A_2 = lower bleeder area (sf)

H_2 = head above lower bleeder centroid (ft)

Example 9/7/2009 at 4:00 pm:

A_2 = .049 sf

H_2 = 1.16 – 0.125 = 1.035 ft

Flow = $4.8 * 0.049 * 1.035^{½}$ = 0.2393

Water depth above invert < 0.0 ft

Flow = 0.0 cfs

The Brooks:

Water depth above invert > 0.95 ft

Flow = $4.8 * A * H^{½}$

A = bleeder area (sf)

H = head above bleeder centroid (ft)

Example 8/20/2008 8:00 am:

A = 2.841 sf

H = 0.99 - 0.95/2 = 0.515ft

Flow = $4.8 * 2.841 * 0.515^{½}$ = 9.79 cfs

Water depth above invert > 0.0 ft

Flow = $3.1 * L * H^{1.5}$

L = bleeder length (ft)

H = head above bleeder invert (ft)

Example 8/20/2008 8:00 pm:

L = 2.99 ft

H = 0.77 ft

Flow = $3.1 * 2.99 * 0.77^{1.5}$ = 6.26 cfs

Water depth above invert < 0.0 ft

Flow = 0.0 cfs

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/4/06 12:00 PM	-1.69	0.00	0.0	0.0
Data range not printed - WSEL below invert for entire range				
6/17/06 6:00 PM	-0.14	0.00	0.0	0.0
6/17/06 7:00 PM	0.59	0.00	0.8	2908.5
6/17/06 8:00 PM	0.69	0.00	1.3	3736.2
6/17/06 9:00 PM	0.69	0.00	1.3	4546.6
6/17/06 10:00 PM	0.68	0.00	1.2	4495.2
6/17/06 11:00 PM	0.68	0.00	1.2	4444.2
6/18/06 12:00 AM	0.67	0.00	1.2	4344.8
6/18/06 1:00 AM	0.67	0.00	1.2	4214.3
6/18/06 2:00 AM	0.66	0.00	1.1	4119.6
6/18/06 3:00 AM	0.66	0.00	1.1	4005.4
6/18/06 4:00 AM	0.65	0.00	1.1	3908.8
6/18/06 5:00 AM	0.65	0.00	1.1	3858.5
6/18/06 6:00 AM	0.65	0.00	1.1	3816.4
6/18/06 7:00 AM	0.64	0.00	1.0	3741.9
6/18/06 8:00 AM	0.64	0.00	1.0	3662.7
6/18/06 9:00 AM	0.64	0.00	1.0	3612.6
6/18/06 10:00 AM	0.63	0.00	1.0	3558.8
6/18/06 11:00 AM	0.63	0.00	1.0	3507.5
6/18/06 12:00 PM	0.63	0.00	1.0	3485.5
6/18/06 1:00 PM	0.62	0.00	1.0	3455.6
6/18/06 2:00 PM	0.63	0.00	1.0	3445.2
6/18/06 3:00 PM	0.63	0.00	1.0	3485.9
6/18/06 4:00 PM	0.67	0.00	1.2	3868.6
6/18/06 5:00 PM	0.68	0.00	1.2	4303.6
6/18/06 6:00 PM	0.68	0.00	1.2	4335.9
6/18/06 7:00 PM	0.67	0.00	1.2	4270.4
6/18/06 8:00 PM	0.67	0.00	1.2	4230.0
6/18/06 9:00 PM	0.67	0.00	1.1	4158.9
6/18/06 10:00 PM	0.66	0.00	1.1	4073.1
6/18/06 11:00 PM	0.66	0.00	1.1	3997.4
6/19/06 12:00 AM	0.65	0.00	1.1	3923.4
6/19/06 1:00 AM	0.65	0.00	1.1	3879.9
6/19/06 2:00 AM	0.65	0.00	1.1	3830.5
6/19/06 3:00 AM	0.65	0.00	1.0	3768.3
6/19/06 4:00 AM	0.64	0.00	1.0	3721.2
6/19/06 5:00 AM	0.64	0.00	1.0	3681.9
6/19/06 6:00 AM	0.64	0.00	1.0	3637.4
6/19/06 7:00 AM	0.63	0.00	1.0	3594.2
6/19/06 8:00 AM	0.63	0.00	1.0	3564.2
6/19/06 9:00 AM	0.63	0.00	1.0	3541.0
6/19/06 10:00 AM	0.63	0.00	1.0	3512.9
6/19/06 11:00 AM	0.63	0.00	1.0	3475.4
6/19/06 12:00 PM	0.62	0.00	1.0	3444.8
6/19/06 1:00 PM	0.62	0.00	0.9	3329.8
6/19/06 2:00 PM	0.62	0.00	0.9	3316.4
6/19/06 3:00 PM	0.62	0.00	0.9	3412.4

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/19/06 4:00 PM	0.62	0.00	0.9	3315.3
6/19/06 5:00 PM	0.62	0.00	0.9	3208.4
6/19/06 6:00 PM	0.62	0.00	1.0	3314.3
6/19/06 7:00 PM	0.62	0.00	0.9	3336.1
6/19/06 8:00 PM	0.61	0.00	0.9	3208.5
6/19/06 9:00 PM	0.61	0.00	0.9	3143.9
6/19/06 10:00 PM	0.61	0.00	0.9	3090.6
6/19/06 11:00 PM	0.60	0.00	0.8	3043.2
6/20/06 12:00 AM	0.60	0.00	0.8	2991.0
6/20/06 1:00 AM	0.60	0.00	0.8	2954.7
6/20/06 2:00 AM	0.60	0.00	0.8	2944.4
6/20/06 3:00 AM	0.59	0.00	0.8	2923.9
6/20/06 4:00 AM	0.59	0.00	0.8	2898.4
6/20/06 5:00 AM	0.59	0.00	0.8	2878.0
6/20/06 6:00 AM	0.59	0.00	0.8	2857.8
6/20/06 7:00 AM	0.59	0.00	0.8	2832.6
6/20/06 8:00 AM	0.58	0.00	0.8	2807.5
6/20/06 9:00 AM	0.58	0.00	0.8	2782.6
6/20/06 10:00 AM	0.58	0.00	0.8	2752.8
6/20/06 11:00 AM	0.58	0.00	0.8	2747.9
6/20/06 12:00 PM	0.58	0.00	0.8	2733.2
6/20/06 1:00 PM	0.58	0.00	0.8	2713.5
6/20/06 2:00 PM	0.58	0.00	0.7	2703.7
6/20/06 3:00 PM	0.57	0.00	0.7	2669.6
6/20/06 4:00 PM	0.57	0.00	0.7	2640.6
6/20/06 5:00 PM	0.57	0.00	0.7	2645.4
6/20/06 6:00 PM	0.58	0.00	0.8	2723.7
6/20/06 7:00 PM	0.58	0.00	0.7	2743.2
6/20/06 8:00 PM	0.57	0.00	0.7	2655.3
6/20/06 9:00 PM	0.57	0.00	0.7	2621.4
6/20/06 10:00 PM	0.57	0.00	0.7	2611.8
6/20/06 11:00 PM	0.56	0.00	0.7	2564.3
6/21/06 12:00 AM	0.56	0.00	0.7	2531.2
6/21/06 1:00 AM	0.56	0.00	0.7	2521.8
6/21/06 2:00 AM	0.56	0.00	0.7	2507.7
6/21/06 3:00 AM	0.56	0.00	0.7	2489.1
6/21/06 4:00 AM	0.55	0.00	0.7	2461.3
6/21/06 5:00 AM	0.55	0.00	0.7	2438.3
6/21/06 6:00 AM	0.55	0.00	0.7	2424.5
6/21/06 7:00 AM	0.55	0.00	0.7	2401.7
6/21/06 8:00 AM	0.55	0.00	0.7	2383.5
6/21/06 9:00 AM	0.55	0.00	0.7	2374.5
6/21/06 10:00 AM	0.54	0.00	0.6	2347.5
6/21/06 11:00 AM	0.54	0.00	0.6	2320.6
6/21/06 12:00 PM	0.54	0.00	0.6	2311.7
6/21/06 1:00 PM	0.54	0.00	0.6	2298.3
6/21/06 2:00 PM	0.54	0.00	0.6	2293.9
6/21/06 3:00 PM	0.54	0.00	0.7	2320.6
6/21/06 4:00 PM	0.54	0.00	0.6	2338.4

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/21/06 5:00 PM	0.53	0.00	0.6	2268.0
6/21/06 6:00 PM	0.55	0.00	0.7	2308.7
6/21/06 7:00 PM	0.54	0.00	0.6	2374.7
6/21/06 8:00 PM	0.54	0.00	0.6	2320.6
6/21/06 9:00 PM	0.54	0.00	0.6	2293.9
6/21/06 10:00 PM	0.53	0.00	0.6	2258.7
6/21/06 11:00 PM	0.54	0.00	0.6	2241.1
6/22/06 12:00 AM	0.53	0.00	0.6	2219.5
6/22/06 1:00 AM	0.53	0.00	0.6	2189.1
6/22/06 2:00 AM	0.53	0.00	0.6	2184.8
6/22/06 3:00 AM	0.53	0.00	0.6	2176.2
6/22/06 4:00 AM	0.53	0.00	0.6	2163.4
6/22/06 5:00 AM	0.53	0.00	0.6	2159.1
6/22/06 6:00 AM	0.53	0.00	0.6	2150.6
6/22/06 7:00 AM	0.52	0.00	0.6	2137.8
6/22/06 8:00 AM	0.52	0.00	0.6	2133.5
6/22/06 9:00 AM	0.52	0.00	0.6	2108.3
6/22/06 10:00 AM	0.52	0.00	0.6	2070.5
6/22/06 11:00 AM	0.52	0.00	0.6	2049.8
6/22/06 12:00 PM	0.51	0.00	0.6	2037.4
6/22/06 1:00 PM	0.52	0.00	0.6	2041.5
6/22/06 2:00 PM	0.52	0.00	0.6	2066.4
6/22/06 3:00 PM	0.52	0.00	0.6	2074.7
6/22/06 4:00 PM	0.52	0.00	0.6	2062.2
6/22/06 5:00 PM	0.52	0.00	0.6	2053.9
6/22/06 6:00 PM	0.51	0.00	0.6	2029.2
6/22/06 7:00 PM	0.51	0.00	0.6	2012.7
6/22/06 8:00 PM	0.51	0.00	0.5	1988.4
6/22/06 9:00 PM	0.51	0.00	0.6	1992.5
6/22/06 10:00 PM	0.50	0.00	0.5	1980.4
6/22/06 11:00 PM	0.50	0.00	0.5	1931.8
6/23/06 12:00 AM	0.50	0.00	0.5	1911.9
6/23/06 1:00 AM	0.50	0.00	0.5	1892.1
6/23/06 2:00 AM	0.50	0.00	0.5	1880.3
6/23/06 3:00 AM	0.50	0.00	0.5	1864.6
6/23/06 4:00 AM	0.50	0.00	0.5	1856.8
6/23/06 5:00 AM	0.49	0.00	0.5	1849.0
6/23/06 6:00 AM	0.49	0.00	0.5	1841.2
6/23/06 7:00 AM	0.49	0.00	0.5	1822.0
6/23/06 8:00 AM	0.49	0.00	0.5	1802.7
6/23/06 9:00 AM	0.49	0.00	0.5	1791.2
6/23/06 10:00 AM	0.49	0.00	0.5	1776.0
6/23/06 11:00 AM	0.49	0.00	0.5	1779.8
6/23/06 12:00 PM	0.48	0.00	0.5	1764.7
6/23/06 1:00 PM	0.49	0.00	0.5	1783.9
6/23/06 2:00 PM	0.49	0.00	0.5	1821.9
6/23/06 3:00 PM	0.49	0.00	0.5	1814.2
6/23/06 4:00 PM	0.49	0.00	0.5	1787.5
6/23/06 5:00 PM	0.48	0.00	0.5	1757.1

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/23/06 6:00 PM	0.49	0.00	0.5	1795.4
6/23/06 7:00 PM	0.48	0.00	0.5	1758.2
6/23/06 8:00 PM	0.48	0.00	0.5	1708.6
6/23/06 9:00 PM	0.48	0.00	0.5	1715.9
6/23/06 10:00 PM	0.47	0.00	0.5	1671.6
6/23/06 11:00 PM	0.47	0.00	0.5	1646.0
6/24/06 12:00 AM	0.47	0.00	0.5	1638.8
6/24/06 1:00 AM	0.47	0.00	0.4	1628.0
6/24/06 2:00 AM	0.47	0.00	0.4	1613.6
6/24/06 3:00 AM	0.47	0.00	0.4	1602.8
6/24/06 4:00 AM	0.47	0.00	0.4	1588.6
6/24/06 5:00 AM	0.47	0.00	0.4	1581.5
6/24/06 6:00 AM	0.46	0.00	0.4	1567.4
6/24/06 7:00 AM	0.46	0.00	0.4	1546.3
6/24/06 8:00 AM	0.46	0.00	0.4	1528.9
6/24/06 9:00 AM	0.46	0.00	0.4	1525.4
6/24/06 10:00 AM	0.46	0.00	0.4	1518.5
6/24/06 11:00 AM	0.46	0.00	0.4	1508.1
6/24/06 12:00 PM	0.46	0.00	0.4	1511.6
6/24/06 1:00 PM	0.46	0.00	0.4	1525.4
6/24/06 2:00 PM	0.46	0.00	0.4	1528.9
6/24/06 3:00 PM	0.46	0.00	0.4	1539.4
6/24/06 4:00 PM	0.46	0.00	0.4	1567.3
6/24/06 5:00 PM	0.46	0.00	0.4	1556.8
6/24/06 6:00 PM	0.49	0.00	0.5	1652.0
6/24/06 7:00 PM	0.54	0.00	0.6	2027.0
6/24/06 8:00 PM	0.55	0.00	0.7	2334.2
6/24/06 9:00 PM	0.55	0.00	0.7	2374.5
6/24/06 10:00 PM	0.54	0.00	0.6	2351.9
6/24/06 11:00 PM	0.54	0.00	0.6	2329.5
6/25/06 12:00 AM	0.54	0.00	0.6	2320.6
6/25/06 1:00 AM	0.54	0.00	0.6	2298.4
6/25/06 2:00 AM	0.54	0.00	0.6	2285.1
6/25/06 3:00 AM	0.54	0.00	0.6	2267.5
6/25/06 4:00 AM	0.53	0.00	0.6	2236.8
6/25/06 5:00 AM	0.53	0.00	0.6	2228.1
6/25/06 6:00 AM	0.53	0.00	0.6	2219.4
6/25/06 7:00 AM	0.53	0.00	0.6	2197.7
6/25/06 8:00 AM	0.53	0.00	0.6	2180.5
6/25/06 9:00 AM	0.53	0.00	0.6	2167.6
6/25/06 10:00 AM	0.53	0.00	0.6	2154.8
6/25/06 11:00 AM	0.52	0.00	0.6	2142.0
6/25/06 12:00 PM	0.53	0.00	0.6	2137.8
6/25/06 1:00 PM	0.52	0.00	0.6	2133.6
6/25/06 2:00 PM	0.52	0.00	0.6	2120.9
6/25/06 3:00 PM	0.53	0.00	0.6	2163.7
6/25/06 4:00 PM	0.53	0.00	0.6	2215.0
6/25/06 5:00 PM	0.58	0.00	0.7	2459.1
6/25/06 6:00 PM	0.59	0.00	0.8	2763.2

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/25/06 7:00 PM	0.60	0.00	0.8	2909.2
6/25/06 8:00 PM	0.60	0.00	0.8	3006.6
6/25/06 9:00 PM	0.62	0.00	0.9	3134.3
6/25/06 10:00 PM	0.64	0.00	1.0	3417.2
6/25/06 11:00 PM	0.64	0.00	1.0	3612.6
6/26/06 12:00 AM	0.64	0.00	1.0	3637.2
6/26/06 1:00 AM	0.64	0.00	1.0	3612.6
6/26/06 2:00 AM	0.64	0.00	1.0	3594.0
6/26/06 3:00 AM	0.63	0.00	1.0	3582.1
6/26/06 4:00 AM	0.63	0.00	1.0	3546.8
6/26/06 5:00 AM	0.63	0.00	1.0	3512.9
6/26/06 6:00 AM	0.63	0.00	1.0	3480.5
6/26/06 7:00 AM	0.62	0.00	1.0	3454.6
6/26/06 8:00 AM	0.62	0.00	1.0	3444.6
6/26/06 9:00 AM	0.62	0.00	0.9	3430.7
6/26/06 10:00 AM	0.62	0.00	1.0	3425.9
6/26/06 11:00 AM	0.62	0.00	0.9	3425.9
6/26/06 12:00 PM	0.62	0.00	0.9	3416.7
6/26/06 4:00 PM	0.63	0.00	1.0	13985.4
6/26/06 8:00 PM	0.63	0.00	1.0	14081.3
6/27/06 12:00 AM	0.62	0.00	0.9	13356.9
6/27/06 4:00 AM	0.61	0.00	0.9	12683.2
6/27/06 8:00 AM	0.60	0.00	0.8	12320.9
6/27/06 12:00 PM	0.60	0.00	0.8	12026.4
6/27/06 4:00 PM	0.60	0.00	0.8	12005.5
6/27/06 8:00 PM	0.59	0.00	0.8	11861.5
6/28/06 12:00 AM	0.58	0.00	0.8	11312.9
6/28/06 4:00 AM	0.57	0.00	0.7	10835.0
6/28/06 8:00 AM	0.57	0.00	0.7	10486.5
6/28/06 12:00 PM	0.56	0.00	0.7	10256.7
6/28/06 4:00 PM	0.57	0.00	0.7	10352.2
6/28/06 8:00 PM	0.55	0.00	0.7	9982.6
6/29/06 12:00 AM	0.54	0.00	0.6	9389.9
6/29/06 4:00 AM	0.54	0.00	0.6	9176.1
6/29/06 8:00 AM	0.53	0.00	0.6	8895.6
6/29/06 12:00 PM	0.52	0.00	0.6	8619.7
6/29/06 4:00 PM	0.53	0.00	0.6	8551.3
6/29/06 8:00 PM	0.52	0.00	0.6	8467.2
6/30/06 12:00 AM	0.50	0.00	0.5	7989.9
6/30/06 4:00 AM	0.50	0.00	0.5	7521.9
6/30/06 8:00 AM	0.49	0.00	0.5	7288.1
6/30/06 12:00 PM	0.48	0.00	0.5	7089.1
6/30/06 4:00 PM	0.49	0.00	0.5	7028.2
6/30/06 8:00 PM	0.48	0.00	0.5	6968.3
7/1/06 12:00 AM	0.47	0.00	0.5	6731.1
7/1/06 4:00 AM	0.47	0.00	0.4	6483.4
7/1/06 8:00 AM	0.46	0.00	0.4	6326.0
7/1/06 12:00 PM	0.46	0.00	0.4	6199.4
7/1/06 4:00 PM	0.46	0.00	0.4	6171.2

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/1/06 8:00 PM	0.45	0.00	0.4	5953.6
7/2/06 12:00 AM	0.44	0.00	0.4	5641.1
7/2/06 4:00 AM	0.43	0.00	0.4	5433.0
7/2/06 8:00 AM	0.43	0.00	0.4	5177.3
7/2/06 12:00 PM	0.42	0.00	0.3	5039.7
7/2/06 4:00 PM	0.44	0.00	0.4	5230.1
7/2/06 8:00 PM	0.86	0.00	2.5	21076.6
7/3/06 12:00 AM	0.82	0.00	2.2	33862.4
7/3/06 4:00 AM	0.78	0.00	1.9	29219.2
7/3/06 8:00 AM	0.76	0.00	1.7	26052.2
7/3/06 12:00 PM	0.74	0.00	1.6	23698.3
7/3/06 4:00 PM	0.73	0.00	1.5	22500.0
7/3/06 8:00 PM	0.74	0.00	1.6	22500.0
7/4/06 12:00 AM	0.72	0.00	1.5	21793.9
7/4/06 4:00 AM	0.71	0.00	1.4	20395.8
7/4/06 8:00 AM	0.70	0.00	1.3	19467.5
7/4/06 12:00 PM	0.70	0.00	1.3	18923.0
7/4/06 4:00 PM	0.68	0.00	1.2	18296.3
7/4/06 8:00 PM	0.68	0.00	1.2	17445.3
7/5/06 12:00 AM	0.67	0.00	1.1	16733.6
7/5/06 4:00 AM	0.66	0.00	1.1	16141.0
7/5/06 8:00 AM	0.65	0.00	1.1	15667.0
7/5/06 12:00 PM	0.65	0.00	1.0	15238.9
7/5/06 4:00 PM	0.66	0.00	1.1	15382.5
7/5/06 8:00 PM	0.64	0.00	1.0	15301.8
7/6/06 12:00 AM	0.63	0.00	1.0	14491.9
7/6/06 4:00 AM	0.62	0.00	1.0	13925.8
7/6/06 8:00 AM	0.71	0.00	1.4	16841.9
7/6/06 12:00 PM	0.70	0.00	1.3	19467.5
7/6/06 4:00 PM	0.68	0.00	1.2	18437.2
7/6/06 8:00 PM	0.68	0.00	1.2	17810.5
7/7/06 12:00 AM	0.74	0.00	1.6	20524.7
7/7/06 4:00 AM	0.74	0.00	1.6	22987.1
7/7/06 8:00 AM	0.73	0.00	1.5	22104.0
7/7/06 12:00 PM	0.78	0.00	1.9	24234.0
7/7/06 4:00 PM	0.82	0.00	2.2	29138.9
7/7/06 8:00 PM	1.04	0.00	4.3	46351.3
7/8/06 12:00 AM	1.02	0.00	4.0	59508.1
7/8/06 4:00 AM	0.98	0.00	3.6	54602.0
7/8/06 8:00 AM	0.94	0.00	3.3	49246.5
7/8/06 12:00 PM	0.91	0.00	3.0	44790.4
7/8/06 4:00 PM	0.93	0.00	3.1	43884.1
7/8/06 8:00 PM	0.91	0.00	2.9	43719.5
7/9/06 12:00 AM	0.89	0.00	2.8	41142.0
7/9/06 4:00 AM	0.88	0.00	2.7	39104.0
7/9/06 8:00 AM	0.86	0.00	2.5	37373.0
7/9/06 12:00 PM	0.85	0.00	2.5	35978.6
7/9/06 4:00 PM	0.85	0.00	2.4	35163.9
7/9/06 8:00 PM	0.84	0.00	2.3	34260.0

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/10/06 12:00 AM	0.82	0.00	2.2	32729.0
7/10/06 4:00 AM	0.82	0.00	2.2	31413.7
7/10/06 8:00 AM	0.81	0.00	2.1	30601.7
7/10/06 12:00 PM	0.80	0.00	2.1	29892.6
7/10/06 4:00 PM	0.80	0.00	2.0	29193.2
7/10/06 8:00 PM	0.81	0.00	2.1	29380.7
7/11/06 12:00 AM	0.80	0.00	2.0	29426.8
7/11/06 4:00 AM	0.79	0.00	1.9	28455.2
7/11/06 8:00 AM	0.78	0.00	1.9	27546.7
7/11/06 12:00 PM	0.77	0.00	1.8	26563.9
7/11/06 4:00 PM	1.06	0.00	4.4	44943.9
7/11/06 8:00 PM	1.03	0.00	4.2	61904.6
7/12/06 12:00 AM	1.00	0.00	3.8	57163.0
7/12/06 4:00 AM	0.97	0.00	3.5	52184.8
7/12/06 8:00 AM	0.94	0.00	3.2	48252.7
7/12/06 12:00 PM	0.91	0.00	3.0	44782.7
7/12/06 4:00 PM	0.90	0.00	2.9	42281.1
7/12/06 8:00 PM	0.88	0.00	2.7	40227.1
7/13/06 12:00 AM	0.86	0.00	2.5	37690.6
7/13/06 4:00 AM	0.85	0.00	2.4	35522.9
7/13/06 8:00 AM	0.83	0.00	2.3	33813.6
7/13/06 12:00 PM	0.84	0.00	2.3	33314.1
7/13/06 4:00 PM	0.83	0.00	2.3	33215.9
7/13/06 8:00 PM	0.92	0.00	3.0	38324.6
7/14/06 12:00 AM	0.90	0.00	2.9	42831.8
7/14/06 4:00 AM	0.89	0.00	2.8	40815.5
7/14/06 8:00 AM	0.87	0.00	2.6	38788.9
7/14/06 12:00 PM	0.86	0.00	2.5	37214.4
7/14/06 4:00 PM	0.85	0.00	2.4	35929.5
7/14/06 8:00 PM	0.84	0.00	2.3	34461.2
7/15/06 12:00 AM	0.83	0.00	2.3	33118.8
7/15/06 4:00 AM	0.82	0.00	2.2	31801.6
7/15/06 8:00 AM	0.81	0.00	2.1	30696.7
7/15/06 12:00 PM	0.80	0.00	2.1	29939.8
7/15/06 4:00 PM	0.80	0.00	2.0	29285.5
7/15/06 8:00 PM	0.79	0.00	1.9	28229.7
7/16/06 12:00 AM	0.78	0.00	1.9	27230.4
7/16/06 4:00 AM	0.77	0.00	1.8	26607.1
7/16/06 8:00 AM	0.77	0.00	1.8	25816.9
7/16/06 12:00 PM	0.76	0.00	1.7	24995.6
7/16/06 4:00 PM	0.76	0.00	1.8	24952.4
7/16/06 8:00 PM	0.74	0.00	1.6	24283.7
7/17/06 12:00 AM	0.74	0.00	1.6	22866.0
7/17/06 4:00 AM	0.73	0.00	1.5	22179.8
7/17/06 8:00 AM	0.72	0.00	1.5	21509.0
7/17/06 12:00 PM	0.71	0.00	1.4	20773.5
7/17/06 4:00 PM	0.72	0.00	1.5	20773.5
7/17/06 8:00 PM	0.71	0.00	1.4	20474.3
7/18/06 12:00 AM	0.69	0.00	1.3	19008.6

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/18/06 4:00 AM	0.68	0.00	1.2	17947.7
7/18/06 8:00 AM	0.68	0.00	1.2	17411.6
7/18/06 12:00 PM	0.67	0.00	1.2	16921.3
7/18/06 4:00 PM	0.67	0.00	1.2	16792.3
7/18/06 8:00 PM	0.66	0.00	1.1	16452.2
7/19/06 12:00 AM	0.65	0.00	1.1	15783.9
7/19/06 4:00 AM	0.65	0.00	1.0	15295.8
7/19/06 8:00 AM	0.64	0.00	1.0	14810.5
7/19/06 12:00 PM	0.63	0.00	1.0	14402.7
7/19/06 4:00 PM	0.64	0.00	1.0	14427.9
7/19/06 8:00 PM	0.64	0.00	1.0	14475.5
7/20/06 12:00 AM	0.63	0.00	1.0	14168.5
7/20/06 4:00 AM	0.62	0.00	0.9	13825.9
7/20/06 8:00 AM	0.61	0.00	0.9	13174.7
7/20/06 12:00 PM	0.61	0.00	0.9	12639.6
7/20/06 4:00 PM	0.90	0.00	2.8	26757.6
7/20/06 8:00 PM	0.86	0.00	2.5	38755.7
7/21/06 12:00 AM	0.83	0.00	2.3	34682.3
7/21/06 4:00 AM	0.81	0.00	2.1	31426.0
7/21/06 8:00 AM	0.79	0.00	2.0	29106.9
7/21/06 12:00 PM	0.78	0.00	1.8	27369.8
7/21/06 4:00 PM	0.78	0.00	1.8	26605.9
7/21/06 8:00 PM	0.76	0.00	1.7	25693.1
7/22/06 12:00 AM	0.78	0.00	1.9	26005.0
7/22/06 4:00 AM	0.94	0.00	3.2	36903.4
7/22/06 8:00 AM	1.05	0.00	4.4	54809.2
7/22/06 12:00 PM	1.06	0.00	4.5	63619.0
7/22/06 4:00 PM	1.02	0.00	4.0	61161.2
7/22/06 8:00 PM	1.02	0.00	4.0	57877.9
7/23/06 12:00 AM	0.98	0.00	3.6	54958.5
7/23/06 4:00 AM	1.02	0.00	4.1	55392.6
7/23/06 8:00 AM	1.03	0.00	4.2	59185.7
7/23/06 12:00 PM	1.00	0.00	3.8	57342.5
7/23/06 4:00 PM	0.98	0.00	3.6	53371.0
7/23/06 8:00 PM	1.02	0.00	4.0	54718.2
7/24/06 12:00 AM	0.99	0.00	3.7	55555.2
7/24/06 4:00 AM	0.96	0.00	3.5	51705.9
7/24/06 8:00 AM	0.94	0.00	3.3	48363.6
7/24/06 12:00 PM	0.92	0.00	3.1	45676.7
7/24/06 4:00 PM	0.92	0.00	3.0	43823.3
7/24/06 8:00 PM	0.91	0.00	2.9	42608.4
7/25/06 12:00 AM	0.88	0.00	2.7	40446.5
7/25/06 4:00 AM	0.87	0.00	2.6	38206.5
7/25/06 8:00 AM	0.86	0.00	2.5	36955.7
7/25/06 12:00 PM	0.85	0.00	2.4	35674.0
7/25/06 4:00 PM	0.85	0.00	2.4	34759.8
7/25/06 8:00 PM	0.85	0.00	2.4	34608.6
7/26/06 12:00 AM	0.83	0.00	2.3	33715.4
7/26/06 4:00 AM	0.82	0.00	2.2	32285.1

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/26/06 8:00 AM	0.81	0.00	2.1	31223.0
7/26/06 12:00 PM	0.80	0.00	2.0	29896.5
7/26/06 4:00 PM	0.79	0.00	2.0	28685.1
7/26/06 8:00 PM	0.79	0.00	2.0	28270.6
7/27/06 12:00 AM	0.78	0.00	1.9	27728.2
7/27/06 4:00 AM	0.77	0.00	1.8	26608.6
7/27/06 8:00 AM	0.76	0.00	1.7	25557.0
7/27/06 12:00 PM	0.75	0.00	1.7	24654.3
7/27/06 4:00 PM	0.75	0.00	1.7	24271.8
7/27/06 8:00 PM	0.74	0.00	1.6	23527.2
7/28/06 12:00 AM	0.73	0.00	1.5	22262.4
7/28/06 4:00 AM	0.72	0.00	1.5	21468.7
7/28/06 8:00 AM	0.71	0.00	1.4	20774.4
7/28/06 12:00 PM	0.71	0.00	1.4	20203.9
7/28/06 4:00 PM	0.70	0.00	1.4	19758.8
7/28/06 8:00 PM	0.90	0.00	2.8	30137.2
7/29/06 12:00 AM	0.87	0.00	2.6	38804.8
7/29/06 4:00 AM	0.84	0.00	2.3	35229.4
7/29/06 8:00 AM	0.82	0.00	2.2	32488.2
7/29/06 12:00 PM	0.81	0.00	2.1	30651.2
7/29/06 4:00 PM	0.83	0.00	2.2	31134.7
7/29/06 8:00 PM	0.82	0.00	2.2	31656.2
7/30/06 12:00 AM	0.80	0.00	2.0	30226.7
7/30/06 4:00 AM	0.79	0.00	1.9	28733.4
7/30/06 8:00 AM	0.78	0.00	1.9	27457.5
7/30/06 12:00 PM	0.77	0.00	1.8	26430.9
7/30/06 4:00 PM	0.77	0.00	1.8	26033.4
7/30/06 8:00 PM	0.76	0.00	1.8	25685.9
7/31/06 12:00 AM	0.75	0.00	1.6	24490.4
7/31/06 4:00 AM	0.74	0.00	1.6	23274.9
7/31/06 8:00 AM	0.73	0.00	1.5	22461.5
7/31/06 12:00 PM	0.73	0.00	1.5	21782.9
7/31/06 4:00 PM	0.73	0.00	1.5	21743.1
7/31/06 8:00 PM	0.72	0.00	1.5	21510.0
8/1/06 12:00 AM	0.75	0.00	1.7	22614.0
8/1/06 4:00 AM	0.74	0.00	1.6	23525.7
8/1/06 8:00 AM	0.73	0.00	1.5	22342.5
8/1/06 12:00 PM	0.72	0.00	1.5	21353.8
8/1/06 4:00 PM	0.71	0.00	1.4	20507.5
8/1/06 8:00 PM	0.70	0.00	1.3	19723.4
8/2/06 12:00 AM	0.70	0.00	1.3	19031.7
8/2/06 4:00 AM	0.69	0.00	1.3	18396.9
8/2/06 8:00 AM	0.68	0.00	1.2	17679.4
8/2/06 12:00 PM	0.67	0.00	1.2	17083.0
8/2/06 4:00 PM	0.67	0.00	1.1	16697.8
8/2/06 8:00 PM	0.66	0.00	1.1	16294.1
8/3/06 12:00 AM	0.65	0.00	1.1	15755.3
8/3/06 4:00 AM	0.65	0.00	1.0	15267.3
8/3/06 8:00 AM	0.64	0.00	1.0	14810.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/3/06 12:00 PM	0.63	0.00	1.0	14402.7
8/3/06 4:00 PM	0.63	0.00	1.0	14187.4
8/3/06 8:00 PM	0.62	0.00	1.0	13948.3
8/4/06 12:00 AM	0.62	0.00	0.9	13295.3
8/4/06 4:00 AM	0.61	0.00	0.9	12661.5
8/4/06 8:00 AM	0.61	0.00	0.8	12362.8
8/4/06 12:00 PM	0.60	0.00	0.8	12130.8
8/4/06 4:00 PM	0.60	0.00	0.8	11902.1
8/4/06 8:00 PM	0.59	0.00	0.8	11695.7
8/5/06 12:00 AM	0.58	0.00	0.8	11352.4
8/5/06 4:00 AM	0.58	0.00	0.8	10952.5
8/5/06 8:00 AM	0.57	0.00	0.7	10679.1
8/5/06 12:00 PM	0.57	0.00	0.7	10409.2
8/5/06 4:00 PM	0.56	0.00	0.7	10237.9
8/5/06 8:00 PM	0.59	0.00	0.8	10866.9
8/6/06 12:00 AM	0.58	0.00	0.8	11291.9
8/6/06 4:00 AM	0.58	0.00	0.7	10913.1
8/6/06 8:00 AM	0.57	0.00	0.7	10602.0
8/6/06 12:00 PM	0.56	0.00	0.7	10276.2
8/6/06 4:00 PM	0.56	0.00	0.7	10200.1
8/6/06 8:00 PM	0.56	0.00	0.7	10069.4
8/7/06 12:00 AM	0.55	0.00	0.7	9717.1
8/7/06 4:00 AM	0.54	0.00	0.6	9408.3
8/7/06 8:00 AM	0.54	0.00	0.6	9158.3
8/7/06 12:00 PM	0.54	0.00	0.6	9017.1
8/7/06 4:00 PM	0.53	0.00	0.6	8809.2
8/7/06 8:00 PM	0.52	0.00	0.6	8501.0
8/8/06 12:00 AM	0.51	0.00	0.6	8249.3
8/8/06 4:00 AM	0.51	0.00	0.5	8002.4
8/8/06 8:00 AM	0.50	0.00	0.5	7775.7
8/8/06 12:00 PM	0.49	0.00	0.5	7429.8
8/8/06 4:00 PM	0.49	0.00	0.5	7272.6
8/8/06 8:00 PM	0.49	0.00	0.5	7242.1
8/9/06 12:00 AM	0.48	0.00	0.5	6954.1
8/9/06 4:00 AM	0.47	0.00	0.5	6672.1
8/9/06 8:00 AM	0.47	0.00	0.4	6454.7
8/9/06 12:00 PM	0.46	0.00	0.4	6283.7
8/9/06 4:00 PM	0.46	0.00	0.4	6185.2
8/9/06 8:00 PM	0.45	0.00	0.4	5979.1
8/10/06 12:00 AM	0.44	0.00	0.4	5694.6
8/10/06 4:00 AM	0.44	0.00	0.4	5471.3
8/10/06 8:00 AM	0.43	0.00	0.4	5290.8
8/10/06 12:00 PM	0.43	0.00	0.4	5151.9
8/10/06 4:00 PM	0.43	0.00	0.4	5076.8
8/10/06 8:00 PM	0.40	0.00	0.3	4720.5
8/11/06 12:00 AM	0.37	0.00	0.2	3958.4
8/11/06 4:00 AM	0.35	0.00	0.2	3294.2
8/11/06 8:00 AM	0.33	0.00	0.2	2834.6
8/11/06 12:00 PM	0.31	0.00	0.2	2495.6

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/11/06 4:00 PM	0.31	0.00	0.2	2342.2
8/11/06 8:00 PM	0.29	0.00	0.1	2107.1
8/12/06 12:00 AM	0.27	0.00	0.1	1731.6
8/12/06 4:00 AM	0.26	0.00	0.1	1492.1
8/12/06 8:00 AM	0.24	0.00	0.1	1336.3
8/12/06 12:00 PM	0.24	0.00	0.1	1221.6
8/12/06 4:00 PM	0.22	0.00	0.1	1100.1
8/12/06 8:00 PM	0.22	0.00	0.1	988.2
8/13/06 12:00 AM	0.20	0.00	0.1	857.6
8/13/06 4:00 AM	0.19	0.00	0.0	706.3
8/13/06 8:00 AM	0.18	0.00	0.0	614.7
8/13/06 12:00 PM	0.17	0.00	0.0	559.7
8/13/06 4:00 PM	0.16	0.00	0.0	502.8
8/13/06 8:00 PM	0.16	0.00	0.0	436.9
8/14/06 12:00 AM	0.14	0.00	0.0	360.6
8/14/06 4:00 AM	0.13	0.00	0.0	285.7
8/14/06 8:00 AM	0.12	0.00	0.0	241.5
8/14/06 12:00 PM	0.13	0.00	0.0	247.8
8/14/06 4:00 PM	0.16	0.00	0.0	348.3
8/14/06 8:00 PM	0.31	0.00	0.2	1320.8
8/15/06 12:00 AM	0.31	0.00	0.2	2288.5
8/15/06 4:00 AM	0.32	0.00	0.2	2405.4
8/15/06 8:00 AM	0.32	0.00	0.2	2485.3
8/15/06 12:00 PM	0.33	0.00	0.2	2567.2
8/15/06 4:00 PM	0.33	0.00	0.2	2684.5
8/15/06 8:00 PM	0.34	0.00	0.2	2804.4
8/16/06 12:00 AM	0.35	0.00	0.2	2992.2
8/16/06 4:00 AM	0.35	0.00	0.2	3137.1
8/16/06 8:00 AM	0.35	0.00	0.2	3118.6
8/16/06 12:00 PM	0.35	0.00	0.2	3090.8
8/16/06 4:00 PM	0.36	0.00	0.2	3175.1
8/16/06 8:00 PM	0.36	0.00	0.2	3240.5
8/17/06 12:00 AM	0.35	0.00	0.2	3165.4
8/17/06 4:00 AM	0.35	0.00	0.2	3118.5
8/17/06 8:00 AM	0.35	0.00	0.2	3090.9
8/17/06 12:00 PM	0.35	0.00	0.2	3026.7
8/17/06 4:00 PM	0.35	0.00	0.2	3008.5
8/17/06 8:00 PM	0.34	0.00	0.2	2990.4
8/18/06 12:00 AM	0.34	0.00	0.2	2910.0
8/18/06 4:00 AM	0.33	0.00	0.2	2813.0
8/18/06 8:00 AM	0.33	0.00	0.2	2726.7
8/18/06 12:00 PM	0.33	0.00	0.2	2650.3
8/18/06 4:00 PM	0.33	0.00	0.2	2633.4
8/18/06 8:00 PM	0.33	0.00	0.2	2616.8
8/19/06 12:00 AM	0.32	0.00	0.2	2526.3
8/19/06 4:00 AM	0.32	0.00	0.2	2429.2
8/19/06 8:00 AM	0.31	0.00	0.2	2365.7
8/19/06 12:00 PM	0.31	0.00	0.2	2311.2
8/19/06 4:00 PM	0.32	0.00	0.2	2382.7

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/19/06 8:00 PM	0.59	0.00	0.8	7018.9
8/20/06 12:00 AM	0.59	0.00	0.8	11431.4
8/20/06 4:00 AM	0.58	0.00	0.8	11131.1
8/20/06 8:00 AM	0.57	0.00	0.7	10815.3
8/20/06 12:00 PM	0.57	0.00	0.7	10505.5
8/20/06 4:00 PM	0.57	0.00	0.7	10313.6
8/20/06 8:00 PM	0.56	0.00	0.7	10106.9
8/21/06 12:00 AM	0.55	0.00	0.7	9735.7
8/21/06 4:00 AM	0.55	0.00	0.7	9534.0
8/21/06 8:00 AM	0.54	0.00	0.6	9284.0
8/21/06 12:00 PM	0.53	0.00	0.6	8999.6
8/21/06 4:00 PM	0.53	0.00	0.6	8947.1
8/21/06 8:00 PM	0.54	0.00	0.6	9034.8
8/22/06 12:00 AM	0.53	0.00	0.6	8982.7
8/22/06 4:00 AM	0.53	0.00	0.6	8722.5
8/22/06 8:00 AM	0.52	0.00	0.6	8517.5
8/22/06 12:00 PM	0.52	0.00	0.6	8332.5
8/22/06 4:00 PM	0.52	0.00	0.6	8298.9
8/22/06 8:00 PM	0.51	0.00	0.6	8183.7
8/23/06 12:00 AM	0.50	0.00	0.5	7777.2
8/23/06 4:00 AM	0.50	0.00	0.5	7505.6
8/23/06 8:00 AM	0.49	0.00	0.5	7350.0
8/23/06 12:00 PM	0.49	0.00	0.5	7226.1
8/23/06 4:00 PM	0.49	0.00	0.5	7287.9
8/23/06 8:00 PM	0.49	0.00	0.5	7318.6
8/24/06 12:00 AM	0.48	0.00	0.5	7090.1
8/24/06 4:00 AM	0.47	0.00	0.5	6775.2
8/24/06 8:00 AM	0.47	0.00	0.4	6555.4
8/24/06 12:00 PM	0.47	0.00	0.5	6482.9
8/24/06 4:00 PM	0.47	0.00	0.5	6497.3
8/24/06 8:00 PM	0.45	0.00	0.4	6189.7
8/25/06 12:00 AM	0.45	0.00	0.4	5841.6
8/25/06 4:00 AM	0.44	0.00	0.4	5707.8
8/25/06 8:00 AM	0.44	0.00	0.4	5562.1
8/25/06 12:00 PM	0.44	0.00	0.4	5509.6
8/25/06 4:00 PM	0.44	0.00	0.4	5470.6
8/25/06 8:00 PM	0.43	0.00	0.4	5254.2
8/26/06 12:00 AM	0.42	0.00	0.3	5002.9
8/26/06 4:00 AM	0.41	0.00	0.3	4832.6
8/26/06 8:00 AM	0.41	0.00	0.3	4688.8
8/26/06 12:00 PM	0.41	0.00	0.3	4583.0
8/26/06 4:00 PM	0.41	0.00	0.3	4618.5
8/26/06 8:00 PM	0.41	0.00	0.3	4700.5
8/27/06 12:00 AM	0.41	0.00	0.3	4595.1
8/27/06 4:00 AM	0.40	0.00	0.3	4432.8
8/27/06 8:00 AM	0.39	0.00	0.3	4274.5
8/27/06 12:00 PM	0.39	0.00	0.3	4141.0
8/27/06 4:00 PM	0.39	0.00	0.3	4141.0
8/27/06 8:00 PM	0.39	0.00	0.3	4076.1

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/28/06 12:00 AM	0.37	0.00	0.2	3770.0
8/28/06 4:00 AM	0.37	0.00	0.2	3512.9
8/28/06 8:00 AM	0.36	0.00	0.2	3394.7
8/28/06 12:00 PM	0.36	0.00	0.2	3288.3
8/28/06 4:00 PM	0.35	0.00	0.2	3212.1
8/28/06 8:00 PM	0.35	0.00	0.2	3155.8
8/29/06 12:00 AM	0.36	0.00	0.2	3232.0
8/29/06 4:00 AM	0.35	0.00	0.2	3250.6
8/29/06 8:00 AM	0.35	0.00	0.2	3127.9
8/29/06 12:00 PM	0.35	0.00	0.2	3045.1
8/29/06 4:00 PM	0.34	0.00	0.2	2954.5
8/29/06 8:00 PM	0.36	0.00	0.2	3103.7
8/30/06 12:00 AM	0.36	0.00	0.2	3316.9
8/30/06 4:00 AM	0.36	0.00	0.2	3297.8
8/30/06 8:00 AM	0.35	0.00	0.2	3175.1
8/30/06 12:00 PM	0.42	0.00	0.3	3985.6
8/30/06 4:00 PM	0.43	0.00	0.4	5028.6
8/30/06 8:00 PM	0.47	0.00	0.4	5779.7
8/31/06 12:00 AM	0.47	0.00	0.4	6411.3
8/31/06 4:00 AM	0.47	0.00	0.4	6397.1
8/31/06 8:00 AM	0.47	0.00	0.5	6483.7
8/31/06 12:00 PM	0.48	0.00	0.5	6701.1
8/31/06 4:00 PM	0.47	0.00	0.5	6672.1
8/31/06 8:00 PM	0.47	0.00	0.4	6497.5
9/1/06 12:00 AM	0.46	0.00	0.4	6340.5
9/1/06 4:00 AM	0.46	0.00	0.4	6185.3
9/1/06 8:00 AM	0.46	0.00	0.4	6129.4
9/1/06 12:00 PM	0.46	0.00	0.4	6074.0
9/1/06 4:00 PM	0.46	0.00	0.4	6101.9
9/1/06 8:00 PM	0.45	0.00	0.4	6060.8
9/2/06 12:00 AM	0.45	0.00	0.4	5802.0
9/2/06 4:00 AM	0.44	0.00	0.4	5588.5
9/2/06 8:00 AM	0.44	0.00	0.4	5483.6
9/2/06 12:00 PM	0.44	0.00	0.4	5509.8
9/2/06 4:00 PM	0.46	0.00	0.4	5804.1
9/2/06 8:00 PM	0.45	0.00	0.4	5977.8
9/3/06 12:00 AM	0.44	0.00	0.4	5775.1
9/3/06 4:00 AM	0.44	0.00	0.4	5601.5
9/3/06 8:00 AM	0.44	0.00	0.4	5496.8
9/3/06 12:00 PM	0.44	0.00	0.4	5418.8
9/3/06 4:00 PM	0.46	0.00	0.4	5698.6
9/3/06 8:00 PM	0.58	0.00	0.8	8412.8
9/4/06 12:00 AM	0.57	0.00	0.7	10621.6
9/4/06 4:00 AM	0.56	0.00	0.7	10257.4
9/4/06 8:00 AM	0.55	0.00	0.7	9901.9
9/4/06 12:00 PM	0.54	0.00	0.6	9499.0
9/4/06 4:00 PM	0.56	0.00	0.7	9572.6
9/4/06 8:00 PM	0.54	0.00	0.7	9608.4
9/5/06 12:00 AM	0.54	0.00	0.6	9229.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/5/06 4:00 AM	0.53	0.00	0.6	8930.5
9/5/06 8:00 AM	0.53	0.00	0.6	8756.4
9/5/06 12:00 PM	0.52	0.00	0.6	8636.7
9/5/06 4:00 PM	0.52	0.00	0.6	8534.2
9/5/06 8:00 PM	0.51	0.00	0.6	8333.6
9/6/06 12:00 AM	0.51	0.00	0.5	7954.1
9/6/06 4:00 AM	0.50	0.00	0.5	7616.9
9/6/06 8:00 AM	0.74	0.00	1.6	15080.0
9/6/06 12:00 PM	0.74	0.00	1.6	22620.6
9/6/06 4:00 PM	0.75	0.00	1.6	23112.9
9/6/06 8:00 PM	0.71	0.00	1.4	22057.7
9/7/06 12:00 AM	0.69	0.00	1.3	19551.9
9/7/06 4:00 AM	0.68	0.00	1.2	18158.3
9/7/06 8:00 AM	0.66	0.00	1.1	16667.5
9/7/06 12:00 PM	0.66	0.00	1.1	15751.4
9/7/06 4:00 PM	0.69	0.00	1.3	16998.1
9/7/06 8:00 PM	0.66	0.00	1.1	17087.3
9/8/06 12:00 AM	0.64	0.00	1.0	15344.8
9/8/06 4:00 AM	0.63	0.00	1.0	14279.9
9/8/06 8:00 AM	0.61	0.00	0.9	13184.9
9/8/06 12:00 PM	0.63	0.00	1.0	13226.6
9/8/06 4:00 PM	0.66	0.00	1.1	14788.4
9/8/06 8:00 PM	0.61	0.00	0.9	14051.6
9/9/06 12:00 AM	0.60	0.00	0.8	12154.0
9/9/06 4:00 AM	0.59	0.00	0.8	11554.8
9/9/06 8:00 AM	0.58	0.00	0.7	11032.6
9/9/06 12:00 PM	0.58	0.00	0.8	10873.7
9/9/06 4:00 PM	0.62	0.00	0.9	11882.0
9/9/06 8:00 PM	0.57	0.00	0.7	11687.2
9/10/06 12:00 AM	0.58	0.00	0.8	10757.3
9/10/06 4:00 AM	0.55	0.00	0.7	10306.7
9/10/06 8:00 AM	0.54	0.00	0.7	9516.5
9/10/06 12:00 PM	0.54	0.00	0.6	9282.5
9/10/06 4:00 PM	0.58	0.00	0.8	10053.0
9/10/06 8:00 PM	0.63	0.00	1.0	12561.3
9/11/06 12:00 AM	0.61	0.00	0.9	13360.5
9/11/06 4:00 AM	0.60	0.00	0.8	12196.0
9/11/06 8:00 AM	0.59	0.00	0.8	11615.6
9/11/06 12:00 PM	0.58	0.00	0.8	11250.2
9/11/06 4:00 PM	0.62	0.00	0.9	11959.4
9/11/06 8:00 PM	0.68	0.00	1.2	15138.6
9/12/06 12:00 AM	0.69	0.00	1.3	17951.3
9/12/06 4:00 AM	0.68	0.00	1.2	17754.0
9/12/06 8:00 AM	0.66	0.00	1.1	16581.2
9/12/06 12:00 PM	0.66	0.00	1.1	15988.5
9/12/06 4:00 PM	0.68	0.00	1.2	16652.3
9/12/06 8:00 PM	0.66	0.00	1.1	16652.3
9/13/06 12:00 AM	0.64	0.00	1.0	15263.9
9/13/06 4:00 AM	0.63	0.00	1.0	14427.9

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/13/06 8:00 AM	0.62	0.00	0.9	13556.0
9/13/06 12:00 PM	0.61	0.00	0.9	12704.5
9/13/06 4:00 PM	0.63	0.00	1.0	13313.4
9/13/06 8:00 PM	0.69	0.00	1.3	16095.2
9/14/06 12:00 AM	0.74	0.00	1.6	20572.1
9/14/06 4:00 AM	0.72	0.00	1.5	22188.7
9/14/06 8:00 AM	0.71	0.00	1.4	20480.2
9/14/06 12:00 PM	0.82	0.00	2.2	25463.3
9/14/06 4:00 PM	0.98	0.00	3.7	42040.4
9/14/06 8:00 PM	0.92	0.00	3.0	47988.3
9/15/06 12:00 AM	0.85	0.00	2.4	39238.5
9/15/06 4:00 AM	0.83	0.00	2.2	33676.7
9/15/06 8:00 AM	0.79	0.00	2.0	30294.2
9/15/06 12:00 PM	0.81	0.00	2.1	29431.4
9/15/06 4:00 PM	0.82	0.00	2.2	30696.2
9/15/06 8:00 PM	0.78	0.00	1.9	29129.4
9/16/06 12:00 AM	0.75	0.00	1.6	25416.4
9/16/06 4:00 AM	0.74	0.00	1.6	23071.4
9/16/06 8:00 AM	0.72	0.00	1.5	21751.5
9/16/06 12:00 PM	0.71	0.00	1.4	20658.6
9/16/06 4:00 PM	0.75	0.00	1.6	21978.5
9/16/06 8:00 PM	0.73	0.00	1.5	22594.0
9/17/06 12:00 AM	0.70	0.00	1.3	20271.7
9/17/06 4:00 AM	0.69	0.00	1.3	18537.9
9/17/06 8:00 AM	0.67	0.00	1.2	17423.0
9/17/06 12:00 PM	0.67	0.00	1.2	16728.6
9/17/06 4:00 PM	0.70	0.00	1.3	17772.3
9/17/06 8:00 PM	0.99	0.00	3.7	36089.7
9/18/06 12:00 AM	1.11	0.00	5.0	62730.4
9/18/06 4:00 AM	1.07	0.00	4.5	68793.6
9/18/06 8:00 AM	1.01	0.00	3.9	60882.7
9/18/06 12:00 PM	0.96	0.00	3.4	52750.2
9/18/06 4:00 PM	0.92	0.00	3.1	46829.5
9/18/06 8:00 PM	0.91	0.00	3.0	43602.9
9/19/06 12:00 AM	0.86	0.00	2.5	39425.4
9/19/06 4:00 AM	0.84	0.00	2.3	34622.3
9/19/06 8:00 AM	0.82	0.00	2.2	32097.2
9/19/06 12:00 PM	0.82	0.00	2.2	31462.0
9/19/06 4:00 PM	0.83	0.00	2.2	32137.9
9/19/06 8:00 PM	0.82	0.00	2.2	31944.8
9/20/06 12:00 AM	0.85	0.00	2.4	33285.5
9/20/06 4:00 AM	0.83	0.00	2.3	33917.1
9/20/06 8:00 AM	0.82	0.00	2.1	31852.8
9/20/06 12:00 PM	0.85	0.00	2.4	32846.5
9/20/06 4:00 PM	0.85	0.00	2.4	35012.0
9/20/06 8:00 PM	0.83	0.00	2.3	33871.5
9/21/06 12:00 AM	0.79	0.00	1.9	30169.7
9/21/06 4:00 AM	0.78	0.00	1.8	27233.4
9/21/06 8:00 AM	0.75	0.00	1.7	25187.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/21/06 12:00 PM	0.75	0.00	1.6	23686.1
9/21/06 4:00 PM	0.78	0.00	1.9	25416.4
9/21/06 8:00 PM	0.77	0.00	1.8	26609.6
9/22/06 12:00 AM	0.73	0.00	1.5	24064.2
9/22/06 4:00 AM	0.72	0.00	1.5	21589.6
9/22/06 8:00 AM	0.70	0.00	1.3	20071.0
9/22/06 12:00 PM	0.70	0.00	1.3	19101.7
9/22/06 4:00 PM	0.72	0.00	1.4	19917.5
9/22/06 8:00 PM	0.75	0.00	1.6	22209.7
9/23/06 12:00 AM	0.74	0.00	1.6	23112.9
9/23/06 4:00 AM	0.72	0.00	1.5	21828.7
9/23/06 8:00 AM	0.71	0.00	1.4	20437.4
9/23/06 12:00 PM	0.70	0.00	1.4	19647.0
9/23/06 4:00 PM	0.71	0.00	1.4	19573.4
9/23/06 8:00 PM	0.71	0.00	1.4	19683.6
9/24/06 12:00 AM	0.68	0.00	1.2	18566.6
9/24/06 4:00 AM	0.66	0.00	1.1	16803.2
9/24/06 8:00 AM	0.65	0.00	1.1	15817.9
9/24/06 12:00 PM	0.65	0.00	1.1	15321.3
9/24/06 4:00 PM	0.67	0.00	1.2	16143.1
9/24/06 8:00 PM	0.66	0.00	1.1	16670.4
9/25/06 12:00 AM	0.63	0.00	1.0	15095.8
9/25/06 4:00 AM	0.62	0.00	0.9	13442.9
9/25/06 8:00 AM	0.61	0.00	0.9	12621.2
9/25/06 12:00 PM	0.62	0.00	0.9	12944.6
9/25/06 4:00 PM	0.64	0.00	1.0	14090.7
9/25/06 8:00 PM	0.62	0.00	1.0	14125.7
9/26/06 12:00 AM	0.59	0.00	0.8	12506.5
9/26/06 4:00 AM	0.58	0.00	0.8	11091.8
9/26/06 8:00 AM	0.57	0.00	0.7	10584.1
9/26/06 12:00 PM	0.57	0.00	0.7	10370.9
9/26/06 4:00 PM	0.60	0.00	0.8	11081.6
9/26/06 8:00 PM	0.59	0.00	0.8	11593.8
9/27/06 12:00 AM	0.55	0.00	0.7	10603.1
9/27/06 4:00 AM	0.55	0.00	0.7	9643.4
9/27/06 8:00 AM	0.53	0.00	0.6	9249.6
9/27/06 12:00 PM	0.54	0.00	0.6	9017.2
9/27/06 4:00 PM	0.58	0.00	0.7	9921.7
9/27/06 8:00 PM	0.56	0.00	0.7	10468.7
9/28/06 12:00 AM	0.54	0.00	0.6	9651.8
9/28/06 4:00 AM	0.53	0.00	0.6	8930.9
9/28/06 8:00 AM	0.52	0.00	0.6	8586.0
9/28/06 12:00 PM	0.53	0.00	0.6	8517.5
9/28/06 4:00 PM	0.55	0.00	0.7	9095.3
9/28/06 8:00 PM	0.52	0.00	0.6	8910.3
9/29/06 12:00 AM	0.49	0.00	0.5	7798.6
9/29/06 4:00 AM	0.49	0.00	0.5	7211.7
9/29/06 8:00 AM	0.48	0.00	0.5	6894.3
9/29/06 12:00 PM	0.47	0.00	0.5	6642.6

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/29/06 4:00 PM	0.49	0.00	0.5	6944.5
9/29/06 8:00 PM	0.47	0.00	0.5	6930.1
9/30/06 12:00 AM	0.45	0.00	0.4	6217.7
9/30/06 4:00 AM	0.45	0.00	0.4	5801.7
9/30/06 8:00 AM	0.44	0.00	0.4	5549.9
9/30/06 12:00 PM	0.44	0.00	0.4	5418.8
9/30/06 4:00 PM	0.45	0.00	0.4	5589.5
9/30/06 8:00 PM	0.45	0.00	0.4	5801.2
10/1/06 12:00 AM	0.42	0.00	0.3	5355.6
10/1/06 4:00 AM	0.41	0.00	0.3	4772.4
10/1/06 8:00 AM	0.40	0.00	0.3	4549.2
10/1/06 12:00 PM	0.40	0.00	0.3	4421.1
10/1/06 4:00 PM	0.41	0.00	0.3	4467.0
10/1/06 8:00 PM	0.39	0.00	0.3	4343.2
10/2/06 12:00 AM	0.39	0.00	0.3	4076.1
10/2/06 4:00 AM	0.38	0.00	0.3	3903.6
10/2/06 8:00 AM	0.36	0.00	0.2	3568.8
10/2/06 12:00 PM	0.35	0.00	0.2	3166.7
10/2/06 4:00 PM	0.37	0.00	0.2	3304.2
10/2/06 8:00 PM	0.36	0.00	0.2	3444.8
10/3/06 12:00 AM	0.34	0.00	0.2	3122.2
10/3/06 4:00 AM	0.33	0.00	0.2	2788.8
10/3/06 8:00 AM	0.33	0.00	0.2	2633.4
10/3/06 12:00 PM	0.32	0.00	0.2	2583.6
10/3/06 4:00 PM	0.33	0.00	0.2	2591.9
10/3/06 8:00 PM	0.32	0.00	0.2	2551.2
10/4/06 12:00 AM	0.31	0.00	0.2	2351.7
10/4/06 4:00 AM	0.30	0.00	0.1	2196.8
10/4/06 8:00 AM	0.30	0.00	0.1	2100.7
10/4/06 12:00 PM	0.29	0.00	0.1	1951.3
10/4/06 4:00 PM	0.29	0.00	0.1	1901.7
10/4/06 8:00 PM	0.28	0.00	0.1	1828.7
10/5/06 12:00 AM	0.27	0.00	0.1	1695.1
10/5/06 4:00 AM	0.27	0.00	0.1	1619.5
10/5/06 8:00 AM	0.25	0.00	0.1	1480.2
10/5/06 12:00 PM	0.25	0.00	0.1	1385.9
10/5/06 4:00 PM	0.24	0.00	0.1	1287.3
10/5/06 8:00 PM	0.23	0.00	0.1	1129.6
10/6/06 12:00 AM	0.22	0.00	0.1	1011.9
10/6/06 4:00 AM	0.22	0.00	0.1	951.1
10/6/06 8:00 AM	0.22	0.00	0.1	933.0
10/6/06 12:00 PM	0.21	0.00	0.1	906.4
10/6/06 4:00 PM	0.22	0.00	0.1	910.9
10/6/06 8:00 PM	0.21	0.00	0.1	898.0
10/7/06 12:00 AM	0.20	0.00	0.1	833.3
10/7/06 4:00 AM	0.20	0.00	0.1	787.8
10/7/06 8:00 AM	0.19	0.00	0.0	732.5
10/7/06 12:00 PM	0.19	0.00	0.0	693.8
10/7/06 4:00 PM	0.19	0.00	0.0	675.2

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/7/06 8:00 PM	0.17	0.00	0.0	601.8
10/8/06 12:00 AM	0.15	0.00	0.0	471.8
10/8/06 4:00 AM	0.15	0.00	0.0	395.0
10/8/06 8:00 AM	0.15	0.00	0.0	376.6
10/8/06 12:00 PM	0.15	0.00	0.0	374.0
10/8/06 4:00 PM	0.18	0.00	0.0	470.3
10/8/06 8:00 PM	0.16	0.00	0.0	489.3
10/9/06 12:00 AM	0.15	0.00	0.0	382.9
10/9/06 4:00 AM	0.14	0.00	0.0	322.1
10/9/06 8:00 AM	0.13	0.00	0.0	287.5
10/9/06 12:00 PM	0.13	0.00	0.0	272.0
10/9/06 4:00 PM	0.15	0.00	0.0	306.7
10/9/06 8:00 PM	0.13	0.00	0.0	311.0
10/10/06 12:00 AM	0.11	0.00	0.0	232.0
10/10/06 4:00 AM	0.11	0.00	0.0	169.4
10/10/06 8:00 AM	0.10	0.00	0.0	151.8
10/10/06 12:00 PM	0.10	0.00	0.0	147.3
10/10/06 4:00 PM	0.12	0.00	0.0	179.2
10/10/06 8:00 PM	0.10	0.00	0.0	172.1
10/11/06 12:00 AM	0.09	0.00	0.0	111.3
10/11/06 4:00 AM	0.08	0.00	0.0	86.2
10/11/06 8:00 AM	0.07	0.00	0.0	71.1
10/11/06 12:00 PM	0.08	0.00	0.0	67.1
10/11/06 4:00 PM	0.08	0.00	0.0	71.7
10/11/06 8:00 PM	0.07	0.00	0.0	63.7
10/12/06 12:00 AM	0.06	0.00	0.0	48.1
10/12/06 4:00 AM	0.06	0.00	0.0	36.7
10/12/06 8:00 AM	0.05	0.00	0.0	29.9
10/12/06 12:00 PM	0.06	0.00	0.0	32.5
10/12/06 4:00 PM	0.11	0.00	0.0	101.8
10/12/06 8:00 PM	0.10	0.00	0.0	158.0
10/13/06 12:00 AM	0.10	0.00	0.0	137.4
10/13/06 4:00 AM	0.09	0.00	0.0	116.9
10/13/06 8:00 AM	0.09	0.00	0.0	100.9
10/13/06 12:00 PM	0.08	0.00	0.0	90.4
10/13/06 4:00 PM	0.10	0.00	0.0	103.8
10/13/06 8:00 PM	0.09	0.00	0.0	109.4
10/14/06 12:00 AM	0.08	0.00	0.0	87.6
10/14/06 4:00 AM	0.07	0.00	0.0	61.7
10/14/06 8:00 AM	0.06	0.00	0.0	44.8
10/14/06 12:00 PM	0.06	0.00	0.0	39.2
10/14/06 4:00 PM	0.06	0.00	0.0	36.5
10/14/06 8:00 PM	0.05	0.00	0.0	31.3
10/15/06 12:00 AM	0.04	0.00	0.0	19.5
10/15/06 4:00 AM	0.03	0.00	0.0	10.1
10/15/06 8:00 AM	0.03	0.00	0.0	5.9
10/15/06 12:00 PM	0.02	0.00	0.0	3.4
10/15/06 4:00 PM	0.02	0.00	0.0	2.4
10/15/06 8:00 PM	0.01	0.00	0.0	1.9

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/16/06 12:00 AM	0.00	0.00	0.0	0.5
10/16/06 4:00 AM	0.00	0.00	0.0	0.0
10/16/06 8:00 AM	0.00	0.00	0.0	0.0
10/16/06 12:00 PM	-0.01	0.00	0.0	0.0
10/16/06 4:00 PM	0.01	0.00	0.0	0.2
10/16/06 8:00 PM	-0.01	0.00	0.0	0.2
10/17/06 12:00 AM	-0.02	0.00	0.0	0.0
Data range not printed - WSEL below invert for entire range				
7/28/07 8:00 AM	-0.02	2.45	0.0	0.0
7/28/07 12:00 PM	0.00	2.45	0.0	0.0
7/28/07 4:00 PM	-0.01	2.44	0.0	0.0
7/28/07 8:00 PM	0.01	2.43	0.0	0.0
7/29/07 12:00 AM	-0.01	2.43	0.0	0.0
7/29/07 4:00 AM	0.00	2.43	0.0	0.0
7/29/07 8:00 AM	0.01	2.42	0.0	0.0
7/29/07 12:00 PM	-0.01	2.42	0.0	0.0
7/29/07 4:00 PM	0.03	2.41	0.0	4.6
7/29/07 8:00 PM	0.00	2.39	0.0	4.6
7/30/07 12:00 AM	0.01	2.39	0.0	0.3
7/30/07 4:00 AM	0.01	2.39	0.0	0.6
7/30/07 8:00 AM	0.02	2.40	0.0	1.7
7/30/07 12:00 PM	0.02	2.40	0.0	2.2
7/30/07 4:00 PM	0.04	2.40	0.0	9.7
7/30/07 8:00 PM	0.03	2.39	0.0	11.5
7/31/07 12:00 AM	0.03	2.39	0.0	6.3
7/31/07 4:00 AM	0.03	2.39	0.0	7.2
7/31/07 8:00 AM	0.04	2.39	0.0	9.4
7/31/07 12:00 PM	0.03	2.39	0.0	9.4
7/31/07 4:00 PM	0.04	2.39	0.0	12.4
7/31/07 8:00 PM	0.05	2.39	0.0	19.3
8/1/07 12:00 AM	0.07	2.39	0.0	41.8
8/1/07 4:00 AM	0.08	2.38	0.0	66.2
8/1/07 8:00 AM	0.23	2.39	0.1	579.1
8/1/07 12:00 PM	0.37	2.38	0.2	2290.6
8/1/07 4:00 PM	0.38	2.39	0.3	3655.9
8/1/07 8:00 PM	0.40	2.38	0.3	4080.2
8/2/07 12:00 AM	0.42	2.38	0.3	4562.7
8/2/07 4:00 AM	0.42	2.38	0.3	4832.2
8/2/07 8:00 AM	0.45	2.38	0.4	5327.3
8/2/07 12:00 PM	0.46	2.38	0.4	5937.9
8/2/07 4:00 PM	0.46	2.38	0.4	6101.6
8/2/07 8:00 PM	0.43	2.38	0.4	5589.2
8/3/07 12:00 AM	0.44	2.38	0.4	5267.2
8/3/07 4:00 AM	0.44	2.37	0.4	5457.6
8/3/07 8:00 AM	0.44	2.37	0.4	5509.8
8/3/07 12:00 PM	0.46	2.37	0.4	5776.6
8/3/07 4:00 PM	0.45	2.35	0.4	5882.7
8/3/07 8:00 PM	0.43	2.35	0.4	5475.5
8/4/07 12:00 AM	0.42	2.34	0.3	5028.6

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/12/07 8:00 AM	0.23	2.26	0.1	1108.4
8/12/07 12:00 PM	0.24	2.26	0.1	1190.7
8/12/07 4:00 PM	0.21	2.25	0.1	1077.5
8/12/07 8:00 PM	0.20	2.24	0.1	855.0
8/13/07 12:00 AM	0.20	2.24	0.1	808.1
8/13/07 4:00 AM	0.20	2.24	0.1	791.8
8/13/07 8:00 AM	0.21	2.24	0.1	838.7
8/13/07 12:00 PM	0.19	2.24	0.0	777.5
8/13/07 4:00 PM	0.17	2.24	0.0	585.3
8/13/07 8:00 PM	0.16	2.24	0.0	461.7
8/14/07 12:00 AM	0.17	2.24	0.0	440.1
8/14/07 4:00 AM	0.16	2.24	0.0	462.7
8/14/07 8:00 AM	0.16	2.24	0.0	450.9
8/14/07 12:00 PM	0.15	2.24	0.0	417.6
8/14/07 4:00 PM	0.39	2.24	0.3	2229.8
8/14/07 8:00 PM	0.40	2.23	0.3	4242.4
8/15/07 12:00 AM	0.40	2.23	0.3	4330.6
8/15/07 4:00 AM	0.39	2.23	0.3	4207.2
8/15/07 8:00 AM	0.39	2.23	0.3	4162.9
8/15/07 12:00 PM	0.42	2.23	0.3	4570.4
8/15/07 4:00 PM	0.40	2.22	0.3	4659.8
8/15/07 8:00 PM	0.39	2.27	0.3	4165.1
8/16/07 12:00 AM	0.38	2.27	0.3	3946.0
8/16/07 4:00 AM	0.38	2.27	0.3	3861.1
8/16/07 8:00 AM	0.38	2.27	0.3	3861.1
8/16/07 12:00 PM	0.39	2.27	0.3	4033.1
8/16/07 4:00 PM	0.36	2.27	0.2	3759.2
8/16/07 8:00 PM	0.35	2.27	0.2	3204.8
8/17/07 12:00 AM	0.35	2.27	0.2	3128.3
8/17/07 4:00 AM	0.36	2.27	0.2	3240.6
8/17/07 8:00 AM	0.35	2.27	0.2	3166.3
8/17/07 12:00 PM	0.37	2.27	0.2	3273.4
8/17/07 4:00 PM	0.35	2.28	0.2	3310.3
8/17/07 8:00 PM	0.32	2.27	0.2	2758.5
8/18/07 12:00 AM	0.33	2.27	0.2	2511.3
8/18/07 4:00 AM	0.33	2.27	0.2	2633.4
8/18/07 8:00 AM	0.33	2.27	0.2	2633.4
8/18/07 12:00 PM	0.33	2.28	0.2	2633.4
8/18/07 4:00 PM	0.29	2.28	0.1	2246.9
8/18/07 8:00 PM	0.29	2.28	0.1	1887.8
8/19/07 12:00 AM	0.29	2.28	0.1	1943.2
8/19/07 4:00 AM	0.29	2.28	0.1	1943.2
8/19/07 8:00 AM	0.30	2.27	0.1	1971.6
8/19/07 12:00 PM	0.31	2.28	0.2	2116.0
8/19/07 4:00 PM	0.30	2.28	0.1	2144.9
8/19/07 8:00 PM	0.27	2.28	0.1	1849.2
8/20/07 12:00 AM	0.27	2.27	0.1	1612.7
8/20/07 4:00 AM	0.27	2.28	0.1	1612.7
8/20/07 8:00 AM	0.27	2.27	0.1	1612.7

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/20/07 12:00 PM	0.28	2.28	0.1	1689.6
8/20/07 4:00 PM	0.25	2.28	0.1	1526.1
8/20/07 8:00 PM	0.23	2.28	0.1	1187.0
8/21/07 12:00 AM	0.23	2.28	0.1	1108.4
8/21/07 4:00 AM	0.23	2.28	0.1	1088.9
8/21/07 8:00 AM	0.24	2.27	0.1	1109.2
8/21/07 12:00 PM	0.25	2.28	0.1	1249.3
8/21/07 4:00 PM	0.21	2.28	0.1	1115.7
8/21/07 8:00 PM	0.20	2.28	0.1	822.8
8/22/07 12:00 AM	0.19	2.28	0.0	728.2
8/22/07 4:00 AM	0.20	2.28	0.1	744.1
8/22/07 8:00 AM	0.20	2.28	0.1	791.8
8/22/07 12:00 PM	0.21	2.28	0.1	837.6
8/22/07 4:00 PM	0.16	2.28	0.0	636.4
8/22/07 8:00 PM	0.15	2.28	0.0	384.7
8/23/07 12:00 AM	0.17	2.28	0.0	419.0
8/23/07 4:00 AM	0.17	2.28	0.0	474.5
8/23/07 8:00 AM	0.16	2.28	0.0	462.7
8/23/07 12:00 PM	0.17	2.28	0.0	474.8
8/23/07 4:00 PM	0.12	2.28	0.0	362.1
8/23/07 8:00 PM	0.24	2.28	0.1	718.0
8/24/07 12:00 AM	0.23	2.28	0.1	1149.5
8/24/07 4:00 AM	0.22	2.28	0.1	1049.9
8/24/07 8:00 AM	0.23	2.28	0.1	1049.9
8/24/07 12:00 PM	0.23	2.28	0.1	1068.9
8/24/07 4:00 PM	0.19	2.28	0.0	881.1
8/24/07 8:00 PM	0.20	2.28	0.1	744.1
8/25/07 12:00 AM	0.21	2.28	0.1	808.5
8/25/07 4:00 AM	0.19	2.28	0.0	777.1
8/25/07 8:00 AM	0.19	2.28	0.0	712.7
8/25/07 12:00 PM	0.21	2.28	0.1	777.1
8/25/07 4:00 PM	0.18	2.29	0.0	719.0
8/25/07 8:00 PM	0.18	2.28	0.0	610.5
8/26/07 12:00 AM	0.18	2.28	0.0	624.5
8/26/07 4:00 AM	0.18	2.28	0.0	610.5
8/26/07 8:00 AM	0.18	2.29	0.0	610.5
8/26/07 12:00 PM	0.17	2.29	0.0	571.0
8/26/07 4:00 PM	0.13	2.29	0.0	379.2
8/26/07 8:00 PM	0.17	2.29	0.0	369.9
8/27/07 12:00 AM	0.17	2.29	0.0	486.6
8/27/07 4:00 AM	0.16	2.29	0.0	462.7
8/27/07 8:00 AM	0.16	2.29	0.0	450.9
8/27/07 12:00 PM	0.16	2.29	0.0	428.3
8/27/07 4:00 PM	0.22	2.29	0.1	689.9
8/27/07 8:00 PM	0.18	2.29	0.0	799.2
8/28/07 12:00 AM	0.22	2.29	0.1	817.9
8/28/07 4:00 AM	0.23	2.29	0.1	1069.8
8/28/07 8:00 AM	0.23	2.29	0.1	1128.3
8/28/07 12:00 PM	0.27	2.30	0.1	1345.8

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/28/07 4:00 PM	0.25	2.30	0.1	1468.8
8/28/07 8:00 PM	0.22	2.30	0.1	1192.9
8/29/07 12:00 AM	0.24	2.30	0.1	1090.2
8/29/07 4:00 AM	0.23	2.30	0.1	1148.7
8/29/07 8:00 AM	0.24	2.29	0.1	1169.5
8/29/07 12:00 PM	0.25	2.30	0.1	1248.1
8/29/07 4:00 PM	0.23	2.30	0.1	1187.0
8/29/07 8:00 PM	0.22	2.30	0.1	1049.9
8/30/07 12:00 AM	0.23	2.30	0.1	1049.9
8/30/07 4:00 AM	0.22	2.30	0.1	1031.2
8/30/07 8:00 AM	0.23	2.30	0.1	1011.7
8/30/07 12:00 PM	0.23	2.30	0.1	1088.9
8/30/07 4:00 PM	0.21	2.30	0.1	984.9
8/30/07 8:00 PM	0.17	2.30	0.0	692.3
8/31/07 12:00 AM	0.19	2.30	0.0	598.1
8/31/07 4:00 AM	0.19	2.30	0.0	667.8
8/31/07 8:00 AM	0.20	2.30	0.1	713.1
8/31/07 12:00 PM	0.18	2.31	0.0	684.1
8/31/07 4:00 PM	0.15	2.31	0.0	494.0
8/31/07 8:00 PM	0.16	2.31	0.0	407.2
9/1/07 12:00 AM	0.16	2.30	0.0	439.4
9/1/07 4:00 AM	0.15	2.30	0.0	395.8
9/1/07 8:00 AM	0.16	2.30	0.0	395.8
9/1/07 12:00 PM	0.15	2.31	0.0	395.8
9/1/07 4:00 PM	0.15	2.31	0.0	353.5
9/1/07 8:00 PM	0.12	2.31	0.0	276.9
9/2/07 12:00 AM	0.11	2.31	0.0	196.2
9/2/07 4:00 AM	0.11	2.31	0.0	169.2
9/2/07 8:00 AM	0.11	2.31	0.0	162.6
9/2/07 12:00 PM	0.11	2.31	0.0	168.9
9/2/07 4:00 PM	0.09	2.31	0.0	140.3
9/2/07 8:00 PM	0.39	2.31	0.3	2137.2
9/3/07 12:00 AM	0.41	2.31	0.3	4378.7
9/3/07 4:00 AM	0.41	2.31	0.3	4641.6
9/3/07 8:00 AM	0.42	2.31	0.3	4784.5
9/3/07 12:00 PM	0.44	2.31	0.4	5169.0
9/3/07 4:00 PM	0.41	2.31	0.3	4979.5
9/3/07 8:00 PM	0.42	2.31	0.3	4642.7
9/4/07 12:00 AM	0.42	2.31	0.3	4832.2
9/4/07 4:00 AM	0.42	2.31	0.3	4832.2
9/4/07 8:00 AM	0.42	2.31	0.3	4881.0
9/4/07 12:00 PM	0.44	2.32	0.4	5217.8
9/4/07 4:00 PM	0.42	2.32	0.3	5120.8
9/4/07 8:00 PM	0.41	2.32	0.3	4642.7
9/5/07 12:00 AM	0.40	2.32	0.3	4421.5
9/5/07 4:00 AM	0.40	2.31	0.3	4341.5
9/5/07 8:00 AM	0.40	2.31	0.3	4375.6
9/5/07 12:00 PM	0.41	2.32	0.3	4549.2
9/5/07 4:00 PM	0.39	2.32	0.3	4425.8

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/5/07 8:00 PM	0.37	2.32	0.3	3908.3
9/6/07 12:00 AM	0.38	2.32	0.3	3694.7
9/6/07 4:00 AM	0.38	2.32	0.3	3735.8
9/6/07 8:00 AM	0.38	2.31	0.3	3777.4
9/6/07 12:00 PM	0.38	2.32	0.3	3777.4
9/6/07 4:00 PM	0.37	2.32	0.3	3694.7
9/6/07 8:00 PM	0.34	2.32	0.2	3281.7
9/7/07 12:00 AM	0.34	2.32	0.2	2909.7
9/7/07 4:00 AM	0.33	2.32	0.2	2839.6
9/7/07 8:00 AM	0.34	2.32	0.2	2804.3
9/7/07 12:00 PM	0.35	2.32	0.2	2946.6
9/7/07 4:00 PM	0.33	2.32	0.2	2911.8
9/7/07 8:00 PM	0.31	2.32	0.2	2486.8
9/8/07 12:00 AM	0.31	2.32	0.2	2204.1
9/8/07 4:00 AM	0.31	2.32	0.2	2234.5
9/8/07 8:00 AM	0.30	2.32	0.1	2204.6
9/8/07 12:00 PM	0.31	2.32	0.2	2204.6
9/8/07 4:00 PM	0.30	2.33	0.1	2204.6
9/8/07 8:00 PM	0.28	2.32	0.1	1929.4
9/9/07 12:00 AM	0.28	2.32	0.1	1714.4
9/9/07 4:00 AM	0.27	2.32	0.1	1688.7
9/9/07 8:00 AM	0.27	2.32	0.1	1663.0
9/9/07 12:00 PM	0.28	2.33	0.1	1741.4
9/9/07 4:00 PM	0.27	2.33	0.1	1741.4
9/9/07 8:00 PM	0.36	2.32	0.2	2538.5
9/10/07 12:00 AM	0.37	2.32	0.2	3453.3
9/10/07 4:00 AM	0.37	2.32	0.2	3532.7
9/10/07 8:00 AM	0.38	2.32	0.3	3654.2
9/10/07 12:00 PM	0.36	2.33	0.2	3507.2
9/10/07 4:00 PM	0.36	2.33	0.2	3346.2
9/10/07 8:00 PM	0.34	2.33	0.2	3126.5
9/11/07 12:00 AM	0.34	2.33	0.2	2874.4
9/11/07 4:00 AM	0.34	2.33	0.2	2909.7
9/11/07 8:00 AM	0.34	2.33	0.2	2874.4
9/11/07 12:00 PM	0.36	2.33	0.2	3126.5
9/11/07 4:00 PM	0.35	2.34	0.2	3234.0
9/11/07 8:00 PM	0.32	2.33	0.2	2785.9
9/12/07 12:00 AM	0.37	2.33	0.3	3085.7
9/12/07 4:00 AM	0.36	2.33	0.2	3533.8
9/12/07 8:00 AM	0.37	2.33	0.3	3533.8
9/12/07 12:00 PM	0.37	2.34	0.2	3573.2
9/12/07 4:00 PM	0.36	2.34	0.2	3453.3
9/12/07 8:00 PM	0.33	2.36	0.2	3057.4
9/13/07 12:00 AM	0.33	2.34	0.2	2735.2
9/13/07 4:00 AM	0.33	2.33	0.2	2735.2
9/13/07 8:00 AM	0.33	2.30	0.2	2735.2
9/13/07 12:00 PM	0.34	2.34	0.2	2875.4
9/13/07 4:00 PM	0.32	2.36	0.2	2749.5
9/13/07 8:00 PM	0.50	2.60	0.5	5003.8

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/14/07 12:00 AM	0.53	2.51	0.6	8131.7
9/14/07 4:00 AM	0.53	2.46	0.6	8705.0
9/14/07 8:00 AM	0.52	2.42	0.6	8501.0
9/14/07 12:00 PM	0.53	2.40	0.6	8638.9
9/14/07 4:00 PM	0.57	2.39	0.7	9698.8
9/14/07 8:00 PM	0.53	2.36	0.6	9698.8
9/15/07 12:00 AM	0.52	2.34	0.6	8706.3
9/15/07 4:00 AM	0.52	2.34	0.6	8433.0
9/15/07 8:00 AM	0.52	2.33	0.6	8298.9
9/15/07 12:00 PM	0.53	2.37	0.6	8502.9
9/15/07 4:00 PM	0.53	2.37	0.6	8842.9
9/15/07 8:00 PM	0.50	2.37	0.5	8264.1
9/16/07 12:00 AM	0.50	2.38	0.5	7679.6
9/16/07 4:00 AM	0.50	2.38	0.5	7679.6
9/16/07 8:00 AM	0.50	2.38	0.5	7615.9
9/16/07 12:00 PM	0.51	2.38	0.6	7874.4
9/16/07 4:00 PM	0.51	2.39	0.5	8002.4
9/16/07 8:00 PM	0.47	2.38	0.4	7155.9
9/17/07 12:00 AM	0.47	2.38	0.5	6497.5
9/17/07 4:00 AM	0.47	2.38	0.5	6555.1
9/17/07 8:00 AM	0.47	2.38	0.5	6555.1
9/17/07 12:00 PM	0.48	2.39	0.5	6657.3
9/17/07 4:00 PM	0.48	2.39	0.5	6818.9
9/17/07 8:00 PM	0.44	2.38	0.4	6167.9
9/18/07 12:00 AM	0.45	2.38	0.4	5562.5
9/18/07 4:00 AM	0.44	2.38	0.4	5562.5
9/18/07 8:00 AM	0.44	2.38	0.4	5509.8
9/18/07 12:00 PM	0.44	2.57	0.4	5561.9
9/18/07 4:00 PM	0.43	2.62	0.4	5319.4
9/18/07 8:00 PM	0.42	2.47	0.3	4978.6
9/19/07 12:00 AM	0.41	2.40	0.3	4691.0
9/19/07 4:00 AM	0.40	2.37	0.3	4455.6
9/19/07 8:00 AM	0.40	2.34	0.3	4375.6
9/19/07 12:00 PM	0.40	2.39	0.3	4296.5
9/19/07 4:00 PM	0.38	2.40	0.3	4077.4
9/19/07 8:00 PM	0.36	2.39	0.2	3658.6
9/20/07 12:00 AM	0.37	2.39	0.2	3453.3
9/20/07 4:00 AM	0.37	2.40	0.2	3532.7
9/20/07 8:00 AM	0.37	2.40	0.3	3613.2
9/20/07 12:00 PM	0.47	2.40	0.5	5104.4
9/20/07 4:00 PM	0.47	2.41	0.4	6440.5
9/20/07 8:00 PM	0.45	2.40	0.4	6050.0
9/21/07 12:00 AM	0.46	2.40	0.4	5882.7
9/21/07 4:00 AM	0.46	2.40	0.4	6046.4
9/21/07 8:00 AM	0.46	2.40	0.4	6046.4
9/21/07 12:00 PM	0.47	2.41	0.4	6158.6
9/21/07 4:00 PM	0.47	2.41	0.5	6440.5
9/21/07 8:00 PM	0.50	2.41	0.5	7022.4
9/22/07 12:00 AM	0.50	2.41	0.5	7616.5

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/22/07 4:00 AM	0.50	2.41	0.5	7679.6
9/22/07 8:00 AM	0.51	2.41	0.5	7743.9
9/22/07 12:00 PM	0.51	2.41	0.5	7871.9
9/22/07 4:00 PM	0.53	2.41	0.6	8254.1
9/22/07 8:00 PM	0.56	2.41	0.7	9333.6
9/23/07 12:00 AM	0.57	2.41	0.7	10258.2
9/23/07 4:00 AM	0.57	2.40	0.7	10562.6
9/23/07 8:00 AM	0.57	2.41	0.7	10639.7
9/23/07 12:00 PM	0.57	2.41	0.7	10562.6
9/23/07 4:00 PM	0.54	2.41	0.6	9910.7
9/23/07 8:00 PM	0.56	2.40	0.7	9609.0
9/24/07 12:00 AM	0.54	2.40	0.6	9609.0
9/24/07 4:00 AM	0.55	2.41	0.7	9407.8
9/24/07 8:00 AM	0.55	2.41	0.7	9479.7
9/24/07 12:00 PM	0.55	2.41	0.7	9625.6
9/24/07 4:00 PM	0.57	2.41	0.7	10128.4
9/24/07 8:00 PM	0.53	2.40	0.6	9698.8
9/25/07 12:00 AM	0.54	2.40	0.6	9124.0
9/25/07 4:00 AM	0.54	2.40	0.6	9264.6
9/25/07 8:00 AM	0.53	2.40	0.6	8914.8
9/25/07 12:00 PM	0.53	2.41	0.6	8774.3
9/25/07 4:00 PM	0.54	2.41	0.6	8982.2
9/25/07 8:00 PM	0.53	2.40	0.6	8844.2
9/26/07 12:00 AM	0.54	2.40	0.6	8844.2
9/26/07 4:00 AM	0.54	2.40	0.6	9052.1
9/26/07 8:00 AM	0.53	2.40	0.6	8982.2
9/26/07 12:00 PM	0.56	2.41	0.7	9471.6
9/26/07 4:00 PM	0.54	2.41	0.6	9683.4
9/26/07 8:00 PM	0.51	2.40	0.6	8734.4
9/27/07 12:00 AM	0.52	2.40	0.6	8182.6
9/27/07 4:00 AM	0.51	2.40	0.6	8182.6
9/27/07 8:00 AM	0.51	2.40	0.6	8067.4
9/27/07 12:00 PM	0.51	2.41	0.6	8001.8
9/27/07 4:00 PM	0.51	2.41	0.6	8067.4
9/27/07 8:00 PM	0.49	2.40	0.5	7749.0
9/28/07 12:00 AM	0.49	2.40	0.5	7303.2
9/28/07 4:00 AM	0.48	2.40	0.5	7000.5
9/28/07 8:00 AM	0.48	2.40	0.5	6759.6
9/28/07 12:00 PM	0.49	2.41	0.5	7062.3
9/28/07 4:00 PM	0.48	2.41	0.5	7018.2
9/28/07 8:00 PM	0.44	2.40	0.4	6116.7
9/29/07 12:00 AM	0.46	2.40	0.4	5776.6
9/29/07 4:00 AM	0.45	2.40	0.4	5936.7
9/29/07 8:00 AM	0.46	2.40	0.4	5936.7
9/29/07 12:00 PM	0.46	2.41	0.4	6046.4
9/29/07 4:00 PM	0.44	2.40	0.4	5740.8
9/29/07 8:00 PM	0.43	2.40	0.4	5228.4
9/30/07 12:00 AM	0.43	2.40	0.4	5177.3
9/30/07 4:00 AM	0.43	2.40	0.4	5177.3

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/30/07 8:00 AM	0.43	2.40	0.4	5076.8
9/30/07 12:00 PM	0.43	2.40	0.4	5126.7
9/30/07 4:00 PM	0.41	2.40	0.3	4885.6
9/30/07 8:00 PM	0.39	2.40	0.3	4291.6
10/1/07 12:00 AM	0.38	2.40	0.3	3946.0
10/1/07 4:00 AM	0.37	2.40	0.3	3778.5
10/1/07 8:00 AM	0.38	2.40	0.3	3694.7
10/1/07 12:00 PM	0.40	2.40	0.3	3993.7
10/1/07 4:00 PM	0.37	2.52	0.3	3952.6
10/1/07 8:00 PM	0.36	2.48	0.2	3466.1
10/2/07 12:00 AM	0.36	2.42	0.2	3278.5
10/2/07 4:00 AM	0.36	2.37	0.2	3317.0
10/2/07 8:00 AM	0.36	2.40	0.2	3355.5
10/2/07 12:00 PM	0.37	2.40	0.3	3504.6
10/2/07 4:00 PM	0.37	2.40	0.2	3613.2
10/2/07 8:00 PM	0.33	2.40	0.2	3136.8
10/3/07 12:00 AM	0.34	2.48	0.2	2805.3
10/3/07 4:00 AM	0.34	2.52	0.2	2874.4
10/3/07 8:00 AM	0.34	2.54	0.2	2839.1
10/3/07 12:00 PM	0.35	2.44	0.2	2983.4
10/3/07 4:00 PM	0.33	2.40	0.2	2914.4
10/3/07 8:00 PM	0.32	2.41	0.2	2545.1
10/4/07 12:00 AM	0.32	2.41	0.2	2421.1
10/4/07 4:00 AM	0.32	2.41	0.2	2485.3
10/4/07 8:00 AM	0.32	2.41	0.2	2517.7
10/4/07 12:00 PM	0.32	2.41	0.2	2542.3
10/4/07 4:00 PM	0.33	2.41	0.2	2600.2
10/4/07 8:00 PM	0.34	2.41	0.2	2771.5
10/5/07 12:00 AM	0.37	2.41	0.2	3201.2
10/5/07 4:00 AM	0.37	2.41	0.2	3492.8
10/5/07 8:00 AM	0.36	2.41	0.2	3453.3
10/5/07 12:00 PM	0.39	2.42	0.3	3701.3
10/5/07 4:00 PM	0.35	2.42	0.2	3558.3
10/5/07 8:00 PM	0.36	2.42	0.2	3203.2
10/6/07 12:00 AM	0.36	2.42	0.2	3317.0
10/6/07 4:00 AM	0.36	2.41	0.2	3317.0
10/6/07 8:00 AM	0.36	2.42	0.2	3278.5
10/6/07 12:00 PM	0.37	2.42	0.2	3425.6
10/6/07 4:00 PM	0.35	2.42	0.2	3387.7
10/6/07 8:00 PM	0.32	2.42	0.2	2827.8
10/7/07 12:00 AM	0.33	2.42	0.2	2611.2
10/7/07 4:00 AM	0.34	2.41	0.2	2804.3
10/7/07 8:00 AM	0.33	2.42	0.2	2736.2
10/7/07 12:00 PM	0.34	2.42	0.2	2807.4
10/7/07 4:00 PM	0.32	2.42	0.2	2717.2
10/7/07 8:00 PM	0.31	2.42	0.2	2358.9
10/8/07 12:00 AM	0.31	2.42	0.2	2264.9
10/8/07 4:00 AM	0.31	2.41	0.2	2264.9
10/8/07 8:00 AM	0.31	2.41	0.2	2264.9

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/8/07 12:00 PM	0.33	2.42	0.2	2482.9
10/8/07 4:00 PM	0.31	2.42	0.2	2482.9
10/8/07 8:00 PM	0.27	2.41	0.1	1914.0
10/9/07 12:00 AM	0.28	2.41	0.1	1691.5
10/9/07 4:00 AM	0.28	2.41	0.1	1767.1
10/9/07 8:00 AM	0.28	2.41	0.1	1714.4
10/9/07 12:00 PM	0.29	2.42	0.1	1842.7
10/9/07 4:00 PM	0.28	2.42	0.1	1895.5
10/9/07 8:00 PM	0.24	2.41	0.1	1515.2
10/10/07 12:00 AM	0.25	2.41	0.1	1292.6
10/10/07 4:00 AM	0.25	2.41	0.1	1352.0
10/10/07 8:00 AM	0.25	2.41	0.1	1352.0
10/10/07 12:00 PM	0.28	2.41	0.1	1544.4
10/10/07 4:00 PM	0.26	2.42	0.1	1567.3
10/10/07 8:00 PM	0.22	2.41	0.1	1215.8
10/11/07 12:00 AM	0.23	2.41	0.1	1030.4
10/11/07 4:00 AM	0.24	2.41	0.1	1109.2
10/11/07 8:00 AM	0.23	2.41	0.1	1128.7
10/11/07 12:00 PM	0.24	2.41	0.1	1149.5
10/11/07 4:00 PM	0.24	2.41	0.1	1231.9
10/11/07 8:00 PM	0.21	2.41	0.1	1047.3
10/12/07 12:00 AM	0.33	2.41	0.2	1771.2
10/12/07 4:00 AM	0.33	2.41	0.2	2700.9
10/12/07 8:00 AM	0.33	2.41	0.2	2735.2
10/12/07 12:00 PM	0.35	2.68	0.2	2911.8
10/12/07 4:00 PM	0.33	2.60	0.2	2911.8
10/12/07 8:00 PM	0.31	2.42	0.2	2486.8
10/13/07 12:00 AM	0.30	2.41	0.1	2174.3
10/13/07 4:00 AM	0.31	2.41	0.2	2204.6
10/13/07 8:00 AM	0.31	2.41	0.2	2295.7
10/13/07 12:00 PM	0.32	2.41	0.2	2422.1
10/13/07 4:00 PM	0.32	2.42	0.2	2485.3
10/13/07 8:00 PM	0.27	2.41	0.1	2058.0
10/14/07 12:00 AM	0.28	2.41	0.1	1714.8
10/14/07 4:00 AM	0.27	2.41	0.1	1714.8
10/14/07 8:00 AM	0.28	2.41	0.1	1688.7
10/14/07 12:00 PM	0.30	2.41	0.1	1871.1
10/14/07 4:00 PM	0.27	2.42	0.1	1845.5
10/14/07 8:00 PM	0.24	2.41	0.1	1436.8
10/15/07 12:00 AM	0.24	2.41	0.1	1231.9
10/15/07 4:00 AM	0.24	2.41	0.1	1231.9
10/15/07 8:00 AM	0.24	2.41	0.1	1210.6
10/15/07 12:00 PM	0.26	2.41	0.1	1362.6
10/15/07 4:00 PM	0.25	2.42	0.1	1444.6
10/15/07 8:00 PM	0.22	2.41	0.1	1156.0
10/16/07 12:00 AM	0.22	2.41	0.1	955.7
10/16/07 4:00 AM	0.21	2.41	0.1	937.9
10/16/07 8:00 AM	0.22	2.41	0.1	937.9
10/16/07 12:00 PM	0.24	2.41	0.1	1113.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
1/0/00 12:00 AM	0.00	2.41	0.0	626.6
1/0/00 12:00 AM	0.00	2.41	0.0	0.0
Data range not printed - WSEL below invert for entire range				
6/18/08 8:00 PM	-0.21	2.40	0.0	0.0
6/19/08 12:00 AM	0.01	2.40	0.0	0.3
6/19/08 4:00 AM	0.04	2.41	0.0	6.2
6/19/08 8:00 AM	0.07	2.41	0.0	33.7
6/19/08 12:00 PM	0.10	2.41	0.0	94.2
6/19/08 4:00 PM	0.10	2.40	0.0	127.4
6/19/08 8:00 PM	0.09	2.40	0.0	108.4
6/20/08 12:00 AM	0.10	2.40	0.0	108.4
6/20/08 4:00 AM	0.11	2.41	0.0	139.2
6/20/08 8:00 AM	0.13	2.41	0.0	206.8
6/20/08 12:00 PM	0.13	2.41	0.0	257.3
6/20/08 4:00 PM	0.11	2.40	0.0	219.7
6/20/08 8:00 PM	0.12	2.40	0.0	203.7
6/21/08 12:00 AM	0.13	2.40	0.0	247.6
6/21/08 4:00 AM	0.14	2.41	0.0	278.6
6/21/08 8:00 AM	0.15	2.41	0.0	335.8
6/21/08 12:00 PM	0.15	2.41	0.0	374.0
6/21/08 4:00 PM	0.15	2.40	0.0	353.5
6/21/08 8:00 PM	0.14	2.40	0.0	333.8
6/22/08 12:00 AM	0.16	2.40	0.0	376.0
6/22/08 4:00 AM	0.16	2.41	0.0	416.9
6/22/08 8:00 AM	0.17	2.41	0.0	461.7
6/22/08 12:00 PM	0.16	2.67	0.0	484.2
6/22/08 4:00 PM	0.16	2.69	0.0	450.9
6/22/08 8:00 PM	0.17	2.61	0.0	484.2
6/23/08 12:00 AM	0.18	2.55	0.0	557.1
6/23/08 4:00 AM	0.17	2.47	0.0	569.9
6/23/08 8:00 AM	0.19	2.46	0.0	612.8
6/23/08 12:00 PM	0.20	2.68	0.1	729.0
6/23/08 4:00 PM	0.17	2.52	0.0	625.0
6/23/08 8:00 PM	0.19	2.42	0.0	578.5
6/24/08 12:00 AM	0.19	2.35	0.0	697.6
6/24/08 4:00 AM	0.19	2.41	0.0	682.9
6/24/08 8:00 AM	0.20	2.41	0.1	714.3
6/24/08 12:00 PM	0.20	2.41	0.1	791.8
6/24/08 4:00 PM	0.16	2.40	0.0	629.5
6/24/08 8:00 PM	0.17	2.40	0.0	484.2
6/25/08 12:00 AM	0.17	2.40	0.0	508.1
6/25/08 4:00 AM	0.17	2.41	0.0	498.8
6/25/08 8:00 AM	0.18	2.41	0.0	547.7
6/25/08 12:00 PM	0.18	2.41	0.0	596.6
6/25/08 4:00 PM	0.16	2.41	0.0	501.2
6/25/08 8:00 PM	0.16	2.40	0.0	416.9
6/26/08 12:00 AM	0.16	2.41	0.0	416.9
6/26/08 4:00 AM	0.16	2.41	0.0	416.9
6/26/08 8:00 AM	0.16	2.41	0.0	439.4

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/26/08 12:00 PM	0.15	2.41	0.0	417.6
6/26/08 4:00 PM	0.17	2.41	0.0	429.4
6/26/08 8:00 PM	0.14	2.40	0.0	380.9
6/27/08 12:00 AM	0.14	2.41	0.0	305.7
6/27/08 4:00 AM	0.14	2.41	0.0	324.1
6/27/08 8:00 AM	0.15	2.41	0.0	354.2
6/27/08 12:00 PM	0.15	2.41	0.0	384.3
6/27/08 4:00 PM	0.16	2.66	0.0	395.1
6/27/08 8:00 PM	0.13	2.83	0.0	323.4
6/28/08 12:00 AM	0.12	2.73	0.0	233.2
6/28/08 4:00 AM	0.13	2.63	0.0	233.2
6/28/08 8:00 AM	0.13	2.56	0.0	255.4
6/28/08 12:00 PM	0.12	0.00	0.0	232.9
6/28/08 4:00 PM	0.11	0.00	0.0	189.0
6/28/08 8:00 PM	0.18	0.00	0.0	389.4
6/29/08 12:00 AM	0.20	0.00	0.1	670.2
6/29/08 4:00 AM	0.19	0.00	0.0	728.2
6/29/08 8:00 AM	0.21	0.00	0.1	777.1
6/29/08 12:00 PM	0.21	0.00	0.1	841.5
6/29/08 4:00 PM	0.21	0.00	0.1	871.7
6/29/08 8:00 PM	0.26	0.00	0.1	1161.1
6/30/08 12:00 AM	0.27	0.00	0.1	1541.7
6/30/08 4:00 AM	0.27	0.00	0.1	1663.0
6/30/08 8:00 AM	0.29	0.00	0.1	1761.7
6/30/08 12:00 PM	0.30	0.00	0.1	1944.1
6/30/08 4:00 PM	0.31	0.00	0.2	2116.0
6/30/08 8:00 PM	0.26	0.00	0.1	1812.2
7/1/08 12:00 AM	0.28	0.00	0.1	1567.3
7/1/08 4:00 AM	0.27	0.00	0.1	1688.7
7/1/08 8:00 AM	0.28	0.00	0.1	1714.8
7/1/08 12:00 PM	0.27	0.00	0.1	1714.8
7/1/08 4:00 PM	0.28	0.00	0.1	1688.7
7/1/08 8:00 PM	0.25	0.00	0.1	1500.0
7/2/08 12:00 AM	0.25	0.00	0.1	1330.0
7/2/08 4:00 AM	0.25	0.00	0.1	1374.5
7/2/08 8:00 AM	0.26	0.00	0.1	1420.8
7/2/08 12:00 PM	0.27	0.00	0.1	1539.8
7/2/08 4:00 PM	0.25	0.00	0.1	1493.6
7/2/08 8:00 PM	0.24	0.00	0.1	1313.8
7/3/08 12:00 AM	0.24	0.00	0.1	1231.9
7/3/08 4:00 AM	0.24	0.00	0.1	1210.6
7/3/08 8:00 AM	0.25	0.00	0.1	1270.1
7/3/08 12:00 PM	0.26	0.00	0.1	1374.9
7/3/08 4:00 PM	0.24	0.00	0.1	1294.7
7/3/08 8:00 PM	0.23	0.00	0.1	1148.7
7/4/08 12:00 AM	0.23	0.00	0.1	1088.9
7/4/08 4:00 AM	0.22	0.00	0.1	1011.7
7/4/08 8:00 AM	0.23	0.00	0.1	1031.2
7/4/08 12:00 PM	0.23	0.00	0.1	1088.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/4/08 4:00 PM	0.23	0.00	0.1	1088.5
7/4/08 8:00 PM	0.19	0.00	0.0	885.5
7/5/08 12:00 AM	0.21	0.00	0.1	762.0
7/5/08 4:00 AM	0.20	0.00	0.1	792.6
7/5/08 8:00 AM	0.21	0.00	0.1	792.6
7/5/08 12:00 PM	0.21	0.00	0.1	854.2
7/5/08 4:00 PM	0.17	0.00	0.0	705.1
7/5/08 8:00 PM	0.22	0.00	0.1	777.2
7/6/08 12:00 AM	0.21	0.00	0.1	939.2
7/6/08 4:00 AM	0.21	0.00	0.1	884.4
7/6/08 8:00 AM	0.23	0.00	0.1	975.6
7/6/08 12:00 PM	0.23	0.00	0.1	1088.9
7/6/08 4:00 PM	0.19	0.00	0.0	905.4
7/6/08 8:00 PM	0.21	0.00	0.1	792.2
7/7/08 12:00 AM	0.21	0.00	0.1	884.4
7/7/08 4:00 AM	0.21	0.00	0.1	854.2
7/7/08 8:00 AM	0.21	0.00	0.1	854.2
7/7/08 12:00 PM	0.22	0.00	0.1	920.5
7/7/08 4:00 PM	0.35	0.00	0.2	2088.3
7/7/08 8:00 PM	0.35	0.00	0.2	3202.6
7/8/08 12:00 AM	0.41	0.00	0.3	3852.1
7/8/08 4:00 AM	0.41	0.00	0.3	4501.5
7/8/08 8:00 AM	0.42	0.00	0.3	4691.0
7/8/08 12:00 PM	0.42	0.00	0.3	4929.2
7/8/08 4:00 PM	0.41	0.00	0.3	4786.3
7/8/08 8:00 PM	0.54	0.00	0.6	6823.3
7/9/08 12:00 AM	0.53	0.00	0.6	8982.2
7/9/08 4:00 AM	0.52	0.00	0.6	8706.3
7/9/08 8:00 AM	0.52	0.00	0.6	8366.2
7/9/08 12:00 PM	0.54	0.00	0.6	8712.8
7/9/08 4:00 PM	0.50	0.00	0.5	8404.6
7/9/08 8:00 PM	0.49	0.00	0.5	7490.5
7/10/08 12:00 AM	0.49	0.00	0.5	7365.0
7/10/08 4:00 AM	0.49	0.00	0.5	7303.2
7/10/08 8:00 AM	0.49	0.00	0.5	7241.4
7/10/08 12:00 PM	0.48	0.00	0.5	7119.7
7/10/08 4:00 PM	0.48	0.00	0.5	6998.0
7/10/08 8:00 PM	0.48	0.00	0.5	6938.1
7/11/08 12:00 AM	0.48	0.00	0.5	6818.9
7/11/08 4:00 AM	0.47	0.00	0.4	6542.8
7/11/08 8:00 AM	0.47	0.00	0.4	6382.9
7/11/08 12:00 PM	0.46	0.00	0.4	6270.7
7/11/08 4:00 PM	0.46	0.00	0.4	6157.4
7/11/08 8:00 PM	0.44	0.00	0.4	5796.6
7/12/08 12:00 AM	0.43	0.00	0.4	5278.4
7/12/08 4:00 AM	0.43	0.00	0.4	5227.3
7/12/08 8:00 AM	0.44	0.00	0.4	5329.0
7/12/08 12:00 PM	0.42	0.00	0.3	5179.1
7/12/08 4:00 PM	0.40	0.00	0.3	4693.8

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/12/08 8:00 PM	0.65	0.00	1.1	9768.3
7/13/08 12:00 AM	0.65	0.00	1.1	15237.9
7/13/08 4:00 AM	0.64	0.00	1.0	15129.9
7/13/08 8:00 AM	0.63	0.00	1.0	14447.9
7/13/08 12:00 PM	0.85	0.00	2.4	24271.7
7/13/08 4:00 PM	0.87	0.00	2.6	35937.5
7/13/08 8:00 PM	0.84	0.00	2.3	35537.9
7/14/08 12:00 AM	0.84	0.00	2.3	33759.2
7/14/08 4:00 AM	0.83	0.00	2.3	33167.7
7/14/08 8:00 AM	0.84	0.00	2.3	33167.7
7/14/08 12:00 PM	0.84	0.00	2.3	33560.9
7/14/08 4:00 PM	0.82	0.00	2.2	32435.7
7/14/08 8:00 PM	0.82	0.00	2.2	31316.7
7/15/08 12:00 AM	0.81	0.00	2.1	30555.4
7/15/08 4:00 AM	0.90	0.00	2.9	35723.0
7/15/08 8:00 AM	0.94	0.00	3.3	44303.9
7/15/08 12:00 PM	1.47	0.00	9.6	92843.2
7/15/08 4:00 PM	1.44	0.00	9.1	134926.4
7/15/08 8:00 PM	1.39	0.00	8.5	126793.1
7/16/08 12:00 AM	1.31	0.00	7.5	114809.8
7/16/08 4:00 AM	1.25	0.00	6.6	101122.5
7/16/08 8:00 AM	1.19	0.00	5.9	89731.3
7/16/08 12:00 PM	1.19	0.00	5.9	84565.3
7/16/08 4:00 PM	1.26	0.00	6.8	91149.5
7/16/08 8:00 PM	1.21	0.00	6.1	92871.8
7/17/08 12:00 AM	1.16	0.00	5.5	83820.6
7/17/08 4:00 AM	1.12	0.00	5.2	76945.9
7/17/08 8:00 AM	1.13	0.00	5.2	74533.0
7/17/08 12:00 PM	1.10	0.00	4.9	72381.4
7/17/08 4:00 PM	1.07	0.00	4.5	67658.8
7/17/08 8:00 PM	1.03	0.00	4.1	62365.9
7/18/08 12:00 AM	1.01	0.00	4.0	58192.3
7/18/08 4:00 AM	0.98	0.00	3.7	54828.8
7/18/08 8:00 AM	0.98	0.00	3.6	52406.2
7/18/08 12:00 PM	0.99	0.00	3.8	53126.8
7/18/08 4:00 PM	0.97	0.00	3.6	52711.4
7/18/08 8:00 PM	0.94	0.00	3.2	48616.5
7/19/08 12:00 AM	0.94	0.00	3.2	45896.1
7/19/08 4:00 AM	0.91	0.00	3.0	44333.8
7/19/08 8:00 AM	0.93	0.00	3.1	43658.8
7/19/08 12:00 PM	0.92	0.00	3.0	44100.6
7/19/08 4:00 PM	0.91	0.00	2.9	42775.2
7/19/08 8:00 PM	0.88	0.00	2.7	40233.6
7/20/08 12:00 AM	0.87	0.00	2.6	38152.4
7/20/08 4:00 AM	0.86	0.00	2.5	36752.9
7/20/08 8:00 AM	0.86	0.00	2.5	35772.8
7/20/08 12:00 PM	0.85	0.00	2.4	35367.0
7/20/08 4:00 PM	0.83	0.00	2.3	33964.7
7/20/08 8:00 PM	0.81	0.00	2.1	31477.2

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/21/08 12:00 AM	0.80	0.00	2.1	29798.4
7/21/08 4:00 AM	0.80	0.00	2.0	29239.3
7/21/08 8:00 AM	0.80	0.00	2.0	29052.9
7/21/08 12:00 PM	0.79	0.00	2.0	28868.8
7/21/08 4:00 PM	0.77	0.00	1.8	27288.3
7/21/08 8:00 PM	0.75	0.00	1.7	25048.4
7/22/08 12:00 AM	0.75	0.00	1.6	23728.7
7/22/08 4:00 AM	0.74	0.00	1.6	23273.1
7/22/08 8:00 AM	0.74	0.00	1.6	23108.7
7/22/08 12:00 PM	0.73	0.00	1.5	22623.7
7/22/08 4:00 PM	0.72	0.00	1.5	21666.9
7/22/08 8:00 PM	0.71	0.00	1.4	20476.1
7/23/08 12:00 AM	0.71	0.00	1.4	19757.2
7/23/08 4:00 AM	0.70	0.00	1.3	19465.4
7/23/08 8:00 AM	0.70	0.00	1.3	19030.4
7/23/08 12:00 PM	0.69	0.00	1.3	18605.8
7/23/08 4:00 PM	0.68	0.00	1.2	17916.5
7/23/08 8:00 PM	0.66	0.00	1.1	16778.5
7/24/08 12:00 AM	0.66	0.00	1.1	15929.3
7/24/08 4:00 AM	0.65	0.00	1.1	15579.5
7/24/08 8:00 AM	0.65	0.00	1.1	15462.9
7/24/08 12:00 PM	0.65	0.00	1.1	15462.9
7/24/08 4:00 PM	0.63	0.00	1.0	14667.0
7/24/08 8:00 PM	0.63	0.00	1.0	13985.1
7/25/08 12:00 AM	0.62	0.00	0.9	13441.9
7/25/08 4:00 AM	0.61	0.00	0.9	12641.1
7/25/08 8:00 AM	0.61	0.00	0.9	12383.5
7/25/08 12:00 PM	0.62	0.00	0.9	12641.1
7/25/08 4:00 PM	0.61	0.00	0.9	12641.1
7/25/08 8:00 PM	0.61	0.00	0.8	12299.0
7/26/08 12:00 AM	0.61	0.00	0.9	12299.0
7/26/08 4:00 AM	0.60	0.00	0.8	12215.2
7/26/08 8:00 AM	0.60	0.00	0.8	12047.0
7/26/08 12:00 PM	0.61	0.00	0.8	12130.8
7/26/08 4:00 PM	0.60	0.00	0.8	11965.3
7/26/08 8:00 PM	0.58	0.00	0.8	11334.1
7/27/08 12:00 AM	0.59	0.00	0.8	11272.7
7/27/08 4:00 AM	0.59	0.00	0.8	11593.4
7/27/08 8:00 AM	0.59	0.00	0.8	11593.4
7/27/08 12:00 PM	0.59	0.00	0.8	11593.4
7/27/08 4:00 PM	0.57	0.00	0.7	11116.5
7/27/08 8:00 PM	0.57	0.00	0.7	10486.1
7/28/08 12:00 AM	0.57	0.00	0.7	10332.6
7/28/08 4:00 AM	0.56	0.00	0.7	10107.4
7/28/08 8:00 AM	0.57	0.00	0.7	10107.4
7/28/08 12:00 PM	0.55	0.00	0.7	9906.2
7/28/08 4:00 PM	0.56	0.00	0.7	9755.3
7/28/08 8:00 PM	0.53	0.00	0.6	9402.3
7/29/08 12:00 AM	0.53	0.00	0.6	8842.9

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/29/08 4:00 AM	0.53	0.00	0.6	8774.3
7/29/08 8:00 AM	0.54	0.00	0.6	8844.2
7/29/08 12:00 PM	0.54	0.00	0.6	9122.7
7/29/08 4:00 PM	0.53	0.00	0.6	9052.8
7/29/08 8:00 PM	0.51	0.00	0.6	8522.6
7/30/08 12:00 AM	0.50	0.00	0.5	7938.1
7/30/08 4:00 AM	0.51	0.00	0.6	7872.5
7/30/08 8:00 AM	0.50	0.00	0.5	7872.5
7/30/08 12:00 PM	0.49	0.00	0.5	7554.1
7/30/08 4:00 PM	0.48	0.00	0.5	7181.5
7/30/08 8:00 PM	0.48	0.00	0.5	6878.8
7/31/08 12:00 AM	0.47	0.00	0.5	6657.3
7/31/08 4:00 AM	0.47	0.00	0.4	6440.5
7/31/08 8:00 AM	0.47	0.00	0.4	6382.9
7/31/08 12:00 PM	0.47	0.00	0.4	6382.9
7/31/08 4:00 PM	0.45	0.00	0.4	6104.0
7/31/08 8:00 PM	0.44	0.00	0.4	5722.0
8/1/08 12:00 AM	0.43	0.00	0.4	5369.3
8/1/08 4:00 AM	0.44	0.00	0.4	5278.4
8/1/08 8:00 AM	0.44	0.00	0.4	5418.8
8/1/08 12:00 PM	0.44	0.00	0.4	5418.8
8/1/08 4:00 PM	0.44	0.00	0.4	5418.8
8/1/08 8:00 PM	0.41	0.00	0.3	5073.1
8/2/08 12:00 AM	0.40	0.00	0.3	4515.1
8/2/08 4:00 AM	0.40	0.00	0.3	4296.5
8/2/08 8:00 AM	0.40	0.00	0.3	4330.6
8/2/08 12:00 PM	0.38	0.00	0.3	4156.5
8/2/08 4:00 PM	0.37	0.00	0.2	3698.0
8/2/08 8:00 PM	0.37	0.00	0.3	3573.2
8/3/08 12:00 AM	0.36	0.00	0.2	3504.6
8/3/08 4:00 AM	0.36	0.00	0.2	3384.7
8/3/08 8:00 AM	0.37	0.00	0.2	3453.3
8/3/08 12:00 PM	0.35	0.00	0.2	3347.7
8/3/08 4:00 PM	0.35	0.00	0.2	3128.3
8/3/08 8:00 PM	0.32	0.00	0.2	2810.5
8/4/08 12:00 AM	0.33	0.00	0.2	2668.2
8/4/08 4:00 AM	0.33	0.00	0.2	2701.4
8/4/08 8:00 AM	0.33	0.00	0.2	2667.2
8/4/08 12:00 PM	0.32	0.00	0.2	2633.9
8/4/08 4:00 PM	0.32	0.00	0.2	2478.1
8/4/08 8:00 PM	0.31	0.00	0.2	2327.1
8/5/08 12:00 AM	0.31	0.00	0.2	2295.7
8/5/08 4:00 AM	0.31	0.00	0.2	2265.4
8/5/08 8:00 AM	0.31	0.00	0.2	2234.5
8/5/08 12:00 PM	0.29	0.00	0.1	2118.0
8/5/08 4:00 PM	0.28	0.00	0.1	1895.5
8/5/08 8:00 PM	0.38	0.00	0.3	2777.8
8/6/08 12:00 AM	0.38	0.00	0.3	3819.5
8/6/08 4:00 AM	0.38	0.00	0.3	3903.3

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/6/08 8:00 AM	0.38	0.00	0.3	3903.3
8/6/08 12:00 PM	0.38	0.00	0.3	3861.1
8/6/08 4:00 PM	0.37	0.00	0.3	3736.3
8/6/08 8:00 PM	0.35	0.00	0.2	3390.7
8/7/08 12:00 AM	0.35	0.00	0.2	3090.9
8/7/08 4:00 AM	0.35	0.00	0.2	3054.0
8/7/08 8:00 AM	0.35	0.00	0.2	3090.9
8/7/08 12:00 PM	0.34	0.00	0.2	3054.6
8/7/08 4:00 PM	0.34	0.00	0.2	2910.2
8/7/08 8:00 PM	0.32	0.00	0.2	2703.0
8/8/08 12:00 AM	0.32	0.00	0.2	2509.9
8/8/08 4:00 AM	0.32	0.00	0.2	2485.3
8/8/08 8:00 AM	0.32	0.00	0.2	2517.7
8/8/08 12:00 PM	0.31	0.00	0.2	2422.1
8/8/08 4:00 PM	0.30	0.00	0.1	2235.5
8/8/08 8:00 PM	0.32	0.00	0.2	2298.7
8/9/08 12:00 AM	0.32	0.00	0.2	2453.0
8/9/08 4:00 AM	0.32	0.00	0.2	2485.3
8/9/08 8:00 AM	0.31	0.00	0.2	2360.9
8/9/08 12:00 PM	0.31	0.00	0.2	2234.5
8/9/08 4:00 PM	0.35	0.00	0.2	2659.5
8/9/08 8:00 PM	0.33	0.00	0.2	2877.5
8/10/08 12:00 AM	0.33	0.00	0.2	2700.9
8/10/08 4:00 AM	0.33	0.00	0.2	2667.2
8/10/08 8:00 AM	0.33	0.00	0.2	2667.2
8/10/08 12:00 PM	0.33	0.00	0.2	2667.2
8/10/08 4:00 PM	0.33	0.00	0.2	2701.4
8/10/08 8:00 PM	0.31	0.00	0.2	2548.0
8/11/08 12:00 AM	0.32	0.00	0.2	2357.9
8/11/08 4:00 AM	0.31	0.00	0.2	2296.7
8/11/08 8:00 AM	0.31	0.00	0.2	2265.4
8/11/08 12:00 PM	0.33	0.00	0.2	2548.0
8/11/08 4:00 PM	0.33	0.00	0.2	2701.4
8/11/08 8:00 PM	0.31	0.00	0.2	2449.1
8/12/08 12:00 AM	0.30	0.00	0.1	2175.3
8/12/08 4:00 AM	0.29	0.00	0.1	2028.4
8/12/08 8:00 AM	0.30	0.00	0.1	2057.7
8/12/08 12:00 PM	0.33	0.00	0.2	2388.9
8/12/08 4:00 PM	0.30	0.00	0.1	2330.6
8/12/08 8:00 PM	0.28	0.00	0.1	1871.1
8/13/08 12:00 AM	0.29	0.00	0.1	1814.8
8/13/08 4:00 AM	0.29	0.00	0.1	1887.8
8/13/08 8:00 AM	0.29	0.00	0.1	1887.8
8/13/08 12:00 PM	0.29	0.00	0.1	1915.3
8/13/08 4:00 PM	0.27	0.00	0.1	1789.2
8/13/08 8:00 PM	0.25	0.00	0.1	1518.8
8/14/08 12:00 AM	0.26	0.00	0.1	1397.4
8/14/08 4:00 AM	0.25	0.00	0.1	1397.4
8/14/08 8:00 AM	0.26	0.00	0.1	1397.4

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/14/08 12:00 PM	0.25	0.00	0.1	1374.9
8/14/08 4:00 PM	0.24	0.00	0.1	1249.3
8/14/08 8:00 PM	0.22	0.00	0.1	1071.5
8/15/08 12:00 AM	0.22	0.00	0.1	992.6
8/15/08 4:00 AM	0.22	0.00	0.1	974.4
8/15/08 8:00 AM	0.22	0.00	0.1	974.4
8/15/08 12:00 PM	0.21	0.00	0.1	926.4
8/15/08 4:00 PM	0.20	0.00	0.1	824.8
8/15/08 8:00 PM	0.19	0.00	0.0	730.6
8/16/08 12:00 AM	0.19	0.00	0.0	667.8
8/16/08 4:00 AM	0.19	0.00	0.0	667.8
8/16/08 8:00 AM	0.19	0.00	0.0	667.8
8/16/08 12:00 PM	0.19	0.00	0.0	682.5
8/16/08 4:00 PM	0.17	0.00	0.0	612.8
8/16/08 8:00 PM	0.15	0.00	0.0	453.3
8/17/08 12:00 AM	0.16	0.00	0.0	407.2
8/17/08 4:00 AM	0.16	0.00	0.0	439.4
8/17/08 8:00 AM	0.16	0.00	0.0	439.4
8/17/08 12:00 PM	0.16	0.00	0.0	450.9
8/17/08 4:00 PM	0.14	0.00	0.0	369.1
8/17/08 8:00 PM	0.31	0.00	0.2	1245.7
8/18/08 12:00 AM	0.31	0.00	0.2	2204.1
8/18/08 4:00 AM	0.31	0.00	0.2	2204.1
8/18/08 8:00 AM	0.31	0.00	0.2	2265.4
8/18/08 12:00 PM	0.32	0.00	0.2	2357.9
8/18/08 4:00 PM	0.29	0.00	0.1	2124.8
8/18/08 8:00 PM	0.30	0.00	0.1	2002.4
8/19/08 12:00 AM	0.37	0.00	0.2	2818.6
8/19/08 4:00 AM	0.56	0.00	0.7	6687.4
8/19/08 8:00 AM	0.74	0.00	1.6	16332.3
8/19/08 12:00 PM	0.83	0.00	2.3	27875.4
8/19/08 4:00 PM	0.83	0.00	2.3	32772.3
8/19/08 8:00 PM	0.82	0.00	2.2	32235.6
8/20/08 12:00 AM	0.79	0.00	2.0	30197.3
8/20/08 4:00 AM	0.79	0.00	1.9	27999.4
8/20/08 8:00 AM	0.78	0.00	1.9	27319.7
8/20/08 12:00 PM	0.78	0.00	1.8	26784.6
8/20/08 4:00 PM	0.76	0.00	1.7	25732.9
8/20/08 8:00 PM	0.75	0.00	1.7	24528.3
8/21/08 12:00 AM	0.75	0.00	1.7	24019.7
8/21/08 4:00 AM	0.81	0.00	2.1	27002.9
8/21/08 8:00 AM	0.80	0.00	2.0	29426.8
8/21/08 12:00 PM	0.89	0.00	2.8	34570.3
8/21/08 4:00 PM	0.90	0.00	2.8	40487.9
8/21/08 8:00 PM	0.88	0.00	2.7	39848.6
8/22/08 12:00 AM	0.86	0.00	2.5	37587.9
8/22/08 4:00 AM	0.85	0.00	2.4	35571.4
8/22/08 8:00 AM	0.85	0.00	2.4	34759.8
8/22/08 12:00 PM	0.82	0.00	2.2	33226.7

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/22/08 4:00 PM	0.83	0.00	2.3	32431.7
8/22/08 8:00 PM	0.85	0.00	2.4	33964.7
8/23/08 12:00 AM	0.84	0.00	2.4	34559.4
8/23/08 4:00 AM	0.83	0.00	2.2	33171.9
8/23/08 8:00 AM	0.82	0.00	2.2	31655.4
8/23/08 12:00 PM	0.83	0.00	2.2	31655.4
8/23/08 4:00 PM	0.80	0.00	2.0	30526.9
8/23/08 8:00 PM	0.79	0.00	1.9	28183.5
8/24/08 12:00 AM	0.78	0.00	1.9	27141.3
8/24/08 4:00 AM	0.77	0.00	1.8	26430.2
8/24/08 8:00 AM	0.77	0.00	1.8	26077.2
8/24/08 12:00 PM	0.77	0.00	1.8	25729.1
8/24/08 4:00 PM	0.76	0.00	1.7	24868.6
8/24/08 8:00 PM	0.74	0.00	1.6	23569.3
8/25/08 12:00 AM	0.73	0.00	1.5	22460.7
8/25/08 4:00 AM	0.73	0.00	1.5	21980.0
8/25/08 8:00 AM	0.73	0.00	1.5	21980.0
8/25/08 12:00 PM	0.71	0.00	1.4	21208.7
8/25/08 4:00 PM	0.73	0.00	1.5	21049.9
8/25/08 8:00 PM	0.71	0.00	1.4	20789.2
8/26/08 12:00 AM	0.70	0.00	1.4	19610.5
8/26/08 4:00 AM	0.70	0.00	1.3	19175.4
8/26/08 8:00 AM	0.70	0.00	1.3	18887.1
8/26/08 12:00 PM	0.69	0.00	1.3	18745.6
8/26/08 4:00 PM	0.68	0.00	1.2	18190.4
8/26/08 8:00 PM	0.66	0.00	1.1	17034.2
8/27/08 12:00 AM	0.66	0.00	1.1	16291.7
8/27/08 4:00 AM	0.66	0.00	1.1	16050.9
8/27/08 8:00 AM	0.66	0.00	1.1	15929.3
8/27/08 12:00 PM	0.65	0.00	1.1	15812.6
8/27/08 4:00 PM	0.65	0.00	1.1	15462.9
8/27/08 8:00 PM	0.63	0.00	1.0	14826.5
8/28/08 12:00 AM	0.63	0.00	1.0	14144.6
8/28/08 4:00 AM	0.62	0.00	0.9	13825.9
8/28/08 8:00 AM	0.62	0.00	0.9	13666.8
8/28/08 12:00 PM	0.62	0.00	0.9	13666.8
8/28/08 4:00 PM	0.60	0.00	0.8	12856.9
8/28/08 8:00 PM	0.59	0.00	0.8	11658.5
8/29/08 12:00 AM	0.60	0.00	0.8	11575.4
8/29/08 4:00 AM	0.59	0.00	0.8	11655.9
8/29/08 8:00 AM	0.59	0.00	0.8	11512.2
8/29/08 12:00 PM	0.59	0.00	0.8	11431.7
8/29/08 4:00 PM	0.59	0.00	0.8	11350.5
8/29/08 8:00 PM	0.55	0.00	0.7	10527.9
8/30/08 12:00 AM	0.55	0.00	0.7	9552.3
8/30/08 4:00 AM	0.55	0.00	0.7	9479.7
8/30/08 8:00 AM	0.54	0.00	0.6	9336.5
8/30/08 12:00 PM	0.54	0.00	0.6	9264.6
8/30/08 4:00 PM	0.54	0.00	0.6	9264.6

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/30/08 8:00 PM	0.54	0.00	0.6	9193.3
8/31/08 12:00 AM	0.54	0.00	0.6	9193.3
8/31/08 4:00 AM	0.55	0.00	0.7	9409.1
8/31/08 8:00 AM	0.57	0.00	0.7	10055.2
8/31/08 12:00 PM	0.60	0.00	0.8	11266.2
8/31/08 4:00 PM	0.60	0.00	0.8	11881.5
8/31/08 8:00 PM	0.68	0.00	1.2	14612.3
9/1/08 12:00 AM	0.69	0.00	1.3	17916.5
9/1/08 4:00 AM	0.68	0.00	1.2	17784.5
9/1/08 8:00 AM	0.67	0.00	1.2	17114.4
9/1/08 12:00 PM	0.67	0.00	1.2	16856.5
9/1/08 4:00 PM	0.64	0.00	1.0	15819.7
9/1/08 8:00 PM	0.62	0.00	0.9	14288.8
9/2/08 12:00 AM	0.64	0.00	1.0	14184.1
9/2/08 4:00 AM	0.63	0.00	1.0	14343.2
9/2/08 8:00 AM	0.63	0.00	1.0	14144.6
9/2/08 12:00 PM	0.63	0.00	1.0	14233.9
9/2/08 4:00 PM	0.61	0.00	0.9	13273.6
9/2/08 8:00 PM	0.61	0.00	0.8	12299.0
9/3/08 12:00 AM	0.60	0.00	0.8	12130.8
9/3/08 4:00 AM	0.60	0.00	0.8	11881.5
9/3/08 8:00 AM	0.60	0.00	0.8	11798.4
9/3/08 12:00 PM	0.58	0.00	0.8	11495.6
9/3/08 4:00 PM	0.58	0.00	0.7	10952.8
9/3/08 8:00 PM	0.55	0.00	0.7	10283.3
9/4/08 12:00 AM	0.55	0.00	0.7	9698.1
9/4/08 4:00 AM	0.56	0.00	0.7	9753.5
9/4/08 8:00 AM	0.55	0.00	0.7	9826.8
9/4/08 12:00 PM	0.55	0.00	0.7	9625.6
9/4/08 4:00 PM	0.53	0.00	0.6	9126.7
9/4/08 8:00 PM	0.51	0.00	0.6	8453.3
9/5/08 12:00 AM	0.52	0.00	0.6	8249.3
9/5/08 4:00 AM	0.51	0.00	0.6	8249.3
9/5/08 8:00 AM	0.51	0.00	0.6	8067.4
9/5/08 12:00 PM	0.50	0.00	0.5	7808.9
9/5/08 4:00 PM	0.50	0.00	0.5	7552.9
9/5/08 8:00 PM	0.48	0.00	0.5	7124.7
9/6/08 12:00 AM	0.48	0.00	0.5	6759.6
9/6/08 4:00 AM	0.47	0.00	0.5	6657.3
9/6/08 8:00 AM	0.48	0.00	0.5	6613.3
9/6/08 12:00 PM	0.48	0.00	0.5	6671.5
9/6/08 4:00 PM	0.45	0.00	0.4	6222.8
9/6/08 8:00 PM	0.44	0.00	0.4	5668.1
9/7/08 12:00 AM	0.44	0.00	0.4	5509.8
9/7/08 4:00 AM	0.44	0.00	0.4	5509.8
9/7/08 8:00 AM	0.44	0.00	0.4	5561.9
9/7/08 12:00 PM	0.45	0.00	0.4	5668.1
9/7/08 4:00 PM	0.42	0.00	0.3	5279.1
9/7/08 8:00 PM	0.40	0.00	0.3	4517.8

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/8/08 12:00 AM	0.41	0.00	0.3	4423.1
9/8/08 4:00 AM	0.41	0.00	0.3	4548.0
9/8/08 8:00 AM	0.41	0.00	0.3	4501.5
9/8/08 12:00 PM	0.41	0.00	0.3	4595.1
9/8/08 4:00 PM	0.38	0.00	0.3	4253.8
9/8/08 8:00 PM	0.41	0.00	0.3	4206.7
9/9/08 12:00 AM	0.41	0.00	0.3	4641.6
9/9/08 4:00 AM	0.41	0.00	0.3	4641.6
9/9/08 8:00 AM	0.42	0.00	0.3	4737.5
9/9/08 12:00 PM	0.40	0.00	0.3	4566.0
9/9/08 4:00 PM	0.38	0.00	0.3	4077.4
9/9/08 8:00 PM	0.44	0.00	0.4	4680.4
9/10/08 12:00 AM	0.47	0.00	0.4	5891.7
9/10/08 4:00 AM	0.50	0.00	0.5	6970.9
9/10/08 8:00 AM	0.76	0.00	1.7	16155.5
9/10/08 12:00 PM	0.77	0.00	1.8	25038.1
9/10/08 4:00 PM	0.74	0.00	1.6	24081.8
9/10/08 8:00 PM	0.72	0.00	1.5	21834.5
9/11/08 12:00 AM	0.70	0.00	1.3	20030.1
9/11/08 4:00 AM	0.70	0.00	1.3	19173.7
9/11/08 8:00 AM	0.69	0.00	1.3	18611.2
9/11/08 12:00 PM	0.69	0.00	1.3	18326.4
9/11/08 4:00 PM	0.67	0.00	1.2	17794.2
9/11/08 8:00 PM	0.65	0.00	1.1	16280.6
9/12/08 12:00 AM	0.65	0.00	1.1	15576.8
9/12/08 4:00 AM	0.65	0.00	1.1	15576.8
9/12/08 8:00 AM	0.66	0.00	1.1	15693.5
9/12/08 12:00 PM	0.65	0.00	1.1	15693.5
9/12/08 4:00 PM	0.63	0.00	1.0	14870.3
9/12/08 8:00 PM	0.62	0.00	0.9	13915.2
9/13/08 12:00 AM	0.62	0.00	0.9	13666.8
9/13/08 4:00 AM	0.62	0.00	0.9	13282.8
9/13/08 8:00 AM	0.62	0.00	0.9	12812.1
9/13/08 12:00 PM	0.63	0.00	1.0	13444.6
9/13/08 4:00 PM	0.59	0.00	0.8	12878.5
9/13/08 8:00 PM	0.59	0.00	0.8	11512.2
9/14/08 12:00 AM	0.59	0.00	0.8	11431.0
9/14/08 4:00 AM	0.59	0.00	0.8	11350.5
9/14/08 8:00 AM	0.59	0.00	0.8	11270.0
9/14/08 12:00 PM	0.59	0.00	0.8	11270.0
9/14/08 4:00 PM	0.57	0.00	0.7	10801.3
9/14/08 8:00 PM	0.57	0.00	0.7	10332.6
9/15/08 12:00 AM	0.70	0.00	1.3	14753.2
9/15/08 4:00 AM	0.69	0.00	1.3	18611.2
9/15/08 8:00 AM	0.69	0.00	1.3	18048.7
9/15/08 12:00 PM	0.69	0.00	1.3	18048.7
9/15/08 4:00 PM	0.68	0.00	1.2	17778.6
9/15/08 8:00 PM	0.64	0.00	1.0	16104.9
9/16/08 12:00 AM	0.64	0.00	1.0	14806.0

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/4/07 4:00 AM	0.42	2.34	0.3	4880.4
8/4/07 8:00 AM	0.43	2.34	0.4	4978.6
8/4/07 12:00 PM	0.44	2.34	0.4	5228.4
8/4/07 4:00 PM	0.43	2.34	0.4	5228.4
8/4/07 8:00 PM	0.41	2.33	0.3	4789.1
8/5/07 12:00 AM	0.40	2.34	0.3	4376.6
8/5/07 4:00 AM	0.40	2.34	0.3	4296.5
8/5/07 8:00 AM	0.40	2.34	0.3	4341.5
8/5/07 12:00 PM	0.39	2.34	0.3	4252.2
8/5/07 4:00 PM	0.41	2.34	0.3	4378.7
8/5/07 8:00 PM	0.38	2.33	0.3	4248.9
8/6/07 12:00 AM	0.37	2.33	0.3	3778.5
8/6/07 4:00 AM	0.37	2.33	0.2	3573.2
8/6/07 8:00 AM	0.38	2.33	0.3	3614.3
8/6/07 12:00 PM	0.38	2.33	0.3	3735.8
8/6/07 4:00 PM	0.37	2.33	0.2	3654.2
8/6/07 8:00 PM	0.34	2.32	0.2	3241.2
8/7/07 12:00 AM	0.34	2.32	0.2	2909.7
8/7/07 4:00 AM	0.34	2.32	0.2	2909.7
8/7/07 8:00 AM	0.35	2.32	0.2	2981.9
8/7/07 12:00 PM	0.34	2.32	0.2	2981.9
8/7/07 4:00 PM	0.32	2.31	0.2	2681.3
8/7/07 8:00 PM	0.32	2.31	0.2	2485.3
8/8/07 12:00 AM	0.32	2.31	0.2	2517.7
8/8/07 4:00 AM	0.32	2.30	0.2	2485.3
8/8/07 8:00 AM	0.32	2.30	0.2	2485.3
8/8/07 12:00 PM	0.32	2.30	0.2	2542.3
8/8/07 4:00 PM	0.32	2.29	0.2	2509.9
8/8/07 8:00 PM	0.31	2.29	0.2	2358.9
8/9/07 12:00 AM	0.30	2.29	0.1	2204.6
8/9/07 4:00 AM	0.30	2.29	0.1	2144.4
8/9/07 8:00 AM	0.30	2.29	0.1	2144.4
8/9/07 12:00 PM	0.31	2.29	0.2	2235.5
8/9/07 4:00 PM	0.32	2.28	0.2	2357.9
8/9/07 8:00 PM	0.31	2.28	0.2	2357.9
8/10/07 12:00 AM	0.30	2.28	0.1	2177.2
8/10/07 4:00 AM	0.29	2.28	0.1	1999.5
8/10/07 8:00 AM	0.30	2.28	0.1	1999.5
8/10/07 12:00 PM	0.30	2.27	0.1	2086.1
8/10/07 4:00 PM	0.29	2.27	0.1	2002.4
8/10/07 8:00 PM	0.26	2.27	0.1	1640.3
8/11/07 12:00 AM	0.27	2.27	0.1	1491.7
8/11/07 4:00 AM	0.26	2.27	0.1	1515.1
8/11/07 8:00 AM	0.26	2.27	0.1	1490.8
8/11/07 12:00 PM	0.26	2.27	0.1	1490.8
8/11/07 4:00 PM	0.21	2.27	0.1	1184.4
8/11/07 8:00 PM	0.24	2.26	0.1	1077.5
8/12/07 12:00 AM	0.24	2.26	0.1	1231.9
8/12/07 4:00 AM	0.23	2.25	0.1	1149.5

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/16/08 4:00 AM	0.64	0.00	1.0	14806.0
9/16/08 8:00 AM	0.63	0.00	1.0	14502.7
9/16/08 12:00 PM	0.62	0.00	0.9	13601.4
9/16/08 4:00 PM	0.62	0.00	0.9	13282.8
9/16/08 8:00 PM	0.71	0.00	1.4	16712.0
9/17/08 12:00 AM	0.72	0.00	1.5	20321.8
9/17/08 4:00 AM	0.71	0.00	1.4	20321.8
9/17/08 8:00 AM	0.70	0.00	1.4	19610.5
9/17/08 12:00 PM	0.69	0.00	1.3	18756.2
9/17/08 4:00 PM	0.68	0.00	1.2	17646.6
9/17/08 8:00 PM	0.81	0.00	2.1	23615.2
9/18/08 12:00 AM	0.80	0.00	2.1	29798.4
9/18/08 4:00 AM	0.79	0.00	1.9	28555.1
9/18/08 8:00 AM	0.78	0.00	1.8	26964.2
9/18/08 12:00 PM	0.77	0.00	1.8	25905.0
9/18/08 4:00 PM	0.74	0.00	1.6	24244.8
9/18/08 8:00 PM	0.71	0.00	1.4	21432.9
9/19/08 12:00 AM	0.72	0.00	1.5	20321.8
9/19/08 4:00 AM	0.71	0.00	1.4	20321.8
9/19/08 8:00 AM	0.70	0.00	1.4	19610.5
9/19/08 12:00 PM	0.71	0.00	1.4	19871.2
9/19/08 4:00 PM	0.69	0.00	1.3	19301.5
9/19/08 8:00 PM	0.66	0.00	1.1	17186.5
9/20/08 12:00 AM	0.66	0.00	1.1	15929.3
9/20/08 4:00 AM	0.66	0.00	1.1	15810.1
9/20/08 8:00 AM	0.66	0.00	1.1	15810.1
9/20/08 12:00 PM	0.65	0.00	1.1	15468.5
9/20/08 4:00 PM	0.64	0.00	1.0	14914.1
9/20/08 8:00 PM	0.63	0.00	1.0	14343.2
9/21/08 12:00 AM	0.63	0.00	1.0	13985.1
9/21/08 4:00 AM	0.63	0.00	1.0	13901.6
9/21/08 8:00 AM	0.62	0.00	0.9	13742.5
9/21/08 12:00 PM	0.63	0.00	1.0	13742.5
9/21/08 4:00 PM	0.60	0.00	0.8	12767.1
9/21/08 8:00 PM	0.68	0.00	1.2	14612.3
9/22/08 12:00 AM	0.67	0.00	1.2	17118.6
9/22/08 4:00 AM	0.66	0.00	1.1	16269.4
9/22/08 8:00 AM	0.66	0.00	1.1	15929.3
9/22/08 12:00 PM	0.64	0.00	1.0	15374.9
9/22/08 4:00 PM	0.63	0.00	1.0	14502.7
9/22/08 8:00 PM	0.69	0.00	1.3	16176.4
9/23/08 12:00 AM	0.93	0.00	3.1	31521.5
9/23/08 4:00 AM	0.89	0.00	2.8	42419.5
9/23/08 8:00 AM	0.86	0.00	2.5	37808.8
9/23/08 12:00 PM	0.85	0.00	2.4	35367.0
9/23/08 4:00 PM	0.84	0.00	2.3	34161.9
9/23/08 8:00 PM	0.79	0.00	2.0	30748.2
9/24/08 12:00 AM	0.79	0.00	1.9	27816.5
9/24/08 4:00 AM	0.78	0.00	1.9	27319.7

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/24/08 8:00 AM	0.77	0.00	1.8	26608.6
9/24/08 12:00 PM	0.76	0.00	1.7	25557.0
9/24/08 4:00 PM	0.77	0.00	1.8	25557.0
9/24/08 8:00 PM	0.75	0.00	1.6	24757.4
9/25/08 12:00 AM	0.73	0.00	1.5	22472.1
9/25/08 4:00 AM	0.73	0.00	1.5	21506.6
9/25/08 8:00 AM	0.72	0.00	1.5	21350.8
9/25/08 12:00 PM	0.72	0.00	1.4	20888.0
9/25/08 4:00 PM	0.71	0.00	1.4	20169.1
9/25/08 8:00 PM	0.68	0.00	1.2	18632.9
9/26/08 12:00 AM	0.69	0.00	1.3	17778.6
9/26/08 4:00 AM	0.68	0.00	1.2	17778.6
9/26/08 8:00 AM	0.68	0.00	1.2	17376.5
9/26/08 12:00 PM	0.68	0.00	1.2	17510.6
9/26/08 4:00 PM	0.66	0.00	1.1	16912.6
9/26/08 8:00 PM	0.66	0.00	1.1	16048.4
9/27/08 12:00 AM	0.65	0.00	1.1	15698.7
9/27/08 4:00 AM	0.64	0.00	1.0	15129.9
9/27/08 8:00 AM	0.64	0.00	1.0	14806.0
9/27/08 12:00 PM	0.64	0.00	1.0	14600.0
9/27/08 4:00 PM	0.63	0.00	1.0	14241.9
9/27/08 8:00 PM	0.63	0.00	1.0	13901.6
9/28/08 12:00 AM	0.63	0.00	1.0	13818.1
9/28/08 4:00 AM	0.62	0.00	0.9	13742.5
9/28/08 8:00 AM	0.62	0.00	0.9	13282.8
9/28/08 12:00 PM	0.63	0.00	1.0	13358.4
9/28/08 4:00 PM	0.63	0.00	1.0	14061.1
9/28/08 8:00 PM	0.63	0.00	1.0	14144.6
9/29/08 12:00 AM	0.62	0.00	0.9	13825.9
9/29/08 4:00 AM	0.62	0.00	0.9	13666.8
9/29/08 8:00 AM	0.62	0.00	0.9	13196.2
9/29/08 12:00 PM	0.61	0.00	0.9	12639.7
9/29/08 4:00 PM	0.61	0.00	0.8	12384.2
9/29/08 8:00 PM	1.02	0.00	4.1	35294.3
9/30/08 12:00 AM	0.96	0.00	3.4	53683.2
9/30/08 4:00 AM	0.94	0.00	3.2	47671.0
9/30/08 8:00 AM	0.90	0.00	2.9	43904.9
9/30/08 12:00 PM	0.89	0.00	2.8	40866.5
9/30/08 4:00 PM	0.90	0.00	2.9	40703.9
9/30/08 8:00 PM	0.88	0.00	2.6	39643.2
10/1/08 12:00 AM	0.86	0.00	2.5	37320.6
10/1/08 4:00 AM	0.85	0.00	2.4	35524.1
10/1/08 8:00 AM	0.84	0.00	2.3	34158.8
10/1/08 12:00 PM	0.83	0.00	2.3	33167.7
10/1/08 4:00 PM	0.83	0.00	2.2	32381.1
10/1/08 8:00 PM	0.80	0.00	2.0	30712.1
10/2/08 12:00 AM	0.79	0.00	2.0	28868.8
10/2/08 4:00 AM	0.79	0.00	1.9	28134.9
10/2/08 8:00 AM	0.79	0.00	1.9	27770.3

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/2/08 12:00 PM	0.79	0.00	1.9	27634.8
10/2/08 4:00 PM	0.78	0.00	1.8	26964.2
10/2/08 8:00 PM	0.75	0.00	1.7	25224.4
10/3/08 12:00 AM	0.74	0.00	1.6	23564.2
10/3/08 4:00 AM	0.73	0.00	1.5	22465.0
10/3/08 8:00 AM	0.73	0.00	1.5	21821.2
10/3/08 12:00 PM	0.74	0.00	1.6	22301.9
10/3/08 4:00 PM	0.73	0.00	1.5	22460.7
10/3/08 8:00 PM	0.70	0.00	1.3	20512.9
10/4/08 12:00 AM	0.69	0.00	1.3	18745.6
10/4/08 4:00 AM	0.69	0.00	1.3	18326.4
10/4/08 8:00 AM	0.69	0.00	1.3	18048.7
10/4/08 12:00 PM	0.70	0.00	1.3	18467.9
10/4/08 4:00 PM	0.67	0.00	1.1	17713.4
10/4/08 8:00 PM	0.69	0.00	1.3	17294.2
10/5/08 12:00 AM	0.69	0.00	1.3	18048.7
10/5/08 4:00 AM	0.68	0.00	1.2	17646.6
10/5/08 8:00 AM	0.67	0.00	1.2	17114.4
10/5/08 12:00 PM	0.69	0.00	1.3	17794.2
10/5/08 4:00 PM	0.66	0.00	1.1	17447.9
10/5/08 8:00 PM	0.65	0.00	1.1	15820.4
10/6/08 12:00 AM	0.65	0.00	1.1	15462.9
10/6/08 4:00 AM	0.64	0.00	1.0	15243.8
10/6/08 8:00 AM	0.64	0.00	1.0	14806.0
10/6/08 12:00 PM	0.66	0.00	1.1	15255.7
10/6/08 4:00 PM	0.66	0.00	1.1	15810.1
10/6/08 8:00 PM	0.65	0.00	1.1	15693.5
10/7/08 12:00 AM	0.64	0.00	1.0	15243.8
10/7/08 4:00 AM	0.63	0.00	1.0	14537.2
10/7/08 8:00 AM	0.63	0.00	1.0	14163.7
10/7/08 12:00 PM	0.62	0.00	0.9	13531.2
10/7/08 4:00 PM	0.62	0.00	0.9	13282.8
10/7/08 8:00 PM	0.62	0.00	0.9	13282.8
10/8/08 12:00 AM	0.62	0.00	0.9	12898.7
10/8/08 4:00 AM	0.61	0.00	0.9	12641.1
10/8/08 8:00 AM	0.61	0.00	0.9	12383.5
10/8/08 12:00 PM	0.61	0.00	0.9	12383.5
10/8/08 4:00 PM	0.61	0.00	0.8	12299.0
10/8/08 8:00 PM	0.58	0.00	0.8	11662.5
10/9/08 12:00 AM	0.58	0.00	0.8	11110.4
10/9/08 4:00 AM	0.58	0.00	0.7	10952.8
10/9/08 8:00 AM	0.58	0.00	0.7	10795.2
10/9/08 12:00 PM	0.56	0.00	0.7	10488.2
10/9/08 4:00 PM	0.58	0.00	0.7	10488.2
10/9/08 8:00 PM	0.55	0.00	0.7	10283.3
10/10/08 12:00 PM	0.55	0.00	0.7	9771.4
10/10/08 4:00 AM	0.55	0.00	0.7	9625.6
10/10/08 8:00 AM	0.55	0.00	0.7	9479.7
10/10/08 12:00 PM	0.55	0.00	0.7	9479.7
			Total =	22025517.6

Laguna Lake Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/17/06 9:00 PM	-0.52	0.00	0.0	0.0
Data range not printed - WSEL below invert for entire range				
6/11/06 10:45 AM	-0.13	0.00	0.0	0.0
6/11/06 11:00 AM	-0.13	0.00	0.0	0.5
6/11/06 11:15 AM	0.00	0.00	0.0	6.3
6/11/06 11:30 AM	0.01	0.00	0.0	18.5
6/11/06 11:45 AM	0.02	0.00	0.0	28.7
6/11/06 12:00 PM	0.03	0.00	0.0	34.0
6/11/06 12:15 PM	0.03	0.00	0.0	36.4
6/11/06 12:30 PM	0.03	0.00	0.0	38.1
6/11/06 12:45 PM	0.03	0.00	0.0	38.9
6/11/06 1:00 PM	0.03	0.00	0.0	39.8
6/11/06 1:15 PM	0.03	0.00	0.0	39.8
6/11/06 1:30 PM	0.03	0.00	0.0	38.9
6/11/06 1:45 PM	0.03	0.00	0.0	38.1
6/11/06 2:00 PM	0.03	0.00	0.0	36.4
6/11/06 2:15 PM	0.03	0.00	0.0	34.8
6/11/06 2:30 PM	0.03	0.00	0.0	34.0
6/11/06 2:45 PM	0.03	0.00	0.0	30.2
6/11/06 3:00 PM	0.02	0.00	0.0	27.1
6/11/06 3:15 PM	0.02	0.00	0.0	27.1
6/11/06 3:30 PM	0.02	0.00	0.0	25.6
6/11/06 3:45 PM	0.02	0.00	0.0	25.6
6/11/06 4:00 PM	0.02	0.00	0.0	24.2
6/11/06 4:15 PM	0.02	0.00	0.0	20.7
6/11/06 4:30 PM	0.02	0.00	0.0	18.7
6/11/06 4:45 PM	0.02	0.00	0.0	17.4
6/11/06 5:00 PM	0.02	0.00	0.0	16.2
6/11/06 5:15 PM	0.02	0.00	0.0	15.0
6/11/06 5:30 PM	0.02	0.00	0.0	13.8
6/11/06 5:45 PM	0.01	0.00	0.0	12.6
6/11/06 6:00 PM	0.01	0.00	0.0	12.0
6/11/06 6:15 PM	0.01	0.00	0.0	12.0
6/11/06 6:30 PM	0.01	0.00	0.0	13.2
6/11/06 6:45 PM	0.02	0.00	0.0	16.2
6/11/06 7:00 PM	0.02	0.00	0.0	19.4
6/11/06 7:15 PM	0.02	0.00	0.0	24.3
6/11/06 7:30 PM	0.02	0.00	0.0	30.1
6/11/06 7:45 PM	0.03	0.00	0.0	32.4
6/11/06 8:00 PM	0.03	0.00	0.0	32.4
6/11/06 8:15 PM	0.03	0.00	0.0	34.0
6/11/06 8:30 PM	0.03	0.00	0.0	34.8
6/11/06 8:45 PM	0.03	0.00	0.0	33.2
6/11/06 9:00 PM	0.03	0.00	0.0	30.9
6/11/06 9:15 PM	0.02	0.00	0.0	29.3
6/11/06 9:30 PM	0.02	0.00	0.0	29.3
6/11/06 9:45 PM	0.02	0.00	0.0	28.6
6/11/06 10:00 PM	0.02	0.00	0.0	27.1
6/11/06 10:15 PM	0.02	0.00	0.0	25.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/11/06 10:30 PM	0.02	0.00	0.0	25.6
6/11/06 10:45 PM	0.02	0.00	0.0	24.9
6/11/06 11:00 PM	0.02	0.00	0.0	23.5
6/11/06 11:15 PM	0.02	0.00	0.0	24.2
6/11/06 11:30 PM	0.02	0.00	0.0	24.9
6/11/06 11:45 PM	0.02	0.00	0.0	24.9
6/12/06 12:00 AM	0.02	0.00	0.0	25.6
6/12/06 12:15 AM	0.02	0.00	0.0	26.4
6/12/06 12:30 AM	0.02	0.00	0.0	29.4
6/12/06 12:45 AM	0.03	0.00	0.0	44.6
6/12/06 1:00 AM	0.04	0.00	0.1	64.6
6/12/06 1:15 AM	0.04	0.00	0.1	94.9
6/12/06 1:30 AM	0.06	0.00	0.1	129.7
6/12/06 1:45 AM	0.07	0.00	0.2	144.7
6/12/06 2:00 AM	0.07	0.00	0.2	147.3
6/12/06 2:15 AM	0.07	0.00	0.2	149.9
6/12/06 2:30 AM	0.07	0.00	0.2	149.9
6/12/06 2:45 AM	0.07	0.00	0.2	147.3
6/12/06 3:00 AM	0.07	0.00	0.2	143.4
6/12/06 3:15 AM	0.07	0.00	0.2	139.5
6/12/06 3:30 AM	0.07	0.00	0.2	138.3
6/12/06 3:45 AM	0.07	0.00	0.2	133.2
6/12/06 4:00 AM	0.07	0.00	0.1	129.5
6/12/06 4:15 AM	0.07	0.00	0.1	125.8
6/12/06 4:30 AM	0.06	0.00	0.1	122.1
6/12/06 4:45 AM	0.06	0.00	0.1	119.6
6/12/06 5:00 AM	0.06	0.00	0.1	116.0
6/12/06 5:15 AM	0.06	0.00	0.1	112.4
6/12/06 5:30 AM	0.06	0.00	0.1	108.9
6/12/06 5:45 AM	0.06	0.00	0.1	105.4
6/12/06 6:00 AM	0.06	0.00	0.1	101.9
6/12/06 6:15 AM	0.06	0.00	0.1	105.4
6/12/06 6:30 AM	0.06	0.00	0.1	111.2
6/12/06 6:45 AM	0.06	0.00	0.1	111.2
6/12/06 7:00 AM	0.06	0.00	0.1	118.5
6/12/06 7:15 AM	0.06	0.00	0.1	129.5
6/12/06 7:30 AM	0.07	0.00	0.1	133.2
6/12/06 7:45 AM	0.07	0.00	0.1	134.5
6/12/06 8:00 AM	0.07	0.00	0.1	137.0
6/12/06 8:15 AM	0.07	0.00	0.2	144.7
6/12/06 8:30 AM	0.07	0.00	0.2	151.2
6/12/06 8:45 AM	0.07	0.00	0.2	152.5
6/12/06 9:00 AM	0.07	0.00	0.2	149.9
6/12/06 9:15 AM	0.07	0.00	0.2	147.3
6/12/06 9:30 AM	0.07	0.00	0.2	144.7
6/12/06 9:45 AM	0.07	0.00	0.2	142.1
6/12/06 10:00 AM	0.07	0.00	0.2	135.8
6/12/06 10:15 AM	0.07	0.00	0.1	130.7
6/12/06 10:30 AM	0.07	0.00	0.1	132.0
6/12/06 10:45 AM	0.07	0.00	0.1	133.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/12/06 11:00 AM	0.07	0.00	0.1	133.2
6/12/06 11:15 AM	0.07	0.00	0.1	134.5
6/12/06 11:30 AM	0.07	0.00	0.2	133.2
6/12/06 11:45 AM	0.07	0.00	0.1	130.7
6/12/06 12:00 PM	0.07	0.00	0.1	129.5
6/12/06 12:15 PM	0.06	0.00	0.1	127.0
6/12/06 12:30 PM	0.06	0.00	0.1	317.4
6/12/06 12:45 PM	0.16	0.00	0.6	723.7
6/12/06 1:00 PM	0.25	0.00	1.0	951.1
6/12/06 1:15 PM	0.26	0.00	1.1	962.6
6/12/06 1:30 PM	0.26	0.00	1.1	955.0
6/12/06 1:45 PM	0.25	0.00	1.1	938.2
6/12/06 2:00 PM	0.25	0.00	1.0	919.8
6/12/06 2:15 PM	0.24	0.00	1.0	901.1
6/12/06 2:30 PM	0.24	0.00	1.0	881.9
6/12/06 2:45 PM	0.23	0.00	1.0	856.6
6/12/06 3:00 PM	0.22	0.00	0.9	835.1
6/12/06 3:15 PM	0.22	0.00	0.9	818.8
6/12/06 3:30 PM	0.21	0.00	0.9	797.7
6/12/06 3:45 PM	0.21	0.00	0.9	777.6
6/12/06 4:00 PM	0.20	0.00	0.9	722.6
6/12/06 4:15 PM	0.20	0.00	0.8	651.4
6/12/06 4:30 PM	0.19	0.00	0.7	623.7
6/12/06 4:45 PM	0.19	0.00	0.7	609.1
6/12/06 5:00 PM	0.18	0.00	0.7	586.3
6/12/06 5:15 PM	0.18	0.00	0.6	580.1
6/12/06 5:30 PM	0.18	0.00	0.6	563.9
6/12/06 5:45 PM	0.17	0.00	0.6	529.6
6/12/06 6:00 PM	0.16	0.00	0.6	507.8
6/12/06 6:15 PM	0.16	0.00	0.6	488.3
6/12/06 6:30 PM	0.16	0.00	0.5	469.1
6/12/06 6:45 PM	0.15	0.00	0.5	459.5
6/12/06 7:00 PM	0.15	0.00	0.5	444.5
6/12/06 7:15 PM	0.15	0.00	0.5	425.8
6/12/06 7:30 PM	0.14	0.00	0.5	411.1
6/12/06 7:45 PM	0.14	0.00	0.4	396.5
6/12/06 8:00 PM	0.14	0.00	0.4	385.7
6/12/06 8:15 PM	0.13	0.00	0.4	371.5
6/12/06 8:30 PM	0.13	0.00	0.4	357.4
6/12/06 8:45 PM	0.13	0.00	0.4	340.2
6/12/06 9:00 PM	0.12	0.00	0.4	328.1
6/12/06 9:15 PM	0.12	0.00	0.4	323.1
6/12/06 9:30 PM	0.12	0.00	0.4	309.7
6/12/06 9:45 PM	0.11	0.00	0.3	299.7
6/12/06 10:00 PM	0.11	0.00	0.3	294.8
6/12/06 10:15 PM	0.11	0.00	0.3	281.8
6/12/06 10:30 PM	0.11	0.00	0.3	273.7
6/12/06 10:45 PM	0.11	0.00	0.3	267.4
6/12/06 11:00 PM	0.10	0.00	0.3	254.8
6/12/06 11:15 PM	0.10	0.00	0.3	245.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/12/06 11:30 PM	0.10	0.00	0.3	236.3
6/12/06 11:45 PM	0.10	0.00	0.3	230.3
6/13/06 12:00 AM	0.10	0.00	0.3	222.8
6/13/06 12:15 AM	0.09	0.00	0.2	215.3
6/13/06 12:30 AM	0.09	0.00	0.2	216.8
6/13/06 12:45 AM	0.09	0.00	0.2	211.0
6/13/06 1:00 AM	0.09	0.00	0.2	192.3
6/13/06 1:15 AM	0.08	0.00	0.2	182.3
6/13/06 1:30 AM	0.08	0.00	0.2	180.9
6/13/06 1:45 AM	0.08	0.00	0.2	175.4
6/13/06 2:00 AM	0.08	0.00	0.2	172.6
6/13/06 2:15 AM	0.08	0.00	0.2	168.6
6/13/06 2:30 AM	0.08	0.00	0.2	156.5
6/13/06 2:45 AM	0.07	0.00	0.2	146.0
6/13/06 3:00 AM	0.07	0.00	0.2	140.8
6/13/06 3:15 AM	0.07	0.00	0.2	137.0
6/13/06 3:30 AM	0.07	0.00	0.1	130.7
6/13/06 3:45 AM	0.06	0.00	0.1	128.2
6/13/06 4:00 AM	0.07	0.00	0.1	125.8
6/13/06 4:15 AM	0.06	0.00	0.1	119.6
6/13/06 4:30 AM	0.06	0.00	0.1	112.5
6/13/06 4:45 AM	0.06	0.00	0.1	112.5
6/13/06 5:00 AM	0.06	0.00	0.1	111.3
6/13/06 5:15 AM	0.06	0.00	0.1	106.5
6/13/06 5:30 AM	0.06	0.00	0.1	103.1
6/13/06 5:45 AM	0.05	0.00	0.1	99.6
6/13/06 6:00 AM	0.06	0.00	0.1	96.3
6/13/06 6:15 AM	0.05	0.00	0.1	92.9
6/13/06 6:30 AM	0.05	0.00	0.1	92.9
6/13/06 6:45 AM	0.05	0.00	0.1	90.6
6/13/06 7:00 AM	0.05	0.00	0.1	86.3
6/13/06 7:15 AM	0.05	0.00	0.1	83.0
6/13/06 7:30 AM	0.05	0.00	0.1	76.7
6/13/06 7:45 AM	0.04	0.00	0.1	71.5
6/13/06 8:00 AM	0.04	0.00	0.1	70.5
6/13/06 8:15 AM	0.04	0.00	0.1	68.4
6/13/06 8:30 AM	0.04	0.00	0.1	68.4
6/13/06 8:45 AM	0.04	0.00	0.1	65.5
6/13/06 9:00 AM	0.04	0.00	0.1	83.9
6/13/06 9:15 AM	0.06	0.00	0.1	239.3
6/13/06 9:30 AM	0.13	0.00	0.4	394.9
6/13/06 9:45 AM	0.14	0.00	0.5	418.4
6/13/06 10:00 AM	0.14	0.00	0.5	416.6
6/13/06 10:15 AM	0.14	0.00	0.5	412.9
6/13/06 10:30 AM	0.14	0.00	0.5	403.8
6/13/06 10:45 AM	0.14	0.00	0.4	392.9
6/13/06 11:00 AM	0.14	0.00	0.4	387.5
6/13/06 11:15 AM	0.13	0.00	0.4	376.8
6/13/06 11:30 AM	0.13	0.00	0.4	369.7
6/13/06 11:45 AM	0.13	0.00	0.4	376.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/13/06 12:00 PM	0.13	0.00	0.4	507.0
6/13/06 12:15 PM	0.19	0.00	0.7	703.8
6/13/06 12:30 PM	0.20	0.00	0.9	802.0
6/13/06 12:45 PM	0.22	0.00	0.9	840.8
6/13/06 1:00 PM	0.23	0.00	1.0	865.2
6/13/06 1:15 PM	0.23	0.00	1.0	870.8
6/13/06 1:30 PM	0.23	0.00	1.0	862.4
6/13/06 1:45 PM	0.23	0.00	1.0	852.4
6/13/06 2:00 PM	0.22	0.00	0.9	842.4
6/13/06 2:15 PM	0.22	0.00	0.9	830.7
6/13/06 2:30 PM	0.22	0.00	0.9	817.4
6/13/06 2:45 PM	0.21	0.00	0.9	800.8
6/13/06 3:00 PM	0.21	0.00	0.9	782.3
6/13/06 3:15 PM	0.20	0.00	0.9	723.6
6/13/06 3:30 PM	0.20	0.00	0.7	664.1
6/13/06 3:45 PM	0.19	0.00	0.7	644.9
6/13/06 4:00 PM	0.19	0.00	0.7	619.6
6/13/06 4:15 PM	0.18	0.00	0.7	596.6
6/13/06 4:30 PM	0.18	0.00	0.7	570.0
6/13/06 4:45 PM	0.17	0.00	0.6	545.6
6/13/06 5:00 PM	0.17	0.00	0.6	535.5
6/13/06 5:15 PM	0.17	0.00	0.6	519.7
6/13/06 5:30 PM	0.16	0.00	0.6	498.0
6/13/06 5:45 PM	0.16	0.00	0.5	482.5
6/13/06 6:00 PM	0.16	0.00	0.5	469.1
6/13/06 6:15 PM	0.15	0.00	0.5	450.1
6/13/06 6:30 PM	0.15	0.00	0.5	433.2
6/13/06 6:45 PM	0.14	0.00	0.5	420.2
6/13/06 7:00 PM	0.14	0.00	0.5	402.0
6/13/06 7:15 PM	0.14	0.00	0.4	387.5
6/13/06 7:30 PM	0.13	0.00	0.4	378.6
6/13/06 7:45 PM	0.13	0.00	0.4	366.2
6/13/06 8:00 PM	0.13	0.00	0.4	355.7
6/13/06 8:15 PM	0.13	0.00	0.4	345.3
6/13/06 8:30 PM	0.12	0.00	0.4	331.6
6/13/06 8:45 PM	0.12	0.00	0.4	319.7
6/13/06 9:00 PM	0.12	0.00	0.3	308.0
6/13/06 9:15 PM	0.11	0.00	0.3	298.1
6/13/06 9:30 PM	0.11	0.00	0.3	288.3
6/13/06 9:45 PM	0.11	0.00	0.3	278.6
6/13/06 10:00 PM	0.11	0.00	0.3	270.6
6/13/06 10:15 PM	0.11	0.00	0.3	264.2
6/13/06 10:30 PM	0.10	0.00	0.3	256.4
6/13/06 10:45 PM	0.10	0.00	0.3	245.5
6/13/06 11:00 PM	0.10	0.00	0.3	236.3
6/13/06 11:15 PM	0.10	0.00	0.3	231.8
6/13/06 11:30 PM	0.10	0.00	0.3	225.8
6/13/06 11:45 PM	0.09	0.00	0.2	215.3
6/14/06 12:00 AM	0.09	0.00	0.2	208.0
6/14/06 12:15 AM	0.09	0.00	0.2	202.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/14/06 12:30 AM	0.09	0.00	0.2	196.5
6/14/06 12:45 AM	0.09	0.00	0.2	190.8
6/14/06 1:00 AM	0.08	0.00	0.2	185.1
6/14/06 1:15 AM	0.08	0.00	0.2	179.5
6/14/06 1:30 AM	0.08	0.00	0.2	175.4
6/14/06 1:45 AM	0.08	0.00	0.2	168.6
6/14/06 2:00 AM	0.08	0.00	0.2	161.8
6/14/06 2:15 AM	0.08	0.00	0.2	159.1
6/14/06 2:30 AM	0.07	0.00	0.2	155.1
6/14/06 2:45 AM	0.07	0.00	0.2	148.6
6/14/06 3:00 AM	0.07	0.00	0.2	144.7
6/14/06 3:15 AM	0.07	0.00	0.2	143.4
6/14/06 3:30 AM	0.07	0.00	0.2	137.0
6/14/06 3:45 AM	0.07	0.00	0.1	130.7
6/14/06 4:00 AM	0.07	0.00	0.1	127.0
6/14/06 4:15 AM	0.06	0.00	0.1	124.5
6/14/06 4:30 AM	0.06	0.00	0.1	119.7
6/14/06 4:45 AM	0.06	0.00	0.1	116.0
6/14/06 5:00 AM	0.06	0.00	0.1	113.6
6/14/06 5:15 AM	0.06	0.00	0.1	110.1
6/14/06 5:30 AM	0.06	0.00	0.1	107.7
6/14/06 5:45 AM	0.06	0.00	0.1	104.2
6/14/06 6:00 AM	0.06	0.00	0.1	100.8
6/14/06 6:15 AM	0.05	0.00	0.1	96.2
6/14/06 6:30 AM	0.05	0.00	0.1	92.9
6/14/06 6:45 AM	0.05	0.00	0.1	89.5
6/14/06 7:00 AM	0.05	0.00	0.1	87.3
6/14/06 7:15 AM	0.05	0.00	0.1	84.1
6/14/06 7:30 AM	0.05	0.00	0.1	79.8
6/14/06 7:45 AM	0.05	0.00	0.1	79.8
6/14/06 8:00 AM	0.05	0.00	0.1	77.7
6/14/06 8:15 AM	0.05	0.00	0.1	71.5
6/14/06 8:30 AM	0.04	0.00	0.1	69.5
6/14/06 8:45 AM	0.04	0.00	0.1	65.5
6/14/06 9:00 AM	0.04	0.00	0.1	63.5
6/14/06 9:15 AM	0.04	0.00	0.1	65.5
6/14/06 9:30 AM	0.04	0.00	0.1	63.5
6/14/06 9:45 AM	0.04	0.00	0.1	62.5
6/14/06 10:00 AM	0.04	0.00	0.1	60.6
6/14/06 10:15 AM	0.04	0.00	0.1	54.9
6/14/06 10:30 AM	0.04	0.00	0.1	52.1
6/14/06 10:45 AM	0.04	0.00	0.1	50.3
6/14/06 11:00 AM	0.03	0.00	0.1	45.8
6/14/06 11:15 AM	0.03	0.00	0.0	46.7
6/14/06 11:30 AM	0.03	0.00	0.1	46.7
6/14/06 11:45 AM	0.03	0.00	0.0	44.0
6/14/06 12:00 PM	0.03	0.00	0.0	43.2
6/14/06 12:15 PM	0.03	0.00	0.0	41.4
6/14/06 12:30 PM	0.03	0.00	0.0	40.6
6/14/06 12:45 PM	0.03	0.00	0.0	40.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/14/06 1:00 PM	0.03	0.00	0.0	39.8
6/14/06 1:15 PM	0.03	0.00	0.0	38.1
6/14/06 1:30 PM	0.03	0.00	0.0	34.1
6/14/06 1:45 PM	0.03	0.00	0.0	30.9
6/14/06 2:00 PM	0.03	0.00	0.0	30.1
6/14/06 2:15 PM	0.02	0.00	0.0	31.7
6/14/06 2:30 PM	0.03	0.00	0.0	32.4
6/14/06 2:45 PM	0.03	0.00	0.0	30.1
6/14/06 3:00 PM	0.02	0.00	0.0	28.6
6/14/06 3:15 PM	0.02	0.00	0.0	24.3
6/14/06 3:30 PM	0.02	0.00	0.0	22.8
6/14/06 3:45 PM	0.02	0.00	0.0	23.5
6/14/06 4:00 PM	0.02	0.00	0.0	22.1
6/14/06 4:15 PM	0.02	0.00	0.0	19.5
6/14/06 4:30 PM	0.02	0.00	0.0	16.8
6/14/06 4:45 PM	0.02	0.00	0.0	16.8
6/14/06 5:00 PM	0.02	0.00	0.0	15.6
6/14/06 5:15 PM	0.02	0.00	0.0	13.2
6/14/06 5:30 PM	0.01	0.00	0.0	12.6
6/14/06 5:45 PM	0.01	0.00	0.0	12.6
6/14/06 6:00 PM	0.01	0.00	0.0	11.5
6/14/06 6:15 PM	0.01	0.00	0.0	9.4
6/14/06 6:30 PM	0.01	0.00	0.0	7.3
6/14/06 6:45 PM	0.01	0.00	0.0	6.0
6/14/06 7:00 PM	0.01	0.00	0.0	4.7
6/14/06 7:15 PM	0.01	0.00	0.0	3.9
6/14/06 7:30 PM	0.01	0.00	0.0	3.1
6/14/06 7:45 PM	0.01	0.00	0.0	2.1
6/14/06 8:00 PM	0.00	0.00	0.0	1.5
6/14/06 8:15 PM	0.00	0.00	0.0	1.0
6/14/06 8:30 PM	0.00	0.00	0.0	0.3
6/14/06 8:45 PM	0.00	0.00	0.0	0.0
6/14/06 9:00 PM	0.00	0.00	0.0	0.0
6/14/06 9:15 PM	0.00	0.00	0.0	0.0
6/14/06 9:30 PM	0.00	0.00	0.0	0.0
6/14/06 9:45 PM	0.00	0.00	0.0	0.0
6/14/06 10:00 PM	-0.01	0.00	0.0	0.0
Data range not printed - WSEL below invert for entire range				
6/17/06 5:15 PM	-0.07	0.00	0.0	0.0
6/17/06 5:30 PM	-0.01	0.00	0.0	23.8
6/17/06 5:45 PM	0.03	0.00	0.1	59.0
6/17/06 6:00 PM	0.04	0.00	0.1	190.9
6/17/06 6:15 PM	0.12	0.00	0.3	876.4
6/17/06 6:30 PM	0.46	0.00	1.6	1617.1
6/17/06 6:45 PM	0.65	0.00	2.0	1824.8
6/17/06 7:00 PM	0.69	0.00	2.1	1860.8
6/17/06 7:15 PM	0.69	0.00	2.1	1857.6
6/17/06 7:30 PM	0.69	0.00	2.1	1839.1
6/17/06 7:45 PM	0.67	0.00	2.0	1817.1
6/17/06 8:00 PM	0.66	0.00	2.0	1795.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/17/06 8:15 PM	0.64	0.00	2.0	1772.9
6/17/06 8:30 PM	0.63	0.00	2.0	1749.4
6/17/06 8:45 PM	0.62	0.00	1.9	1724.1
6/17/06 9:00 PM	0.60	0.00	1.9	1699.2
6/17/06 9:15 PM	0.59	0.00	1.9	1676.0
6/17/06 9:30 PM	0.57	0.00	1.8	1651.8
6/17/06 9:45 PM	0.56	0.00	1.8	1628.8
6/17/06 10:00 PM	0.55	0.00	1.8	1605.4
6/17/06 10:15 PM	0.53	0.00	1.8	1578.6
6/17/06 10:30 PM	0.52	0.00	1.7	1552.9
6/17/06 10:45 PM	0.51	0.00	1.7	1530.8
6/17/06 11:00 PM	0.50	0.00	1.7	1508.3
6/17/06 11:15 PM	0.48	0.00	1.7	1484.7
6/17/06 11:30 PM	0.47	0.00	1.6	1461.5
6/17/06 11:45 PM	0.46	0.00	1.6	1438.0
6/18/06 12:00 AM	0.45	0.00	1.6	1414.0
6/18/06 12:15 AM	0.44	0.00	1.6	1390.6
6/18/06 12:30 AM	0.43	0.00	1.5	1366.7
6/18/06 12:45 AM	0.41	0.00	1.5	1343.3
6/18/06 1:00 AM	0.40	0.00	1.5	1321.3
6/18/06 1:15 AM	0.39	0.00	1.5	1298.0
6/18/06 1:30 AM	0.38	0.00	1.4	1275.3
6/18/06 1:45 AM	0.37	0.00	1.4	1253.1
6/18/06 2:00 AM	0.36	0.00	1.4	1229.5
6/18/06 2:15 AM	0.35	0.00	1.4	1206.5
6/18/06 2:30 AM	0.34	0.00	1.3	1184.1
6/18/06 2:45 AM	0.34	0.00	1.3	1160.1
6/18/06 3:00 AM	0.33	0.00	1.3	1136.8
6/18/06 3:15 AM	0.32	0.00	1.3	1115.1
6/18/06 3:30 AM	0.31	0.00	1.2	1095.3
6/18/06 3:45 AM	0.30	0.00	1.2	1075.1
6/18/06 4:00 AM	0.29	0.00	1.2	1053.3
6/18/06 4:15 AM	0.29	0.00	1.2	1032.2
6/18/06 4:30 AM	0.28	0.00	1.1	1010.8
6/18/06 4:45 AM	0.27	0.00	1.1	991.3
6/18/06 5:00 AM	0.27	0.00	1.1	972.7
6/18/06 5:15 AM	0.26	0.00	1.1	953.7
6/18/06 5:30 AM	0.25	0.00	1.0	935.6
6/18/06 5:45 AM	0.25	0.00	1.0	918.5
6/18/06 6:00 AM	0.24	0.00	1.0	899.7
6/18/06 6:15 AM	0.24	0.00	1.0	880.6
6/18/06 6:30 AM	0.23	0.00	1.0	862.4
6/18/06 6:45 AM	0.22	0.00	0.9	842.3
6/18/06 7:00 AM	0.22	0.00	0.9	821.8
6/18/06 7:15 AM	0.21	0.00	0.9	802.3
6/18/06 7:30 AM	0.21	0.00	0.9	783.9
6/18/06 7:45 AM	0.20	0.00	0.9	725.8
6/18/06 8:00 AM	0.20	0.00	0.8	668.4
6/18/06 8:15 AM	0.19	0.00	0.7	644.9
6/18/06 8:30 AM	0.19	0.00	0.7	619.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/18/06 8:45 AM	0.18	0.00	0.7	596.6
6/18/06 9:00 AM	0.18	0.00	0.6	576.0
6/18/06 9:15 AM	0.17	0.00	0.6	555.7
6/18/06 9:30 AM	0.17	0.00	0.6	531.6
6/18/06 9:45 AM	0.16	0.00	0.6	509.8
6/18/06 10:00 AM	0.16	0.00	0.6	496.1
6/18/06 10:15 AM	0.16	0.00	0.5	484.4
6/18/06 10:30 AM	0.16	0.00	0.5	467.2
6/18/06 10:45 AM	0.15	0.00	0.5	450.1
6/18/06 11:00 AM	0.15	0.00	0.5	436.9
6/18/06 11:15 AM	0.15	0.00	0.5	423.9
6/18/06 11:30 AM	0.14	0.00	0.5	411.1
6/18/06 11:45 AM	0.14	0.00	0.5	400.1
6/18/06 12:00 PM	0.14	0.00	0.4	387.5
6/18/06 12:15 PM	0.13	0.00	0.4	373.3
6/18/06 12:30 PM	0.13	0.00	0.4	359.2
6/18/06 12:45 PM	0.13	0.00	0.4	350.4
6/18/06 1:00 PM	0.13	0.00	0.4	343.5
6/18/06 1:15 PM	0.12	0.00	0.4	333.2
6/18/06 1:30 PM	0.12	0.00	0.4	324.7
6/18/06 1:45 PM	0.12	0.00	0.4	316.3
6/18/06 2:00 PM	0.12	0.00	0.3	304.7
6/18/06 2:15 PM	0.11	0.00	0.3	294.8
6/18/06 2:30 PM	0.11	0.00	0.3	288.3
6/18/06 2:45 PM	0.11	0.00	0.3	278.6
6/18/06 3:00 PM	0.11	0.00	0.3	269.0
6/18/06 3:15 PM	0.11	0.00	0.3	250.3
6/18/06 3:30 PM	0.10	0.00	0.3	248.7
6/18/06 3:45 PM	0.10	0.00	0.3	285.3
6/18/06 4:00 PM	0.12	0.00	0.3	316.4
6/18/06 4:15 PM	0.12	0.00	0.4	326.4
6/18/06 4:30 PM	0.12	0.00	0.4	326.4
6/18/06 4:45 PM	0.12	0.00	0.4	321.4
6/18/06 5:00 PM	0.12	0.00	0.4	316.3
6/18/06 5:15 PM	0.12	0.00	0.3	311.3
6/18/06 5:30 PM	0.12	0.00	0.3	303.0
6/18/06 5:45 PM	0.11	0.00	0.3	293.2
6/18/06 6:00 PM	0.11	0.00	0.3	285.0
6/18/06 6:15 PM	0.11	0.00	0.3	278.6
6/18/06 6:30 PM	0.11	0.00	0.3	272.2
6/18/06 6:45 PM	0.11	0.00	0.3	264.2
6/18/06 7:00 PM	0.10	0.00	0.3	254.8
6/18/06 7:15 PM	0.10	0.00	0.3	247.0
6/18/06 7:30 PM	0.10	0.00	0.3	240.9
6/18/06 7:45 PM	0.10	0.00	0.3	233.3
6/18/06 8:00 PM	0.10	0.00	0.3	225.7
6/18/06 8:15 PM	0.09	0.00	0.2	216.8
6/18/06 8:30 PM	0.09	0.00	0.2	210.9
6/18/06 8:45 PM	0.09	0.00	0.2	205.1
6/18/06 9:00 PM	0.09	0.00	0.2	196.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/18/06 9:15 PM	0.09	0.00	0.2	192.2
6/18/06 9:30 PM	0.08	0.00	0.2	187.9
6/18/06 9:45 PM	0.08	0.00	0.2	180.9
6/18/06 10:00 PM	0.08	0.00	0.2	175.4
6/18/06 10:15 PM	0.08	0.00	0.2	169.9
6/18/06 10:30 PM	0.08	0.00	0.2	164.5
6/18/06 10:45 PM	0.08	0.00	0.2	159.1
6/18/06 11:00 PM	0.07	0.00	0.2	153.8
6/18/06 11:15 PM	0.07	0.00	0.2	149.9
6/18/06 11:30 PM	0.07	0.00	0.2	144.7
6/18/06 11:45 PM	0.07	0.00	0.2	142.1
6/19/06 12:00 AM	0.07	0.00	0.2	138.3
6/19/06 12:15 AM	0.07	0.00	0.1	134.5
6/19/06 12:30 AM	0.07	0.00	0.1	132.0
6/19/06 12:45 AM	0.07	0.00	0.1	128.2
6/19/06 1:00 AM	0.06	0.00	0.1	124.5
6/19/06 1:15 AM	0.06	0.00	0.1	120.8
6/19/06 1:30 AM	0.06	0.00	0.1	117.2
6/19/06 1:45 AM	0.06	0.00	0.1	113.6
6/19/06 2:00 AM	0.06	0.00	0.1	111.2
6/19/06 2:15 AM	0.06	0.00	0.1	107.7
6/19/06 2:30 AM	0.06	0.00	0.1	104.2
6/19/06 2:45 AM	0.06	0.00	0.1	104.2
6/19/06 3:00 AM	0.06	0.00	0.1	104.2
6/19/06 3:15 AM	0.06	0.00	0.1	99.6
6/19/06 3:30 AM	0.05	0.00	0.1	95.1
6/19/06 3:45 AM	0.05	0.00	0.1	94.0
6/19/06 4:00 AM	0.05	0.00	0.1	92.9
6/19/06 4:15 AM	0.05	0.00	0.1	91.7
6/19/06 4:30 AM	0.05	0.00	0.1	89.5
6/19/06 4:45 AM	0.05	0.00	0.1	85.2
6/19/06 5:00 AM	0.05	0.00	0.1	83.0
6/19/06 5:15 AM	0.05	0.00	0.1	80.9
6/19/06 5:30 AM	0.05	0.00	0.1	77.7
6/19/06 5:45 AM	0.05	0.00	0.1	76.7
6/19/06 6:00 AM	0.05	0.00	0.1	74.6
6/19/06 6:15 AM	0.04	0.00	0.1	71.5
6/19/06 6:30 AM	0.04	0.00	0.1	69.5
6/19/06 6:45 AM	0.04	0.00	0.1	67.4
6/19/06 7:00 AM	0.04	0.00	0.1	65.5
6/19/06 7:15 AM	0.04	0.00	0.1	63.5
6/19/06 7:30 AM	0.04	0.00	0.1	62.5
6/19/06 7:45 AM	0.04	0.00	0.1	60.6
6/19/06 8:00 AM	0.04	0.00	0.1	59.6
6/19/06 8:15 AM	0.04	0.00	0.1	59.6
6/19/06 8:30 AM	0.04	0.00	0.1	56.7
6/19/06 8:45 AM	0.04	0.00	0.1	53.9
6/19/06 9:00 AM	0.04	0.00	0.1	52.1
6/19/06 9:15 AM	0.04	0.00	0.1	51.2
6/19/06 9:30 AM	0.04	0.00	0.1	50.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/19/06 9:45 AM	0.03	0.00	0.1	47.6
6/19/06 10:00 AM	0.03	0.00	0.1	44.9
6/19/06 10:15 AM	0.03	0.00	0.0	44.9
6/19/06 10:30 AM	0.03	0.00	0.1	44.9
6/19/06 10:45 AM	0.03	0.00	0.0	44.0
6/19/06 11:00 AM	0.03	0.00	0.0	43.2
6/19/06 11:15 AM	0.03	0.00	0.0	41.4
6/19/06 11:30 AM	0.03	0.00	0.0	40.6
6/19/06 11:45 AM	0.03	0.00	0.0	40.6
6/19/06 12:00 PM	0.03	0.00	0.0	41.4
6/19/06 12:15 PM	0.03	0.00	0.0	43.2
6/19/06 12:30 PM	0.03	0.00	0.0	40.6
6/19/06 12:45 PM	0.03	0.00	0.0	38.1
6/19/06 1:00 PM	0.03	0.00	0.0	38.9
6/19/06 1:15 PM	0.03	0.00	0.0	38.1
6/19/06 1:30 PM	0.03	0.00	0.0	34.8
6/19/06 1:45 PM	0.03	0.00	0.0	34.8
6/19/06 2:00 PM	0.03	0.00	0.0	34.8
6/19/06 2:15 PM	0.03	0.00	0.0	34.0
6/19/06 2:30 PM	0.03	0.00	0.0	33.3
6/19/06 2:45 PM	0.03	0.00	0.0	30.1
6/19/06 3:00 PM	0.02	0.00	0.0	30.9
6/19/06 3:15 PM	0.03	0.00	0.0	31.7
6/19/06 3:30 PM	0.03	0.00	0.0	30.1
6/19/06 3:45 PM	0.02	0.00	0.0	28.6
6/19/06 4:00 PM	0.02	0.00	0.0	26.4
6/19/06 4:15 PM	0.02	0.00	0.0	24.2
6/19/06 4:30 PM	0.02	0.00	0.0	22.8
6/19/06 4:45 PM	0.02	0.00	0.0	21.4
6/19/06 5:00 PM	0.02	0.00	0.0	20.7
6/19/06 5:15 PM	0.02	0.00	0.0	20.1
6/19/06 5:30 PM	0.02	0.00	0.0	18.1
6/19/06 5:45 PM	0.02	0.00	0.0	13.9
6/19/06 6:00 PM	0.01	0.00	0.0	10.9
6/19/06 6:15 PM	0.01	0.00	0.0	10.4
6/19/06 6:30 PM	0.01	0.00	0.0	10.4
6/19/06 6:45 PM	0.01	0.00	0.0	10.4
6/19/06 7:00 PM	0.01	0.00	0.0	7.9
6/19/06 7:15 PM	0.01	0.00	0.0	5.5
6/19/06 7:30 PM	0.01	0.00	0.0	5.1
6/19/06 7:45 PM	0.01	0.00	0.0	4.3
6/19/06 8:00 PM	0.01	0.00	0.0	2.5
6/19/06 8:15 PM	0.00	0.00	0.0	1.8
6/19/06 8:30 PM	0.00	0.00	0.0	1.3
6/19/06 8:45 PM	0.00	0.00	0.0	0.3
6/19/06 9:00 PM	0.00	0.00	0.0	0.1
6/19/06 9:15 PM	0.00	0.00	0.0	0.1
6/19/06 9:30 PM	0.00	0.00	0.0	0.0
6/19/06 9:45 PM	0.00	0.00	0.0	0.0
6/19/06 10:00 PM	0.00	0.00	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/19/06 10:15 PM	0.00	0.00	0.0	0.0
6/19/06 10:30 PM	-0.01	0.00	0.0	0.0
Data range not printed - WSEL below invert for entire range				
6/24/06 5:30 PM	-0.14	0.00	0.0	0.0
6/24/06 5:45 PM	-0.09	0.00	0.0	440.3
6/24/06 6:00 PM	0.23	0.00	1.0	1101.0
6/24/06 6:15 PM	0.40	0.00	1.5	1421.7
6/24/06 6:30 PM	0.50	0.00	1.7	1530.8
6/24/06 6:45 PM	0.51	0.00	1.7	1539.6
6/24/06 7:00 PM	0.51	0.00	1.7	1531.6
6/24/06 7:15 PM	0.50	0.00	1.7	1514.8
6/24/06 7:30 PM	0.49	0.00	1.7	1497.8
6/24/06 7:45 PM	0.48	0.00	1.7	1483.9
6/24/06 8:00 PM	0.47	0.00	1.6	1471.5
6/24/06 8:15 PM	0.47	0.00	1.6	1455.7
6/24/06 8:30 PM	0.46	0.00	1.6	1436.3
6/24/06 8:45 PM	0.45	0.00	1.6	1418.4
6/24/06 9:00 PM	0.44	0.00	1.6	1399.3
6/24/06 9:15 PM	0.43	0.00	1.5	1377.3
6/24/06 9:30 PM	0.42	0.00	1.5	1358.6
6/24/06 9:45 PM	0.41	0.00	1.5	1341.5
6/24/06 10:00 PM	0.40	0.00	1.5	1323.2
6/24/06 10:15 PM	0.40	0.00	1.5	1304.6
6/24/06 10:30 PM	0.39	0.00	1.4	1284.8
6/24/06 10:45 PM	0.38	0.00	1.4	1264.8
6/24/06 11:00 PM	0.37	0.00	1.4	1246.3
6/24/06 11:15 PM	0.36	0.00	1.4	1228.6
6/24/06 11:30 PM	0.35	0.00	1.4	1209.6
6/24/06 11:45 PM	0.35	0.00	1.3	1190.3
6/25/06 12:00 AM	0.34	0.00	1.3	1171.7
6/25/06 12:15 AM	0.33	0.00	1.3	1152.8
6/25/06 12:30 AM	0.32	0.00	1.3	1133.6
6/25/06 12:45 AM	0.32	0.00	1.2	1115.2
6/25/06 1:00 AM	0.31	0.00	1.2	1097.5
6/25/06 1:15 AM	0.30	0.00	1.2	1079.6
6/25/06 1:30 AM	0.30	0.00	1.2	1059.1
6/25/06 1:45 AM	0.29	0.00	1.2	1039.3
6/25/06 2:00 AM	0.28	0.00	1.1	1022.8
6/25/06 2:15 AM	0.28	0.00	1.1	1005.9
6/25/06 2:30 AM	0.27	0.00	1.1	987.6
6/25/06 2:45 AM	0.26	0.00	1.1	968.9
6/25/06 3:00 AM	0.26	0.00	1.1	952.4
6/25/06 3:15 AM	0.25	0.00	1.0	935.6
6/25/06 3:30 AM	0.25	0.00	1.0	917.2
6/25/06 3:45 AM	0.24	0.00	1.0	899.7
6/25/06 4:00 AM	0.24	0.00	1.0	883.3
6/25/06 4:15 AM	0.23	0.00	1.0	868.0
6/25/06 4:30 AM	0.23	0.00	1.0	851.0
6/25/06 4:45 AM	0.22	0.00	0.9	833.6
6/25/06 5:00 AM	0.22	0.00	0.9	820.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/25/06 5:15 AM	0.21	0.00	0.9	805.3
6/25/06 5:30 AM	0.21	0.00	0.9	788.5
6/25/06 5:45 AM	0.20	0.00	0.9	739.8
6/25/06 6:00 AM	0.20	0.00	0.8	690.0
6/25/06 6:15 AM	0.20	0.00	0.8	672.7
6/25/06 6:30 AM	0.19	0.00	0.7	651.3
6/25/06 6:45 AM	0.19	0.00	0.7	632.2
6/25/06 7:00 AM	0.19	0.00	0.7	615.4
6/25/06 7:15 AM	0.18	0.00	0.7	596.6
6/25/06 7:30 AM	0.18	0.00	0.7	580.1
6/25/06 7:45 AM	0.18	0.00	0.6	561.7
6/25/06 8:00 AM	0.17	0.00	0.6	545.6
6/25/06 8:15 AM	0.17	0.00	0.6	533.5
6/25/06 8:30 AM	0.17	0.00	0.6	519.6
6/25/06 8:45 AM	0.16	0.00	0.6	503.9
6/25/06 9:00 AM	0.16	0.00	0.6	490.2
6/25/06 9:15 AM	0.16	0.00	0.5	480.6
6/25/06 9:30 AM	0.16	0.00	0.5	467.2
6/25/06 9:45 AM	0.15	0.00	0.5	453.8
6/25/06 10:00 AM	0.15	0.00	0.5	442.6
6/25/06 10:15 AM	0.15	0.00	0.5	433.2
6/25/06 10:30 AM	0.15	0.00	0.5	423.9
6/25/06 10:45 AM	0.14	0.00	0.5	412.9
6/25/06 11:00 AM	0.14	0.00	0.5	402.0
6/25/06 11:15 AM	0.14	0.00	0.4	391.1
6/25/06 11:30 AM	0.14	0.00	0.4	383.9
6/25/06 11:45 AM	0.13	0.00	0.4	375.0
6/25/06 12:00 PM	0.13	0.00	0.4	366.2
6/25/06 12:15 PM	0.13	0.00	0.4	357.4
6/25/06 12:30 PM	0.13	0.00	0.4	348.7
6/25/06 12:45 PM	0.13	0.00	0.4	345.2
6/25/06 1:00 PM	0.13	0.00	0.4	347.0
6/25/06 1:15 PM	0.13	0.00	0.4	355.7
6/25/06 1:30 PM	0.13	0.00	0.4	367.9
6/25/06 1:45 PM	0.13	0.00	0.4	371.5
6/25/06 2:00 PM	0.13	0.00	0.4	367.9
6/25/06 2:15 PM	0.13	0.00	0.4	364.4
6/25/06 2:30 PM	0.13	0.00	0.4	360.9
6/25/06 2:45 PM	0.13	0.00	0.4	353.9
6/25/06 3:00 PM	0.13	0.00	0.4	343.5
6/25/06 3:15 PM	0.12	0.00	0.4	347.0
6/25/06 3:30 PM	0.13	0.00	0.4	583.5
6/25/06 3:45 PM	0.21	0.00	0.9	821.8
6/25/06 4:00 PM	0.22	0.00	0.9	845.2
6/25/06 4:15 PM	0.23	0.00	1.0	980.1
6/25/06 4:30 PM	0.31	0.00	1.2	1215.4
6/25/06 4:45 PM	0.40	0.00	1.5	1375.7
6/25/06 5:00 PM	0.45	0.00	1.6	1440.4
6/25/06 5:15 PM	0.46	0.00	1.6	1482.1
6/25/06 5:30 PM	0.49	0.00	1.7	1521.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/25/06 5:45 PM	0.50	0.00	1.7	1551.3
6/25/06 6:00 PM	0.52	0.00	1.7	1578.6
6/25/06 6:15 PM	0.53	0.00	1.8	1602.4
6/25/06 6:30 PM	0.55	0.00	1.8	1616.1
6/25/06 6:45 PM	0.55	0.00	1.8	1623.6
6/25/06 7:00 PM	0.55	0.00	1.8	1632.6
6/25/06 7:15 PM	0.56	0.00	1.8	1635.6
6/25/06 7:30 PM	0.56	0.00	1.8	1628.8
6/25/06 7:45 PM	0.55	0.00	1.8	1616.1
6/25/06 8:00 PM	0.54	0.00	1.8	1601.7
6/25/06 8:15 PM	0.53	0.00	1.8	1590.2
6/25/06 8:30 PM	0.53	0.00	1.8	1591.7
6/25/06 8:45 PM	0.54	0.00	1.8	1607.0
6/25/06 9:00 PM	0.55	0.00	1.8	1627.3
6/25/06 9:15 PM	0.56	0.00	1.8	1645.2
6/25/06 9:30 PM	0.57	0.00	1.8	1655.6
6/25/06 9:45 PM	0.57	0.00	1.8	1657.0
6/25/06 10:00 PM	0.57	0.00	1.8	1654.1
6/25/06 10:15 PM	0.57	0.00	1.8	1653.4
6/25/06 10:30 PM	0.57	0.00	1.8	1651.1
6/25/06 10:45 PM	0.56	0.00	1.8	1643.7
6/25/06 11:00 PM	0.56	0.00	1.8	1633.3
6/25/06 11:15 PM	0.55	0.00	1.8	1619.8
6/25/06 11:30 PM	0.54	0.00	1.8	1605.5
6/25/06 11:45 PM	0.54	0.00	1.8	1590.2
6/26/06 12:00 AM	0.53	0.00	1.8	1574.0
6/26/06 12:15 AM	0.52	0.00	1.7	1558.4
6/26/06 12:30 AM	0.51	0.00	1.7	1542.7
6/26/06 12:45 AM	0.50	0.00	1.7	1526.0
6/26/06 1:00 AM	0.49	0.00	1.7	1510.0
6/26/06 1:15 AM	0.49	0.00	1.7	1495.4
6/26/06 1:30 AM	0.48	0.00	1.7	1480.6
6/26/06 1:45 AM	0.47	0.00	1.6	1463.2
6/26/06 2:00 AM	0.46	0.00	1.6	1446.5
6/26/06 2:15 AM	0.45	0.00	1.6	1431.2
6/26/06 2:30 AM	0.45	0.00	1.6	1414.9
6/26/06 2:45 AM	0.44	0.00	1.6	1398.4
6/26/06 3:00 AM	0.43	0.00	1.5	1381.8
6/26/06 3:15 AM	0.42	0.00	1.5	1367.6
6/26/06 3:30 AM	0.42	0.00	1.5	1352.3
6/26/06 3:45 AM	0.41	0.00	1.5	1336.0
6/26/06 4:00 AM	0.40	0.00	1.5	1320.4
6/26/06 4:15 AM	0.39	0.00	1.5	1304.6
6/26/06 4:30 AM	0.39	0.00	1.4	1289.6
6/26/06 4:45 AM	0.38	0.00	1.4	1273.4
6/26/06 5:00 AM	0.37	0.00	1.4	1258.0
6/26/06 5:15 AM	0.37	0.00	1.4	1243.4
6/26/06 5:30 AM	0.36	0.00	1.4	1226.6
6/26/06 5:45 AM	0.35	0.00	1.4	1209.6
6/26/06 6:00 AM	0.35	0.00	1.3	1193.3

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/26/06 6:15 AM	0.34	0.00	1.3	1175.8
6/26/06 6:30 AM	0.33	0.00	1.3	1158.1
6/26/06 6:45 AM	0.33	0.00	1.3	1143.3
6/26/06 7:00 AM	0.32	0.00	1.3	1129.3
6/26/06 7:15 AM	0.32	0.00	1.2	1114.1
6/26/06 7:30 AM	0.31	0.00	1.2	1098.6
6/26/06 7:45 AM	0.30	0.00	1.2	1080.7
6/26/06 8:00 AM	0.30	0.00	1.2	1064.8
6/26/06 8:15 AM	0.29	0.00	1.2	1049.8
6/26/06 8:30 AM	0.29	0.00	1.2	1033.5
6/26/06 8:45 AM	0.28	0.00	1.1	1018.0
6/26/06 9:00 AM	0.27	0.00	1.1	1002.3
6/26/06 9:15 AM	0.27	0.00	1.1	986.4
6/26/06 9:30 AM	0.26	0.00	1.1	970.2
6/26/06 9:45 AM	0.26	0.00	1.1	955.0
6/26/06 10:00 AM	0.25	0.00	1.1	939.5
6/26/06 10:15 AM	0.25	0.00	1.0	923.8
6/26/06 10:30 AM	0.24	0.00	1.0	910.5
6/26/06 10:45 AM	0.24	0.00	1.0	891.5
6/26/06 11:00 AM	0.23	0.00	1.0	877.8
6/26/06 11:15 AM	0.23	0.00	1.0	869.4
6/26/06 11:30 AM	0.23	0.00	1.0	853.9
6/26/06 11:45 AM	0.22	0.00	0.9	840.9
6/26/06 12:00 PM	0.22	0.00	0.9	827.8
6/26/06 12:15 PM	0.22	0.00	0.9	814.4
6/26/06 12:30 PM	0.21	0.00	0.9	799.3
6/26/06 12:45 PM	0.21	0.00	0.9	779.2
6/26/06 1:00 PM	0.20	0.00	0.9	768.2
6/26/06 1:15 PM	0.20	0.00	0.9	729.1
6/26/06 1:30 PM	0.20	0.00	0.8	677.0
6/26/06 1:45 PM	0.19	0.00	0.7	653.4
6/26/06 2:00 PM	0.19	0.00	0.7	638.5
6/26/06 2:15 PM	0.19	0.00	0.7	623.7
6/26/06 2:30 PM	0.18	0.00	0.7	607.0
6/26/06 2:45 PM	0.18	0.00	0.7	1796.0
6/26/06 3:00 PM	0.18	0.00	0.7	3056.6
6/26/06 4:00 PM	0.25	0.00	1.0	12939.2
6/26/06 8:00 PM	0.20	0.00	0.8	9176.7
6/27/06 12:00 AM	0.15	0.00	0.5	6289.3
6/27/06 4:00 AM	0.12	0.00	0.4	4476.2
6/27/06 8:00 AM	0.10	0.00	0.3	3248.5
6/27/06 12:00 PM	0.08	0.00	0.2	2445.9
6/27/06 4:00 PM	0.07	0.00	0.1	1689.0
6/27/06 8:00 PM	0.05	0.00	0.1	1037.2
6/28/06 12:00 AM	0.04	0.00	0.1	776.1
6/28/06 4:00 AM	0.03	0.00	0.0	624.3
6/28/06 8:00 AM	0.03	0.00	0.0	471.5
6/28/06 12:00 PM	0.02	0.00	0.0	333.8
6/28/06 4:00 PM	0.02	0.00	0.0	142.3
6/28/06 8:00 PM	0.00	0.00	0.0	7.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/29/06 12:00 AM	-0.01	0.00	0.0	0.0
6/29/06 4:00 AM	-0.01	0.00	0.0	0.0
6/29/06 8:00 AM	-0.02	0.00	0.0	0.0
6/29/06 12:00 PM	-0.02	0.00	0.0	0.0
6/29/06 4:00 PM	-0.03	0.00	0.0	0.0
6/29/06 8:00 PM	-0.05	0.00	0.0	0.0
6/30/06 12:00 AM	-0.06	0.00	0.0	0.0
6/30/06 4:00 AM	-0.06	0.00	0.0	0.0
6/30/06 8:00 AM	-0.06	0.00	0.0	0.0
6/30/06 12:00 PM	-0.07	0.00	0.0	0.0
6/30/06 4:00 PM	-0.08	0.00	0.0	0.0
6/30/06 8:00 PM	-0.09	0.00	0.0	0.0
7/1/06 12:00 AM	-0.10	0.00	0.0	0.0
7/1/06 4:00 AM	-0.10	0.00	0.0	0.0
7/1/06 8:00 AM	-0.11	0.00	0.0	0.0
7/1/06 12:00 PM	-0.11	0.00	0.0	0.0
7/1/06 4:00 PM	-0.12	0.00	0.0	0.0
7/1/06 8:00 PM	-0.14	0.00	0.0	0.0
7/2/06 12:00 AM	-0.15	0.00	0.0	0.0
7/2/06 4:00 AM	-0.15	0.00	0.0	0.0
7/2/06 8:00 AM	-0.17	0.00	0.0	0.0
7/2/06 12:00 PM	-0.17	0.00	0.0	0.0
7/2/06 4:00 PM	-0.18	0.00	0.0	20603.5
7/2/06 8:00 PM	1.23	0.00	2.9	39074.1
7/3/06 12:00 AM	1.01	0.00	2.6	34835.6
7/3/06 4:00 AM	0.82	0.00	2.3	30531.9
7/3/06 8:00 AM	0.64	0.00	2.0	26394.5
7/3/06 12:00 PM	0.50	0.00	1.7	22514.1
7/3/06 4:00 PM	0.38	0.00	1.4	18666.9
7/3/06 8:00 PM	0.29	0.00	1.2	14967.2
7/4/06 12:00 AM	0.22	0.00	0.9	10967.4
7/4/06 4:00 AM	0.17	0.00	0.6	7451.8
7/4/06 8:00 AM	0.13	0.00	0.4	5377.3
7/4/06 12:00 PM	0.11	0.00	0.3	4040.5
7/4/06 4:00 PM	0.09	0.00	0.2	2912.7
7/4/06 8:00 PM	0.07	0.00	0.2	2021.2
7/5/06 12:00 AM	0.06	0.00	0.1	1612.8
7/5/06 4:00 AM	0.05	0.00	0.1	1416.7
7/5/06 8:00 AM	0.05	0.00	0.1	1162.7
7/5/06 12:00 PM	0.04	0.00	0.1	939.6
7/5/06 4:00 PM	0.04	0.00	0.1	634.8
7/5/06 8:00 PM	0.02	0.00	0.0	316.3
7/6/06 12:00 AM	0.01	0.00	0.0	192.7
7/6/06 4:00 AM	0.01	0.00	0.0	264.1
7/6/06 8:00 AM	0.02	0.00	0.0	247.2
7/6/06 12:00 PM	0.01	0.00	0.0	92.6
7/6/06 4:00 PM	0.01	0.00	0.0	22.1
7/6/06 8:00 PM	-0.01	0.00	0.0	9725.1
7/7/06 12:00 AM	0.35	0.00	1.4	17262.2
7/7/06 4:00 AM	0.25	0.00	1.0	12145.1

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/7/06 8:00 AM	0.18	0.00	0.6	13006.9
7/7/06 12:00 PM	0.29	0.00	1.2	17764.3
7/7/06 4:00 PM	0.33	0.00	1.3	25509.5
7/7/06 8:00 PM	0.80	0.00	2.2	30777.1
7/8/06 12:00 AM	0.67	0.00	2.0	27373.1
7/8/06 4:00 AM	0.53	0.00	1.8	23673.9
7/8/06 8:00 AM	0.42	0.00	1.5	19890.3
7/8/06 12:00 PM	0.31	0.00	1.2	16133.0
7/8/06 4:00 PM	0.24	0.00	1.0	11883.0
7/8/06 8:00 PM	0.18	0.00	0.7	7951.1
7/9/06 12:00 AM	0.14	0.00	0.5	5576.6
7/9/06 4:00 AM	0.11	0.00	0.3	3996.1
7/9/06 8:00 AM	0.09	0.00	0.2	2947.7
7/9/06 12:00 PM	0.08	0.00	0.2	2299.5
7/9/06 4:00 PM	0.06	0.00	0.1	1767.6
7/9/06 8:00 PM	0.05	0.00	0.1	1868.1
7/10/06 12:00 AM	0.07	0.00	0.2	2073.4
7/10/06 4:00 AM	0.06	0.00	0.1	1781.5
7/10/06 8:00 AM	0.06	0.00	0.1	1488.6
7/10/06 12:00 PM	0.05	0.00	0.1	1227.8
7/10/06 4:00 PM	0.04	0.00	0.1	2181.3
7/10/06 8:00 PM	0.09	0.00	0.2	2858.7
7/11/06 12:00 AM	0.07	0.00	0.2	2159.6
7/11/06 4:00 AM	0.06	0.00	0.1	1599.8
7/11/06 8:00 AM	0.05	0.00	0.1	1245.1
7/11/06 12:00 PM	0.04	0.00	0.1	14497.4
7/11/06 4:00 PM	0.62	0.00	1.9	25397.1
7/11/06 8:00 PM	0.45	0.00	1.6	20626.6
7/12/06 12:00 AM	0.32	0.00	1.3	15913.9
7/12/06 4:00 AM	0.22	0.00	0.9	10781.7
7/12/06 8:00 AM	0.16	0.00	0.6	6628.9
7/12/06 12:00 PM	0.12	0.00	0.4	4379.9
7/12/06 4:00 PM	0.09	0.00	0.2	3044.3
7/12/06 8:00 PM	0.07	0.00	0.2	2180.8
7/13/06 12:00 AM	0.06	0.00	0.1	1724.6
7/13/06 4:00 AM	0.06	0.00	0.1	1470.2
7/13/06 8:00 AM	0.05	0.00	0.1	1148.5
7/13/06 12:00 PM	0.04	0.00	0.1	1081.0
7/13/06 4:00 PM	0.05	0.00	0.1	7159.7
7/13/06 8:00 PM	0.22	0.00	0.9	10315.5
7/14/06 12:00 AM	0.15	0.00	0.5	6269.5
7/14/06 4:00 AM	0.12	0.00	0.3	4275.3
7/14/06 8:00 AM	0.09	0.00	0.2	3041.8
7/14/06 12:00 PM	0.08	0.00	0.2	2221.3
7/14/06 4:00 PM	0.06	0.00	0.1	1584.7
7/14/06 8:00 PM	0.05	0.00	0.1	1178.5
7/15/06 12:00 AM	0.04	0.00	0.1	985.4
7/15/06 4:00 AM	0.04	0.00	0.1	778.6
7/15/06 8:00 AM	0.03	0.00	0.0	571.8
7/15/06 12:00 PM	0.03	0.00	0.0	506.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/15/06 4:00 PM	0.03	0.00	0.0	314.3
7/15/06 8:00 PM	0.01	0.00	0.0	62.7
7/16/06 12:00 AM	0.00	0.00	0.0	15.6
7/16/06 4:00 AM	0.00	0.00	0.0	7.8
7/16/06 8:00 AM	0.00	0.00	0.0	0.0
7/16/06 12:00 PM	-0.01	0.00	0.0	0.0
7/16/06 4:00 PM	-0.01	0.00	0.0	0.0
7/16/06 8:00 PM	-0.02	0.00	0.0	0.0
7/17/06 12:00 AM	-0.03	0.00	0.0	0.0
7/17/06 4:00 AM	-0.03	0.00	0.0	0.0
7/17/06 8:00 AM	-0.03	0.00	0.0	0.0
7/17/06 12:00 PM	-0.04	0.00	0.0	0.0
7/17/06 4:00 PM	-0.04	0.00	0.0	0.0
7/17/06 8:00 PM	-0.05	0.00	0.0	0.0
7/18/06 12:00 AM	-0.06	0.00	0.0	0.0
7/18/06 4:00 AM	-0.06	0.00	0.0	0.0
7/18/06 8:00 AM	-0.07	0.00	0.0	0.0
7/18/06 12:00 PM	-0.07	0.00	0.0	0.0
7/18/06 4:00 PM	-0.05	0.00	0.0	0.0
7/18/06 8:00 PM	-0.05	0.00	0.0	0.0
7/19/06 12:00 AM	-0.06	0.00	0.0	0.0
7/19/06 4:00 AM	-0.06	0.00	0.0	0.0
7/19/06 8:00 AM	-0.06	0.00	0.0	0.0
7/19/06 12:00 PM	-0.06	0.00	0.0	8564.6
7/19/06 4:00 PM	0.30	0.00	1.2	15429.9
7/19/06 8:00 PM	0.23	0.00	1.0	10959.2
7/20/06 12:00 AM	0.16	0.00	0.6	6584.3
7/20/06 4:00 AM	0.12	0.00	0.3	4084.9
7/20/06 8:00 AM	0.09	0.00	0.2	2690.5
7/20/06 12:00 PM	0.07	0.00	0.2	22661.7
7/20/06 4:00 PM	1.34	0.00	3.0	40822.3
7/20/06 8:00 PM	1.09	0.00	2.7	36422.1
7/21/06 12:00 AM	0.89	0.00	2.4	32229.5
7/21/06 4:00 AM	0.71	0.00	2.1	27974.4
7/21/06 8:00 AM	0.55	0.00	1.8	23657.1
7/21/06 12:00 PM	0.41	0.00	1.5	20260.8
7/21/06 4:00 PM	0.34	0.00	1.3	18151.3
7/21/06 8:00 PM	0.30	0.00	1.2	15943.0
7/22/06 12:00 AM	0.24	0.00	1.0	16331.7
7/22/06 4:00 AM	0.32	0.00	1.3	18589.2
7/22/06 8:00 AM	0.34	0.00	1.3	18878.5
7/22/06 12:00 PM	0.33	0.00	1.3	17639.5
7/22/06 4:00 PM	0.29	0.00	1.2	16065.7
7/22/06 8:00 PM	0.26	0.00	1.1	14445.7
7/23/06 12:00 AM	0.22	0.00	0.9	20297.8
7/23/06 4:00 AM	0.59	0.00	1.9	27002.1
7/23/06 8:00 AM	0.58	0.00	1.9	25623.3
7/23/06 12:00 PM	0.50	0.00	1.7	23019.3
7/23/06 4:00 PM	0.41	0.00	1.5	21492.9
7/23/06 8:00 PM	0.41	0.00	1.5	19834.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/24/06 12:00 AM	0.32	0.00	1.3	16745.2
7/24/06 4:00 AM	0.25	0.00	1.1	13769.9
7/24/06 8:00 AM	0.20	0.00	0.9	10327.9
7/24/06 12:00 PM	0.16	0.00	0.6	7314.5
7/24/06 4:00 PM	0.14	0.00	0.4	5515.7
7/24/06 8:00 PM	0.11	0.00	0.3	4212.3
7/25/06 12:00 AM	0.10	0.00	0.3	3357.5
7/25/06 4:00 AM	0.08	0.00	0.2	2723.4
7/25/06 8:00 AM	0.07	0.00	0.2	2216.1
7/25/06 12:00 PM	0.06	0.00	0.1	1933.8
7/25/06 4:00 PM	0.06	0.00	0.1	2200.0
7/25/06 8:00 PM	0.07	0.00	0.2	2298.0
7/26/06 12:00 AM	0.07	0.00	0.1	1973.4
7/26/06 4:00 AM	0.06	0.00	0.1	1780.7
7/26/06 8:00 AM	0.06	0.00	0.1	1612.8
7/26/06 12:00 PM	0.05	0.00	0.1	1451.1
7/26/06 4:00 PM	0.05	0.00	0.1	1181.3
7/26/06 8:00 PM	0.04	0.00	0.1	938.8
7/27/06 12:00 AM	0.04	0.00	0.1	877.6
7/27/06 4:00 AM	0.04	0.00	0.1	819.1
7/27/06 8:00 AM	0.03	0.00	0.1	678.4
7/27/06 12:00 PM	0.03	0.00	0.0	557.5
7/27/06 4:00 PM	0.03	0.00	0.0	374.3
7/27/06 8:00 PM	0.02	0.00	0.0	155.4
7/28/06 12:00 AM	0.01	0.00	0.0	68.4
7/28/06 4:00 AM	0.01	0.00	0.0	49.9
7/28/06 8:00 AM	0.01	0.00	0.0	22.1
7/28/06 12:00 PM	0.00	0.00	0.0	1157.4
7/28/06 4:00 PM	0.07	0.00	0.2	15466.9
7/28/06 8:00 PM	0.65	0.00	2.0	26473.0
7/29/06 12:00 AM	0.50	0.00	1.7	22389.3
7/29/06 4:00 AM	0.38	0.00	1.4	18550.0
7/29/06 8:00 AM	0.29	0.00	1.2	14887.4
7/29/06 12:00 PM	0.22	0.00	0.9	10847.4
7/29/06 4:00 PM	0.17	0.00	0.6	7327.0
7/29/06 8:00 PM	0.13	0.00	0.4	5322.7
7/30/06 12:00 AM	0.11	0.00	0.3	4062.0
7/30/06 4:00 AM	0.09	0.00	0.2	3174.1
7/30/06 8:00 AM	0.08	0.00	0.2	2549.5
7/30/06 12:00 PM	0.07	0.00	0.2	2075.9
7/30/06 4:00 PM	0.06	0.00	0.1	1599.8
7/30/06 8:00 PM	0.05	0.00	0.1	1245.1
7/31/06 12:00 AM	0.04	0.00	0.1	1210.7
7/31/06 4:00 AM	0.05	0.00	0.1	1243.6
7/31/06 8:00 AM	0.05	0.00	0.1	1096.6
7/31/06 12:00 PM	0.04	0.00	0.1	938.8
7/31/06 4:00 PM	0.04	0.00	0.1	698.3
7/31/06 8:00 PM	0.03	0.00	0.0	823.2
8/1/06 12:00 AM	0.04	0.00	0.1	1079.4
8/1/06 4:00 AM	0.04	0.00	0.1	881.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/1/06 8:00 AM	0.03	0.00	0.1	664.2
8/1/06 12:00 PM	0.03	0.00	0.0	509.0
8/1/06 4:00 PM	0.02	0.00	0.0	281.4
8/1/06 8:00 PM	0.01	0.00	0.0	87.3
8/2/06 12:00 AM	0.00	0.00	0.0	38.9
8/2/06 4:00 AM	0.01	0.00	0.0	69.6
8/2/06 8:00 AM	0.01	0.00	0.0	69.6
8/2/06 12:00 PM	0.01	0.00	0.0	22.1
8/2/06 4:00 PM	0.00	0.00	0.0	0.0
8/2/06 8:00 PM	-0.01	0.00	0.0	0.0
8/3/06 12:00 AM	-0.02	0.00	0.0	0.0
8/3/06 4:00 AM	-0.02	0.00	0.0	0.0
8/3/06 8:00 AM	-0.03	0.00	0.0	0.0
8/3/06 12:00 PM	-0.03	0.00	0.0	0.0
8/3/06 4:00 PM	-0.04	0.00	0.0	0.0
8/3/06 8:00 PM	-0.05	0.00	0.0	0.0
8/4/06 12:00 AM	-0.05	0.00	0.0	0.0
8/4/06 4:00 AM	-0.06	0.00	0.0	0.0
8/4/06 8:00 AM	-0.06	0.00	0.0	0.0
8/4/06 12:00 PM	-0.07	0.00	0.0	0.0
8/4/06 4:00 PM	-0.07	0.00	0.0	0.0
8/4/06 8:00 PM	-0.08	0.00	0.0	0.0
8/5/06 12:00 AM	-0.09	0.00	0.0	0.0
8/5/06 4:00 AM	-0.10	0.00	0.0	0.0
8/5/06 8:00 AM	-0.11	0.00	0.0	0.0
8/5/06 12:00 PM	-0.11	0.00	0.0	0.0
8/5/06 4:00 PM	-0.11	0.00	0.0	0.0
8/5/06 8:00 PM	-0.13	0.00	0.0	0.0
8/6/06 12:00 AM	-0.13	0.00	0.0	0.0
8/6/06 4:00 AM	-0.13	0.00	0.0	0.0
8/6/06 8:00 AM	-0.14	0.00	0.0	0.0
8/6/06 12:00 PM	-0.15	0.00	0.0	0.0
8/6/06 4:00 PM	-0.16	0.00	0.0	0.0
8/6/06 8:00 PM	-0.17	0.00	0.0	0.0
8/7/06 12:00 AM	-0.18	0.00	0.0	0.0
8/7/06 4:00 AM	-0.19	0.00	0.0	0.0
8/7/06 8:00 AM	-0.19	0.00	0.0	0.0
8/7/06 12:00 PM	-0.20	0.00	0.0	0.0
8/7/06 4:00 PM	-0.21	0.00	0.0	0.0
8/7/06 8:00 PM	-0.21	0.00	0.0	0.0
8/8/06 12:00 AM	-0.22	0.00	0.0	0.0
8/8/06 4:00 AM	-0.22	0.00	0.0	0.0
8/8/06 8:00 AM	-0.22	0.00	0.0	0.0
8/8/06 12:00 PM	-0.22	0.00	0.0	0.0
8/8/06 4:00 PM	-0.23	0.00	0.0	0.0
8/8/06 8:00 PM	-0.25	0.00	0.0	0.0
8/9/06 12:00 AM	-0.26	0.00	0.0	0.0
8/9/06 4:00 AM	-0.26	0.00	0.0	0.0
8/9/06 8:00 AM	-0.26	0.00	0.0	0.0
8/9/06 12:00 PM	-0.27	0.00	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/9/06 4:00 PM	-0.27	0.00	0.0	0.0
8/9/06 8:00 PM	-0.29	0.00	0.0	0.0
8/10/06 12:00 AM	-0.29	0.00	0.0	0.0
8/10/06 4:00 AM	-0.30	0.00	0.0	0.0
8/10/06 8:00 AM	-0.31	0.00	0.0	0.0
8/10/06 12:00 PM	-0.31	0.00	0.0	0.0
8/10/06 4:00 PM	-0.32	0.00	0.0	0.0
8/10/06 8:00 PM	-0.33	0.00	0.0	0.0
8/11/06 12:00 AM	-0.34	0.00	0.0	0.0
8/11/06 4:00 AM	-0.34	0.00	0.0	0.0
8/11/06 8:00 AM	-0.35	0.00	0.0	0.0
8/11/06 12:00 PM	-0.35	0.00	0.0	0.0
8/11/06 4:00 PM	-0.36	0.00	0.0	0.0
8/11/06 8:00 PM	-0.37	0.00	0.0	0.0
8/12/06 12:00 AM	-0.38	0.00	0.0	0.0
8/12/06 4:00 AM	-0.39	0.00	0.0	0.0
8/12/06 8:00 AM	-0.39	0.00	0.0	0.0
8/12/06 12:00 PM	-0.40	0.00	0.0	0.0
8/12/06 4:00 PM	-0.40	0.00	0.0	0.0
8/12/06 8:00 PM	-0.42	0.00	0.0	0.0
8/13/06 12:00 AM	-0.43	0.00	0.0	0.0
8/13/06 4:00 AM	-0.44	0.00	0.0	0.0
8/13/06 8:00 AM	-0.44	0.00	0.0	0.0
8/13/06 12:00 PM	-0.45	0.00	0.0	0.0
8/13/06 4:00 PM	-0.45	0.00	0.0	0.0
8/13/06 8:00 PM	-0.47	0.00	0.0	0.0
8/14/06 12:00 AM	-0.48	0.00	0.0	0.0
8/14/06 4:00 AM	-0.48	0.00	0.0	0.0
8/14/06 8:00 AM	-0.49	0.00	0.0	0.0
8/14/06 12:00 PM	-0.49	0.00	0.0	0.0
8/14/06 4:00 PM	-0.49	0.00	0.0	6586.9
8/14/06 8:00 PM	0.22	0.00	0.9	10431.4
8/15/06 12:00 AM	0.16	0.00	0.5	6469.5
8/15/06 4:00 AM	0.12	0.00	0.4	4407.0
8/15/06 8:00 AM	0.09	0.00	0.2	2939.4
8/15/06 12:00 PM	0.07	0.00	0.2	12661.6
8/15/06 4:00 PM	0.45	0.00	1.6	20032.2
8/15/06 8:00 PM	0.29	0.00	1.2	21045.7
8/16/06 12:00 AM	0.52	0.00	1.7	22496.2
8/16/06 4:00 AM	0.37	0.00	1.4	17411.4
8/16/06 8:00 AM	0.25	0.00	1.0	11942.9
8/16/06 12:00 PM	0.17	0.00	0.6	26061.2
8/16/06 4:00 PM	1.34	0.00	3.0	40685.9
8/16/06 8:00 PM	1.08	0.00	2.7	36190.7
8/17/06 12:00 AM	0.88	0.00	2.4	32088.9
8/17/06 4:00 AM	0.70	0.00	2.1	27991.5
8/17/06 8:00 AM	0.55	0.00	1.8	23820.9
8/17/06 12:00 PM	0.42	0.00	1.5	19713.5
8/17/06 4:00 PM	0.31	0.00	1.2	15761.9
8/17/06 8:00 PM	0.23	0.00	1.0	11518.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/18/06 12:00 AM	0.18	0.00	0.6	8058.6
8/18/06 4:00 AM	0.15	0.00	0.5	5967.8
8/18/06 8:00 AM	0.12	0.00	0.3	4444.2
8/18/06 12:00 PM	0.10	0.00	0.3	3475.8
8/18/06 4:00 PM	0.09	0.00	0.2	2811.1
8/18/06 8:00 PM	0.07	0.00	0.2	2278.1
8/19/06 12:00 AM	0.06	0.00	0.1	1803.7
8/19/06 4:00 AM	0.05	0.00	0.1	1384.4
8/19/06 8:00 AM	0.05	0.00	0.1	1065.6
8/19/06 12:00 PM	0.04	0.00	0.1	821.2
8/19/06 4:00 PM	0.03	0.00	0.0	18386.7
8/19/06 8:00 PM	0.97	0.00	2.5	33807.0
8/20/06 12:00 AM	0.76	0.00	2.2	29262.3
8/20/06 4:00 AM	0.59	0.00	1.9	24621.6
8/20/06 8:00 AM	0.43	0.00	1.5	19876.7
8/20/06 12:00 PM	0.30	0.00	1.2	15308.0
8/20/06 4:00 PM	0.22	0.00	0.9	10625.5
8/20/06 8:00 PM	0.16	0.00	0.6	6907.6
8/21/06 12:00 AM	0.13	0.00	0.4	5022.4
8/21/06 4:00 AM	0.11	0.00	0.3	3748.8
8/21/06 8:00 AM	0.09	0.00	0.2	2791.6
8/21/06 12:00 PM	0.07	0.00	0.2	2119.4
8/21/06 4:00 PM	0.06	0.00	0.1	8661.0
8/21/06 8:00 PM	0.26	0.00	1.1	12971.5
8/22/06 12:00 AM	0.19	0.00	0.7	8571.8
8/22/06 4:00 AM	0.14	0.00	0.5	5693.9
8/22/06 8:00 AM	0.11	0.00	0.3	4042.9
8/22/06 12:00 PM	0.09	0.00	0.2	3059.2
8/22/06 4:00 PM	0.08	0.00	0.2	2344.5
8/22/06 8:00 PM	0.06	0.00	0.1	1765.8
8/23/06 12:00 AM	0.05	0.00	0.1	1521.5
8/23/06 4:00 AM	0.05	0.00	0.1	1433.1
8/23/06 8:00 AM	0.05	0.00	0.1	1228.9
8/23/06 12:00 PM	0.04	0.00	0.1	1001.4
8/23/06 4:00 PM	0.04	0.00	0.1	765.1
8/23/06 8:00 PM	0.03	0.00	0.0	546.1
8/24/06 12:00 AM	0.02	0.00	0.0	457.5
8/24/06 4:00 AM	0.02	0.00	0.0	399.5
8/24/06 8:00 AM	0.02	0.00	0.0	321.4
8/24/06 12:00 PM	0.02	0.00	0.0	250.1
8/24/06 4:00 PM	0.01	0.00	0.0	133.2
8/24/06 8:00 PM	0.01	0.00	0.0	29.3
8/25/06 12:00 AM	0.00	0.00	0.0	3.0
8/25/06 4:00 AM	0.00	0.00	0.0	1.5
8/25/06 8:00 AM	0.00	0.00	0.0	0.0
8/25/06 12:00 PM	-0.01	0.00	0.0	0.0
8/25/06 4:00 PM	-0.01	0.00	0.0	3071.3
8/25/06 8:00 PM	0.13	0.00	0.4	5778.2
8/26/06 12:00 AM	0.12	0.00	0.4	4609.6
8/26/06 4:00 AM	0.10	0.00	0.3	3186.3

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/26/06 8:00 AM	0.08	0.00	0.2	2183.1
8/26/06 12:00 PM	0.06	0.00	0.1	7742.0
8/26/06 4:00 PM	0.23	0.00	1.0	11882.8
8/26/06 8:00 PM	0.19	0.00	0.7	8343.3
8/27/06 12:00 AM	0.14	0.00	0.5	5635.1
8/27/06 4:00 AM	0.11	0.00	0.3	4019.4
8/27/06 8:00 AM	0.09	0.00	0.2	2949.7
8/27/06 12:00 PM	0.07	0.00	0.2	2238.8
8/27/06 4:00 PM	0.06	0.00	0.1	1623.5
8/27/06 8:00 PM	0.05	0.00	0.1	1116.0
8/28/06 12:00 AM	0.04	0.00	0.1	821.2
8/28/06 4:00 AM	0.03	0.00	0.0	599.2
8/28/06 8:00 AM	0.03	0.00	0.0	412.9
8/28/06 12:00 PM	0.02	0.00	0.0	271.2
8/28/06 4:00 PM	0.01	0.00	0.0	139.4
8/28/06 8:00 PM	0.01	0.00	0.0	2059.9
8/29/06 12:00 AM	0.10	0.00	0.3	3440.0
8/29/06 4:00 AM	0.08	0.00	0.2	2449.8
8/29/06 8:00 AM	0.07	0.00	0.1	1805.4
8/29/06 12:00 PM	0.05	0.00	0.1	1451.1
8/29/06 4:00 PM	0.05	0.00	0.1	2139.9
8/29/06 8:00 PM	0.08	0.00	0.2	3099.3
8/30/06 12:00 AM	0.09	0.00	0.2	3422.7
8/30/06 4:00 AM	0.09	0.00	0.2	3087.1
8/30/06 8:00 AM	0.08	0.00	0.2	9086.8
8/30/06 12:00 PM	0.26	0.00	1.1	13952.6
8/30/06 4:00 PM	0.20	0.00	0.9	14267.1
8/30/06 8:00 PM	0.28	0.00	1.1	15006.8
8/31/06 12:00 AM	0.23	0.00	1.0	11388.1
8/31/06 4:00 AM	0.17	0.00	0.6	10944.8
8/31/06 8:00 AM	0.21	0.00	0.9	10624.3
8/31/06 12:00 PM	0.16	0.00	0.6	6946.6
8/31/06 4:00 PM	0.13	0.00	0.4	4815.5
8/31/06 8:00 PM	0.10	0.00	0.3	3529.3
9/1/06 12:00 AM	0.08	0.00	0.2	2660.9
9/1/06 4:00 AM	0.07	0.00	0.2	2056.9
9/1/06 8:00 AM	0.06	0.00	0.1	1633.4
9/1/06 12:00 PM	0.05	0.00	0.1	1710.5
9/1/06 4:00 PM	0.06	0.00	0.1	1764.4
9/1/06 8:00 PM	0.05	0.00	0.1	1417.9
9/2/06 12:00 AM	0.05	0.00	0.1	1177.6
9/2/06 4:00 AM	0.04	0.00	0.1	971.5
9/2/06 8:00 AM	0.04	0.00	0.1	696.1
9/2/06 12:00 PM	0.03	0.00	0.0	7470.4
9/2/06 4:00 PM	0.24	0.00	1.0	11708.2
9/2/06 8:00 PM	0.17	0.00	0.6	7581.3
9/3/06 12:00 AM	0.13	0.00	0.4	5429.5
9/3/06 4:00 AM	0.11	0.00	0.3	4045.6
9/3/06 8:00 AM	0.09	0.00	0.2	3839.1
9/3/06 12:00 PM	0.11	0.00	0.3	4202.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/3/06 4:00 PM	0.10	0.00	0.3	6658.8
9/3/06 8:00 PM	0.18	0.00	0.6	7736.6
9/4/06 12:00 AM	0.14	0.00	0.4	5382.9
9/4/06 4:00 AM	0.11	0.00	0.3	3894.9
9/4/06 8:00 AM	0.09	0.00	0.2	2903.0
9/4/06 12:00 PM	0.07	0.00	0.2	2219.3
9/4/06 4:00 PM	0.06	0.00	0.1	1638.4
9/4/06 8:00 PM	0.05	0.00	0.1	1165.8
9/5/06 12:00 AM	0.04	0.00	0.1	864.8
9/5/06 4:00 AM	0.03	0.00	0.1	665.3
9/5/06 8:00 AM	0.03	0.00	0.0	495.9
9/5/06 12:00 PM	0.02	0.00	0.0	335.4
9/5/06 4:00 PM	0.02	0.00	0.0	172.1
9/5/06 8:00 PM	0.01	0.00	0.0	88.1
9/6/06 12:00 AM	0.01	0.00	0.0	44.8
9/6/06 4:00 AM	0.00	0.00	0.0	5112.2
9/6/06 8:00 AM	0.19	0.00	0.7	9328.4
9/6/06 12:00 PM	0.17	0.00	0.6	6954.8
9/6/06 4:00 PM	0.12	0.00	0.4	18377.7
9/6/06 8:00 PM	0.75	0.00	2.2	28662.1
9/7/06 12:00 AM	0.55	0.00	1.8	23707.2
9/7/06 4:00 AM	0.41	0.00	1.5	19271.1
9/7/06 8:00 AM	0.30	0.00	1.2	15240.3
9/7/06 12:00 PM	0.22	0.00	0.9	10973.8
9/7/06 4:00 PM	0.17	0.00	0.6	7473.8
9/7/06 8:00 PM	0.14	0.00	0.4	5594.8
9/8/06 12:00 AM	0.12	0.00	0.3	4364.3
9/8/06 4:00 AM	0.10	0.00	0.3	3453.1
9/8/06 8:00 AM	0.08	0.00	0.2	2767.1
9/8/06 12:00 PM	0.07	0.00	0.2	2237.2
9/8/06 4:00 PM	0.06	0.00	0.1	2802.0
9/8/06 8:00 PM	0.09	0.00	0.3	3423.5
9/9/06 12:00 AM	0.09	0.00	0.2	2901.2
9/9/06 4:00 AM	0.08	0.00	0.2	2299.5
9/9/06 8:00 AM	0.06	0.00	0.1	1840.3
9/9/06 12:00 PM	0.06	0.00	0.1	1558.5
9/9/06 4:00 PM	0.05	0.00	0.1	1233.9
9/9/06 8:00 PM	0.04	0.00	0.1	923.9
9/10/06 12:00 AM	0.04	0.00	0.1	847.8
9/10/06 4:00 AM	0.04	0.00	0.1	847.8
9/10/06 8:00 AM	0.04	0.00	0.1	735.2
9/10/06 12:00 PM	0.03	0.00	0.0	636.0
9/10/06 4:00 PM	0.03	0.00	0.0	690.9
9/10/06 8:00 PM	0.03	0.00	0.1	2750.6
9/11/06 12:00 AM	0.11	0.00	0.3	4214.4
9/11/06 4:00 AM	0.10	0.00	0.3	3244.1
9/11/06 8:00 AM	0.08	0.00	0.2	2510.1
9/11/06 12:00 PM	0.07	0.00	0.2	1976.5
9/11/06 4:00 PM	0.06	0.00	0.1	11466.2
9/11/06 8:00 PM	0.40	0.00	1.5	23153.1

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/12/06 12:00 AM	0.52	0.00	1.7	23558.2
9/12/06 4:00 AM	0.42	0.00	1.5	20439.0
9/12/06 8:00 AM	0.34	0.00	1.3	17369.1
9/12/06 12:00 PM	0.27	0.00	1.1	14554.9
9/12/06 4:00 PM	0.22	0.00	0.9	11406.7
9/12/06 8:00 PM	0.18	0.00	0.7	8555.7
9/13/06 12:00 AM	0.15	0.00	0.5	6854.3
9/13/06 4:00 AM	0.13	0.00	0.4	5696.3
9/13/06 8:00 AM	0.12	0.00	0.4	4776.7
9/13/06 12:00 PM	0.11	0.00	0.3	4005.8
9/13/06 4:00 PM	0.10	0.00	0.3	6560.6
9/13/06 8:00 PM	0.18	0.00	0.7	18994.2
9/14/06 12:00 AM	0.65	0.00	2.0	26591.5
9/14/06 4:00 AM	0.50	0.00	1.7	22514.3
9/14/06 8:00 AM	0.38	0.00	1.4	19592.4
9/14/06 12:00 PM	0.34	0.00	1.3	19313.5
9/14/06 4:00 PM	0.36	0.00	1.4	17364.4
9/14/06 8:00 PM	0.25	0.00	1.0	12272.0
9/15/06 12:00 AM	0.18	0.00	0.7	8200.9
9/15/06 4:00 AM	0.14	0.00	0.5	5799.1
9/15/06 8:00 AM	0.12	0.00	0.3	4243.2
9/15/06 12:00 PM	0.09	0.00	0.3	3286.8
9/15/06 4:00 PM	0.08	0.00	0.2	2576.9
9/15/06 8:00 PM	0.07	0.00	0.2	1995.4
9/16/06 12:00 AM	0.06	0.00	0.1	1761.1
9/16/06 4:00 AM	0.06	0.00	0.1	1667.8
9/16/06 8:00 AM	0.06	0.00	0.1	1470.2
9/16/06 12:00 PM	0.05	0.00	0.1	2841.3
9/16/06 4:00 PM	0.11	0.00	0.3	3817.9
9/16/06 8:00 PM	0.09	0.00	0.2	2881.8
9/17/06 12:00 AM	0.07	0.00	0.2	2217.6
9/17/06 4:00 AM	0.06	0.00	0.1	1746.3
9/17/06 8:00 AM	0.05	0.00	0.1	1399.8
9/17/06 12:00 PM	0.05	0.00	0.1	1130.0
9/17/06 4:00 PM	0.04	0.00	0.1	20133.8
9/17/06 8:00 PM	1.13	0.00	2.7	40448.3
9/18/06 12:00 AM	1.26	0.00	2.9	39419.8
9/18/06 4:00 AM	1.02	0.00	2.6	35216.4
9/18/06 8:00 AM	0.84	0.00	2.3	31115.5
9/18/06 12:00 PM	0.66	0.00	2.0	31209.2
9/18/06 4:00 PM	0.85	0.00	2.3	31401.6
9/18/06 8:00 PM	0.68	0.00	2.0	27264.3
9/19/06 12:00 AM	0.52	0.00	1.7	23064.3
9/19/06 4:00 AM	0.39	0.00	1.5	18951.4
9/19/06 8:00 AM	0.29	0.00	1.2	15065.0
9/19/06 12:00 PM	0.22	0.00	0.9	10862.8
9/19/06 4:00 PM	0.17	0.00	0.6	7943.7
9/19/06 8:00 PM	0.15	0.00	0.5	11748.9
9/20/06 12:00 AM	0.27	0.00	1.1	14854.3
9/20/06 4:00 AM	0.22	0.00	0.9	11404.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/20/06 8:00 AM	0.18	0.00	0.6	11051.0
9/20/06 12:00 PM	0.21	0.00	0.9	10791.5
9/20/06 4:00 PM	0.17	0.00	0.6	7534.8
9/20/06 8:00 PM	0.14	0.00	0.4	5703.6
9/21/06 12:00 AM	0.12	0.00	0.3	4593.1
9/21/06 4:00 AM	0.10	0.00	0.3	3763.3
9/21/06 8:00 AM	0.09	0.00	0.2	3079.5
9/21/06 12:00 PM	0.08	0.00	0.2	2697.2
9/21/06 4:00 PM	0.08	0.00	0.2	2380.9
9/21/06 8:00 PM	0.07	0.00	0.1	2013.5
9/22/06 12:00 AM	0.06	0.00	0.1	1894.7
9/22/06 4:00 AM	0.06	0.00	0.1	1818.7
9/22/06 8:00 AM	0.06	0.00	0.1	1613.5
9/22/06 12:00 PM	0.05	0.00	0.1	1450.5
9/22/06 4:00 PM	0.05	0.00	0.1	15773.0
9/22/06 8:00 PM	0.71	0.00	2.1	27814.4
9/23/06 12:00 AM	0.53	0.00	1.8	23057.0
9/23/06 4:00 AM	0.38	0.00	1.4	18237.7
9/23/06 8:00 AM	0.27	0.00	1.1	13302.3
9/23/06 12:00 PM	0.20	0.00	0.7	9072.9
9/23/06 4:00 PM	0.15	0.00	0.5	6370.9
9/23/06 8:00 PM	0.12	0.00	0.4	4755.4
9/24/06 12:00 AM	0.10	0.00	0.3	3739.9
9/24/06 4:00 AM	0.09	0.00	0.2	3012.4
9/24/06 8:00 AM	0.08	0.00	0.2	2485.2
9/24/06 12:00 PM	0.07	0.00	0.2	2055.3
9/24/06 4:00 PM	0.06	0.00	0.1	1652.5
9/24/06 8:00 PM	0.05	0.00	0.1	1364.0
9/25/06 12:00 AM	0.05	0.00	0.1	1277.0
9/25/06 4:00 AM	0.05	0.00	0.1	1194.5
9/25/06 8:00 AM	0.04	0.00	0.1	1047.5
9/25/06 12:00 PM	0.04	0.00	0.1	938.8
9/25/06 4:00 PM	0.04	0.00	0.1	736.8
9/25/06 8:00 PM	0.03	0.00	0.0	545.1
9/26/06 12:00 AM	0.03	0.00	0.0	532.0
9/26/06 4:00 AM	0.03	0.00	0.0	609.7
9/26/06 8:00 AM	0.03	0.00	0.0	596.9
9/26/06 12:00 PM	0.03	0.00	0.0	483.1
9/26/06 4:00 PM	0.02	0.00	0.0	325.7
9/26/06 8:00 PM	0.02	0.00	0.0	211.0
9/27/06 12:00 AM	0.01	0.00	0.0	230.7
9/27/06 4:00 AM	0.02	0.00	0.0	259.0
9/27/06 8:00 AM	0.02	0.00	0.0	229.9
9/27/06 12:00 PM	0.01	0.00	0.0	6499.9
9/27/06 4:00 PM	0.21	0.00	0.9	10239.0
9/27/06 8:00 PM	0.16	0.00	0.5	6578.9
9/28/06 12:00 AM	0.12	0.00	0.4	4760.3
9/28/06 4:00 AM	0.10	0.00	0.3	3529.3
9/28/06 8:00 AM	0.08	0.00	0.2	2619.8
9/28/06 12:00 PM	0.07	0.00	0.2	1978.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/28/06 4:00 PM	0.06	0.00	0.1	1458.3
9/28/06 8:00 PM	0.05	0.00	0.1	1035.4
9/29/06 12:00 AM	0.04	0.00	0.1	763.5
9/29/06 4:00 AM	0.03	0.00	0.0	547.5
9/29/06 8:00 AM	0.02	0.00	0.0	367.4
9/29/06 12:00 PM	0.02	0.00	0.0	199.5
9/29/06 4:00 PM	0.01	0.00	0.0	54.8
9/29/06 8:00 PM	0.00	0.00	0.0	0.0
9/30/06 12:00 AM	0.00	0.00	0.0	0.0
9/30/06 4:00 AM	-0.01	0.00	0.0	0.0
5/5/07 12:00 PM	-0.06	0.00	0.0	0.0
5/5/07 4:00 PM	-0.06	0.00	0.0	0.0
5/5/07 8:00 PM	-0.07	0.00	0.0	61.5
5/6/07 12:00 AM	0.46	0.00	0.1	120.2
5/6/07 4:00 AM	0.43	0.00	0.1	115.0
5/6/07 8:00 AM	0.41	0.00	0.1	110.8
5/6/07 12:00 PM	0.39	0.00	0.1	107.5
5/6/07 4:00 PM	0.38	0.00	0.1	104.3
5/6/07 8:00 PM	0.36	0.00	0.1	100.5
5/7/07 12:00 AM	0.34	0.00	0.1	97.4
5/7/07 4:00 AM	0.33	0.00	0.1	94.6
5/7/07 8:00 AM	0.32	0.00	0.1	91.2
5/7/07 12:00 PM	0.30	0.00	0.1	88.8
5/7/07 4:00 PM	0.30	0.00	0.1	85.6
5/7/07 8:00 PM	0.28	0.00	0.1	81.5
5/8/07 12:00 AM	0.27	0.00	0.1	78.7
5/8/07 4:00 AM	0.26	0.00	0.1	76.5
5/8/07 8:00 AM	0.25	0.00	0.1	74.0
5/8/07 12:00 PM	0.24	0.00	0.1	71.2
5/8/07 4:00 PM	0.23	0.00	0.1	68.4
5/8/07 8:00 PM	0.23	0.00	0.1	65.5
5/9/07 12:00 AM	0.22	0.00	0.1	63.0
5/9/07 4:00 AM	0.21	0.00	0.1	60.9
5/9/07 8:00 AM	0.20	0.00	0.1	58.7
5/9/07 12:00 PM	0.20	0.00	0.1	56.9
5/9/07 4:00 PM	0.20	0.00	0.1	52.7
5/9/07 8:00 PM	0.18	0.00	0.1	47.6
5/10/07 12:00 AM	0.17	0.00	0.1	46.2
5/10/07 4:00 AM	0.17	0.00	0.1	46.0
5/10/07 8:00 AM	0.17	0.00	0.1	44.1
5/10/07 12:00 PM	0.17	0.00	0.0	42.2
5/10/07 4:00 PM	0.16	0.00	0.0	39.1
5/10/07 8:00 PM	0.16	0.00	0.0	34.3
5/11/07 12:00 AM	0.15	0.00	0.0	31.8
5/11/07 4:00 AM	0.15	0.00	0.0	30.9
5/11/07 8:00 AM	0.15	0.00	0.0	27.6
5/11/07 12:00 PM	0.14	0.00	0.0	22.8
5/11/07 4:00 PM	0.13	0.00	0.0	10.1
5/11/07 8:00 PM	0.12	0.00	0.0	0.0
5/12/07 12:00 AM	0.12	0.00	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/12/07 4:00 AM	0.12	0.00	0.0	0.0
5/12/07 8:00 AM	0.12	0.00	0.0	0.0
5/12/07 12:00 PM	0.12	0.00	0.0	0.0
5/12/07 4:00 PM	0.11	0.00	0.0	0.0
5/12/07 8:00 PM	0.10	0.00	0.0	0.0
5/13/07 12:00 AM	0.09	0.00	0.0	0.0
5/13/07 4:00 AM	0.09	0.00	0.0	0.0
5/13/07 8:00 AM	0.08	0.00	0.0	0.0
5/13/07 12:00 PM	0.08	0.00	0.0	0.0
5/13/07 4:00 PM	0.07	0.00	0.0	0.0
5/13/07 8:00 PM	0.06	0.00	0.0	0.0
5/14/07 12:00 AM	0.05	0.00	0.0	0.0
5/14/07 4:00 AM	0.05	0.00	0.0	0.0
5/14/07 8:00 AM	0.04	0.00	0.0	0.0
5/14/07 12:00 PM	0.04	0.00	0.0	0.0
5/14/07 4:00 PM	0.03	0.00	0.0	122.4
5/14/07 8:00 PM	1.46	0.00	0.3	247.3
5/15/07 12:00 AM	1.51	0.00	0.3	248.3
5/15/07 4:00 AM	1.48	0.00	0.3	245.7
5/15/07 8:00 AM	1.46	0.00	0.3	243.4
5/15/07 12:00 PM	1.43	0.00	0.3	245.7
5/15/07 4:00 PM	1.51	0.00	0.3	248.3
5/15/07 8:00 PM	1.49	0.00	0.3	246.8
5/16/07 12:00 AM	1.47	0.00	0.3	245.3
5/16/07 4:00 AM	1.46	0.00	0.3	244.0
5/16/07 8:00 AM	1.44	0.00	0.3	242.7
5/16/07 12:00 PM	1.43	0.00	0.3	243.5
5/16/07 4:00 PM	1.46	0.00	0.3	312.0
5/16/07 8:00 PM	1.65	0.00	0.4	333.5
5/17/07 12:00 AM	1.61	0.00	0.3	271.3
5/17/07 4:00 AM	1.57	0.00	0.3	253.2
5/17/07 8:00 AM	1.54	0.00	0.3	250.4
5/17/07 12:00 PM	1.51	0.00	0.3	247.7
5/17/07 4:00 PM	1.48	0.00	0.3	245.3
5/17/07 8:00 PM	1.45	0.00	0.3	243.5
5/18/07 12:00 AM	1.44	0.00	0.3	242.1
5/18/07 4:00 AM	1.42	0.00	0.3	240.7
5/18/07 8:00 AM	1.41	0.00	0.3	239.2
5/18/07 12:00 PM	1.39	0.00	0.3	237.8
5/18/07 4:00 PM	1.38	0.00	0.3	235.8
5/18/07 8:00 PM	1.35	0.00	0.3	233.1
5/19/07 12:00 AM	1.32	0.00	0.3	230.6
5/19/07 4:00 AM	1.30	0.00	0.3	228.2
5/19/07 8:00 AM	1.27	0.00	0.3	225.5
5/19/07 12:00 PM	1.24	0.00	0.2	222.5
5/19/07 4:00 PM	1.21	0.00	0.2	219.5
5/19/07 8:00 PM	1.18	0.00	0.2	216.2
5/20/07 12:00 AM	1.15	0.00	0.2	213.0
5/20/07 4:00 AM	1.12	0.00	0.2	209.9
5/20/07 8:00 AM	1.09	0.00	0.2	206.9

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/20/07 12:00 PM	1.06	0.00	0.2	204.1
5/20/07 4:00 PM	1.04	0.00	0.2	201.2
5/20/07 8:00 PM	1.01	0.00	0.2	198.2
5/21/07 12:00 AM	0.99	0.00	0.2	195.5
5/21/07 4:00 AM	0.97	0.00	0.2	193.2
5/21/07 8:00 AM	0.95	0.00	0.2	190.8
5/21/07 12:00 PM	0.93	0.00	0.2	188.2
5/21/07 4:00 PM	0.90	0.00	0.2	185.3
5/21/07 8:00 PM	0.88	0.00	0.2	182.2
5/22/07 12:00 AM	0.85	0.00	0.2	179.6
5/22/07 4:00 AM	0.83	0.00	0.2	177.5
5/22/07 8:00 AM	0.82	0.00	0.2	175.2
5/22/07 12:00 PM	0.80	0.00	0.2	172.6
5/22/07 4:00 PM	0.78	0.00	0.2	169.8
5/22/07 8:00 PM	0.76	0.00	0.2	166.6
5/23/07 12:00 AM	0.73	0.00	0.2	163.7
5/23/07 4:00 AM	0.71	0.00	0.2	161.2
5/23/07 8:00 AM	0.69	0.00	0.2	158.4
5/23/07 12:00 PM	0.67	0.00	0.2	155.2
5/23/07 4:00 PM	0.65	0.00	0.2	151.7
5/23/07 8:00 PM	0.62	0.00	0.2	147.9
5/24/07 12:00 AM	0.60	0.00	0.2	144.8
5/24/07 4:00 AM	0.58	0.00	0.2	142.0
5/24/07 8:00 AM	0.57	0.00	0.2	139.3
5/24/07 12:00 PM	0.55	0.00	0.2	136.6
5/24/07 4:00 PM	0.53	0.00	0.2	133.3
5/24/07 8:00 PM	0.51	0.00	0.1	129.9
5/25/07 12:00 AM	0.49	0.00	0.1	127.2
5/25/07 4:00 AM	0.48	0.00	0.1	124.9
5/25/07 8:00 AM	0.47	0.00	0.1	122.4
5/25/07 12:00 PM	0.45	0.00	0.1	120.0
5/25/07 4:00 PM	0.44	0.00	0.1	117.4
5/25/07 8:00 PM	0.42	0.00	0.1	114.5
5/26/07 12:00 AM	0.41	0.00	0.1	112.6
5/26/07 4:00 AM	0.40	0.00	0.1	111.0
5/26/07 8:00 AM	0.40	0.00	0.1	109.1
5/26/07 12:00 PM	0.39	0.00	0.1	107.5
5/26/07 4:00 PM	0.38	0.00	0.1	105.5
5/26/07 8:00 PM	0.37	0.00	0.1	102.8
5/27/07 12:00 AM	0.35	0.00	0.1	100.6
5/27/07 4:00 AM	0.35	0.00	0.1	99.1
5/27/07 8:00 AM	0.34	0.00	0.1	97.8
5/27/07 12:00 PM	0.34	0.00	0.1	96.8
5/27/07 4:00 PM	0.33	0.00	0.1	94.6
5/27/07 8:00 PM	0.32	0.00	0.1	91.4
5/28/07 12:00 AM	0.31	0.00	0.1	89.4
5/28/07 4:00 AM	0.30	0.00	0.1	87.9
5/28/07 8:00 AM	0.29	0.00	0.1	86.9
5/28/07 12:00 PM	0.29	0.00	0.1	86.0
5/28/07 4:00 PM	0.29	0.00	0.1	83.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/28/07 8:00 PM	0.28	0.00	0.1	81.0
5/29/07 12:00 AM	0.27	0.00	0.1	79.8
5/29/07 4:00 AM	0.27	0.00	0.1	79.1
5/29/07 8:00 AM	0.26	0.00	0.1	77.6
5/29/07 12:00 PM	0.26	0.00	0.1	76.2
5/29/07 4:00 PM	0.25	0.00	0.1	73.8
5/29/07 8:00 PM	0.24	0.00	0.1	70.8
5/30/07 12:00 AM	0.23	0.00	0.1	70.3
5/30/07 4:00 AM	0.24	0.00	0.1	70.7
5/30/07 8:00 AM	0.24	0.00	0.1	69.8
5/30/07 12:00 PM	0.23	0.00	0.1	68.4
5/30/07 4:00 PM	0.23	0.00	0.1	65.9
5/30/07 8:00 PM	0.22	0.00	0.1	62.7
5/31/07 12:00 AM	0.21	0.00	0.1	61.3
5/31/07 4:00 AM	0.21	0.00	0.1	60.9
5/31/07 8:00 AM	0.21	0.00	0.1	59.1
5/31/07 12:00 PM	0.20	0.00	0.1	56.7
5/31/07 4:00 PM	0.19	0.00	0.1	54.0
5/31/07 8:00 PM	0.19	0.00	0.1	50.6
6/1/07 12:00 AM	0.18	0.00	0.1	48.4
6/1/07 4:00 AM	0.18	0.00	0.1	47.6
6/1/07 8:00 AM	0.18	0.00	0.1	76.9
6/1/07 12:00 PM	0.38	0.00	0.1	131.2
6/1/07 4:00 PM	0.67	0.00	0.2	162.2
6/1/07 8:00 PM	0.76	0.00	0.2	174.1
6/2/07 12:00 AM	0.84	0.00	0.2	198.9
6/2/07 4:00 AM	1.18	0.00	0.2	216.5
6/2/07 8:00 AM	1.15	0.00	0.2	215.2
6/2/07 12:00 PM	1.16	0.00	0.2	213.9
6/2/07 4:00 PM	1.13	0.00	0.2	210.4
6/2/07 8:00 PM	1.09	0.00	0.2	206.6
6/3/07 12:00 AM	1.06	0.00	0.2	203.1
6/3/07 4:00 AM	1.03	0.00	0.2	199.6
6/3/07 8:00 AM	1.00	0.00	0.2	196.5
6/3/07 12:00 PM	0.97	0.00	0.2	194.5
6/3/07 4:00 PM	0.96	0.00	0.2	193.1
6/3/07 8:00 PM	0.95	0.00	0.2	191.8
6/4/07 12:00 AM	0.94	0.00	0.2	190.7
6/4/07 4:00 AM	0.93	0.00	0.2	189.5
6/4/07 8:00 AM	0.92	0.00	0.2	188.5
6/4/07 12:00 PM	0.91	0.00	0.2	187.6
6/4/07 4:00 PM	0.91	0.00	0.2	185.7
6/4/07 8:00 PM	0.88	0.00	0.2	183.1
6/5/07 12:00 AM	0.86	0.00	0.2	181.1
6/5/07 4:00 AM	0.85	0.00	0.2	179.3
6/5/07 8:00 AM	0.83	0.00	0.2	177.1
6/5/07 12:00 PM	0.81	0.00	0.2	174.7
6/5/07 4:00 PM	0.80	0.00	0.2	172.2
6/5/07 8:00 PM	0.77	0.00	0.2	169.6
6/6/07 12:00 AM	0.76	0.00	0.2	167.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/6/07 4:00 AM	0.75	0.00	0.2	166.4
6/6/07 8:00 AM	0.74	0.00	0.2	164.3
6/6/07 12:00 PM	0.72	0.00	0.2	163.5
6/6/07 4:00 PM	0.72	0.00	0.2	162.6
6/6/07 8:00 PM	0.70	0.00	0.2	160.1
6/7/07 12:00 AM	0.69	0.00	0.2	158.2
6/7/07 4:00 AM	0.68	0.00	0.2	156.8
6/7/07 8:00 AM	0.67	0.00	0.2	154.8
6/7/07 12:00 PM	0.65	0.00	0.2	152.7
6/7/07 4:00 PM	0.64	0.00	0.2	150.4
6/7/07 8:00 PM	0.62	0.00	0.2	147.9
6/8/07 12:00 AM	0.60	0.00	0.2	145.6
6/8/07 4:00 AM	0.59	0.00	0.2	143.8
6/8/07 8:00 AM	0.58	0.00	0.2	142.0
6/8/07 12:00 PM	0.57	0.00	0.2	152.4
6/8/07 4:00 PM	0.72	0.00	0.2	173.5
6/8/07 8:00 PM	0.87	0.00	0.2	182.3
6/9/07 12:00 AM	0.86	0.00	0.2	180.2
6/9/07 4:00 AM	0.84	0.00	0.2	178.1
6/9/07 8:00 AM	0.82	0.00	0.2	175.8
6/9/07 12:00 PM	0.80	0.00	0.2	173.5
6/9/07 4:00 PM	0.79	0.00	0.2	171.3
6/9/07 8:00 PM	0.77	0.00	0.2	168.9
6/10/07 12:00 AM	0.75	0.00	0.2	166.8
6/10/07 4:00 AM	0.74	0.00	0.2	165.0
6/10/07 8:00 AM	0.72	0.00	0.2	162.3
6/10/07 12:00 PM	0.70	0.00	0.2	158.5
6/10/07 4:00 PM	0.67	0.00	0.2	154.2
6/10/07 8:00 PM	0.64	0.00	0.2	150.6
6/11/07 12:00 AM	0.62	0.00	0.2	147.2
6/11/07 4:00 AM	0.59	0.00	0.2	143.0
6/11/07 8:00 AM	0.57	0.00	0.2	138.7
6/11/07 12:00 PM	0.54	0.00	0.2	134.7
6/11/07 4:00 PM	0.52	4.41	0.1	131.0
6/11/07 8:00 PM	0.50	4.37	0.1	127.2
6/12/07 12:00 AM	0.48	4.36	0.1	124.2
6/12/07 4:00 AM	0.46	4.36	0.1	121.7
6/12/07 8:00 AM	0.45	4.37	0.1	119.8
6/12/07 12:00 PM	0.44	4.35	0.1	118.6
6/12/07 4:00 PM	0.44	4.33	0.1	116.2
6/12/07 8:00 PM	0.42	4.28	0.1	113.5
6/13/07 12:00 AM	0.41	4.26	0.1	112.2
6/13/07 4:00 AM	0.40	4.27	0.1	111.4
6/13/07 8:00 AM	0.40	4.29	0.1	110.6
6/13/07 12:00 PM	0.40	4.29	0.1	109.6
6/13/07 4:00 PM	0.39	4.25	0.1	107.9
6/13/07 8:00 PM	0.38	4.23	0.1	105.9
6/14/07 12:00 AM	0.37	4.20	0.1	104.6
6/14/07 4:00 AM	0.37	4.21	0.1	103.6
6/14/07 8:00 AM	0.36	4.20	0.1	102.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/14/07 12:00 PM	0.36	4.23	0.1	101.9
6/14/07 4:00 PM	0.36	4.17	0.1	100.4
6/14/07 8:00 PM	0.34	4.18	0.1	98.5
6/15/07 12:00 AM	0.34	4.17	0.1	97.7
6/15/07 4:00 AM	0.34	4.17	0.1	97.6
6/15/07 8:00 AM	0.34	4.16	0.1	97.0
6/15/07 12:00 PM	0.33	4.15	0.1	96.1
6/15/07 4:00 PM	0.33	4.06	0.1	117.7
6/15/07 8:00 PM	0.56	4.35	0.2	138.4
6/16/07 12:00 AM	0.54	4.39	0.2	134.9
6/16/07 4:00 AM	0.52	4.40	0.1	130.7
6/16/07 8:00 AM	0.49	4.35	0.1	126.8
6/16/07 12:00 PM	0.47	4.20	0.1	123.4
6/16/07 4:00 PM	0.46	4.20	0.1	120.2
6/16/07 8:00 PM	0.44	4.31	0.1	117.3
6/17/07 12:00 AM	0.43	4.37	0.1	115.7
6/17/07 4:00 AM	0.42	4.39	0.1	115.0
6/17/07 8:00 AM	0.42	4.37	0.1	113.9
6/17/07 12:00 PM	0.41	4.18	0.1	137.5
6/17/07 4:00 PM	0.71	4.37	0.2	175.1
6/17/07 8:00 PM	0.91	4.36	0.2	188.3
6/18/07 12:00 AM	0.92	4.41	0.2	188.0
6/18/07 4:00 AM	0.91	4.41	0.2	185.7
6/18/07 8:00 AM	0.88	4.38	0.2	182.5
6/18/07 12:00 PM	0.85	4.26	0.2	179.6
6/18/07 4:00 PM	0.83	4.26	0.2	176.7
6/18/07 8:00 PM	0.81	4.33	0.2	173.6
6/19/07 12:00 AM	0.79	4.38	0.2	170.8
6/19/07 4:00 AM	0.76	4.41	0.2	168.2
6/19/07 8:00 AM	0.75	4.37	0.2	165.7
6/19/07 12:00 PM	0.73	4.22	0.2	163.0
6/19/07 4:00 PM	0.71	4.13	0.2	159.9
6/19/07 8:00 PM	0.68	4.31	0.2	156.7
6/20/07 12:00 AM	0.66	4.36	0.2	154.4
6/20/07 4:00 AM	0.65	4.38	0.2	152.4
6/20/07 8:00 AM	0.63	4.35	0.2	148.7
6/20/07 12:00 PM	0.60	4.21	0.2	127.2
6/20/07 4:00 PM	0.39	4.20	0.1	124.8
6/20/07 8:00 PM	0.57	4.28	0.2	139.8
6/21/07 12:00 AM	0.55	4.33	0.2	139.2
6/21/07 4:00 AM	0.56	4.35	0.2	145.6
6/21/07 8:00 AM	0.63	4.31	0.2	141.0
6/21/07 12:00 PM	0.51	4.19	0.1	127.7
6/21/07 4:00 PM	0.47	4.18	0.1	125.2
6/21/07 8:00 PM	0.48	4.29	0.1	125.6
6/22/07 12:00 AM	0.47	4.33	0.1	122.3
6/22/07 4:00 AM	0.44	4.35	0.1	117.1
6/22/07 8:00 AM	0.42	4.31	0.1	115.1
6/22/07 12:00 PM	0.42	4.21	0.1	113.9
6/22/07 4:00 PM	0.41	4.16	0.1	106.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/22/07 8:00 PM	0.35	4.27	0.1	99.5
6/23/07 12:00 AM	0.34	4.37	0.1	96.7
6/23/07 4:00 AM	0.33	4.39	0.1	92.7
6/23/07 8:00 AM	0.31	4.35	0.1	92.4
6/23/07 12:00 PM	0.32	4.21	0.1	90.5
6/23/07 4:00 PM	0.29	4.16	0.1	91.1
6/23/07 8:00 PM	0.33	4.29	0.1	94.9
6/24/07 12:00 AM	0.32	4.35	0.1	90.5
6/24/07 4:00 AM	0.29	4.38	0.1	84.2
6/24/07 8:00 AM	0.27	4.31	0.1	80.6
6/24/07 12:00 PM	0.27	4.17	0.1	75.8
6/24/07 4:00 PM	0.24	4.12	0.1	69.0
6/24/07 8:00 PM	0.22	4.26	0.1	64.0
6/25/07 12:00 AM	0.21	4.35	0.1	60.7
6/25/07 4:00 AM	0.20	4.38	0.1	57.0
6/25/07 8:00 AM	0.19	4.34	0.1	49.9
6/25/07 12:00 PM	0.17	4.18	0.1	42.7
6/25/07 4:00 PM	0.16	4.07	0.0	39.9
6/25/07 8:00 PM	0.16	4.33	0.0	37.7
6/26/07 12:00 AM	0.15	4.38	0.0	35.1
6/26/07 4:00 AM	0.15	4.38	0.0	34.3
6/26/07 8:00 AM	0.15	4.36	0.0	31.4
6/26/07 12:00 PM	0.14	4.20	0.0	28.0
6/26/07 4:00 PM	0.14	4.12	0.0	21.2
6/26/07 8:00 PM	0.13	4.27	0.0	10.6
6/27/07 12:00 AM	0.13	4.35	0.0	3.1
6/27/07 4:00 AM	0.13	4.38	0.0	0.0
6/27/07 8:00 AM	0.12	4.33	0.0	0.0
6/27/07 12:00 PM	0.12	4.20	0.0	0.0
6/27/07 4:00 PM	0.12	4.28	0.0	0.0
6/27/07 8:00 PM	0.11	4.31	0.0	0.0
6/28/07 12:00 AM	0.11	4.36	0.0	0.0
6/28/07 4:00 AM	0.11	4.39	0.0	0.0
6/28/07 8:00 AM	0.11	4.34	0.0	0.0
6/28/07 12:00 PM	0.10	4.23	0.0	0.0
6/28/07 4:00 PM	0.10	4.18	0.0	0.0
6/28/07 8:00 PM	0.10	4.31	0.0	0.0
6/29/07 12:00 AM	0.09	4.37	0.0	0.0
6/29/07 4:00 AM	0.09	4.39	0.0	0.0
6/29/07 8:00 AM	0.09	4.38	0.0	0.0
6/29/07 12:00 PM	0.09	4.23	0.0	0.0
6/29/07 4:00 PM	0.08	4.23	0.0	0.0
6/29/07 8:00 PM	0.08	4.36	0.0	0.0
6/30/07 12:00 AM	0.08	4.38	0.0	0.0
6/30/07 4:00 AM	0.07	4.39	0.0	0.0
6/30/07 8:00 AM	0.07	4.34	0.0	0.0
6/30/07 12:00 PM	0.07	4.20	0.0	0.0
6/30/07 4:00 PM	0.06	4.19	0.0	0.0
6/30/07 8:00 PM	0.05	4.26	0.0	0.0
7/1/07 12:00 AM	0.05	4.32	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/1/07 4:00 AM	0.05	4.35	0.0	0.0
7/1/07 8:00 AM	0.05	4.29	0.0	0.0
7/1/07 12:00 PM	0.04	4.18	0.0	0.0
7/1/07 4:00 PM	0.04	4.17	0.0	0.0
7/1/07 8:00 PM	0.03	4.27	0.0	0.0
7/2/07 12:00 AM	0.03	4.36	0.0	0.0
7/2/07 4:00 AM	0.02	4.38	0.0	0.0
7/2/07 8:00 AM	0.02	4.33	0.0	0.0
7/2/07 12:00 PM	0.02	4.35	0.0	0.0
7/2/07 4:00 PM	0.02	4.16	0.0	0.0
7/2/07 8:00 PM	0.01	4.32	0.0	0.0
7/3/07 12:00 AM	0.01	4.39	0.0	0.0
7/3/07 4:00 AM	0.01	4.41	0.0	0.0
7/3/07 8:00 AM	0.01	4.35	0.0	0.0
7/3/07 12:00 PM	0.01	4.23	0.0	0.0
7/3/07 4:00 PM	0.01	4.32	0.0	0.0
7/3/07 8:00 PM	0.01	4.37	0.0	0.0
7/4/07 12:00 AM	0.01	4.38	0.0	0.0
7/4/07 4:00 AM	0.00	4.38	0.0	0.0
7/4/07 8:00 AM	0.00	4.33	0.0	0.0
7/4/07 12:00 PM	0.03	4.37	0.0	0.0
7/4/07 4:00 PM	0.10	4.38	0.0	27.7
7/4/07 8:00 PM	0.19	4.36	0.1	52.7
7/5/07 12:00 AM	0.18	4.38	0.1	48.3
7/5/07 4:00 AM	0.17	4.39	0.1	44.3
7/5/07 8:00 AM	0.16	4.36	0.0	41.0
7/5/07 12:00 PM	0.16	4.30	0.0	64.0
7/5/07 4:00 PM	0.30	4.38	0.1	104.1
7/5/07 8:00 PM	0.45	4.37	0.1	120.8
7/6/07 12:00 AM	0.45	4.39	0.1	121.1
7/6/07 4:00 AM	0.45	4.40	0.1	119.9
7/6/07 8:00 AM	0.44	4.37	0.1	117.5
7/6/07 12:00 PM	0.43	4.27	0.1	114.5
7/6/07 4:00 PM	0.41	4.28	0.1	110.6
7/6/07 8:00 PM	0.39	4.35	0.1	106.4
7/7/07 12:00 AM	0.37	4.39	0.1	102.5
7/7/07 4:00 AM	0.35	4.41	0.1	98.8
7/7/07 8:00 AM	0.34	4.37	0.1	95.9
7/7/07 12:00 PM	0.32	4.27	0.1	92.3
7/7/07 4:00 PM	0.31	4.22	0.1	87.2
7/7/07 8:00 PM	0.28	4.35	0.1	82.5
7/8/07 12:00 AM	0.27	4.39	0.1	79.4
7/8/07 4:00 AM	0.26	4.40	0.1	77.1
7/8/07 8:00 AM	0.25	4.35	0.1	74.5
7/8/07 12:00 PM	0.24	4.30	0.1	70.8
7/8/07 4:00 PM	0.23	4.24	0.1	66.7
7/8/07 8:00 PM	0.22	4.37	0.1	63.1
7/9/07 12:00 AM	0.21	4.40	0.1	59.5
7/9/07 4:00 AM	0.20	4.42	0.1	56.4
7/9/07 8:00 AM	0.19	4.37	0.1	54.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/9/07 12:00 PM	0.19	4.32	0.1	53.3
7/9/07 4:00 PM	0.19	4.39	0.1	97.3
7/9/07 8:00 PM	0.57	4.44	0.2	142.0
7/10/07 12:00 AM	0.58	4.47	0.2	141.6
7/10/07 4:00 AM	0.57	4.47	0.2	140.3
7/10/07 8:00 AM	0.56	4.42	0.2	139.3
7/10/07 12:00 PM	0.56	4.28	0.2	137.6
7/10/07 4:00 PM	0.54	4.27	0.2	134.8
7/10/07 8:00 PM	0.52	4.36	0.1	132.1
7/11/07 12:00 AM	0.51	4.42	0.1	129.4
7/11/07 4:00 AM	0.49	4.46	0.1	126.9
7/11/07 8:00 AM	0.48	4.39	0.1	125.2
7/11/07 12:00 PM	0.47	4.26	0.1	123.4
7/11/07 4:00 PM	0.46	4.22	0.1	120.0
7/11/07 8:00 PM	0.44	4.33	0.1	116.9
7/12/07 12:00 AM	0.42	4.40	0.1	114.7
7/12/07 4:00 AM	0.41	4.44	0.1	112.8
7/12/07 8:00 AM	0.40	4.38	0.1	111.2
7/12/07 12:00 PM	0.40	4.28	0.1	108.9
7/12/07 4:00 PM	0.38	4.22	0.1	105.3
7/12/07 8:00 PM	0.36	4.31	0.1	102.1
7/13/07 12:00 AM	0.35	4.38	0.1	99.5
7/13/07 4:00 AM	0.34	4.41	0.1	97.1
7/13/07 8:00 AM	0.33	4.38	0.1	95.3
7/13/07 12:00 PM	0.32	4.27	0.1	92.7
7/13/07 4:00 PM	0.31	4.24	0.1	88.7
7/13/07 8:00 PM	0.29	4.33	0.1	85.1
7/14/07 12:00 AM	0.28	4.41	0.1	82.2
7/14/07 4:00 AM	0.27	4.43	0.1	79.6
7/14/07 8:00 AM	0.26	4.37	0.1	78.2
7/14/07 12:00 PM	0.26	4.25	0.1	76.0
7/14/07 4:00 PM	0.25	4.20	0.1	71.6
7/14/07 8:00 PM	0.23	4.34	0.1	67.4
7/15/07 12:00 AM	0.22	4.42	0.1	65.0
7/15/07 4:00 AM	0.22	4.43	0.1	63.3
7/15/07 8:00 AM	0.21	4.38	0.1	61.9
7/15/07 12:00 PM	0.21	4.24	0.1	97.4
7/15/07 4:00 PM	0.52	4.31	0.1	134.6
7/15/07 8:00 PM	0.54	4.37	0.2	136.1
7/16/07 12:00 AM	0.54	4.43	0.2	136.2
7/16/07 4:00 AM	0.54	4.46	0.2	136.0
7/16/07 8:00 AM	0.54	4.40	0.2	135.2
7/16/07 12:00 PM	0.53	4.34	0.1	133.6
7/16/07 4:00 PM	0.52	4.27	0.1	131.0
7/16/07 8:00 PM	0.50	4.40	0.1	128.0
7/17/07 12:00 AM	0.48	4.45	0.1	125.8
7/17/07 4:00 AM	0.47	4.46	0.1	124.0
7/17/07 8:00 AM	0.46	4.40	0.1	122.8
7/17/07 12:00 PM	0.46	4.27	0.1	121.1
7/17/07 4:00 PM	0.44	4.33	0.1	118.3

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/17/07 8:00 PM	0.43	4.40	0.1	115.6
7/18/07 12:00 AM	0.42	4.43	0.1	113.3
7/18/07 4:00 AM	0.41	4.46	0.1	111.6
7/18/07 8:00 AM	0.40	4.40	0.1	110.3
7/18/07 12:00 PM	0.39	4.25	0.1	108.3
7/18/07 4:00 PM	0.38	4.21	0.1	132.7
7/18/07 8:00 PM	0.68	4.45	0.2	158.6
7/19/07 12:00 AM	0.69	4.47	0.2	158.4
7/19/07 4:00 AM	0.68	4.47	0.2	157.8
7/19/07 8:00 AM	0.68	4.43	0.2	157.8
7/19/07 12:00 PM	0.68	4.29	0.2	157.4
7/19/07 4:00 PM	0.67	4.21	0.2	155.6
7/19/07 8:00 PM	0.66	4.37	0.2	154.8
7/20/07 12:00 AM	0.66	4.46	0.2	154.5
7/20/07 4:00 AM	0.65	4.47	0.2	153.6
7/20/07 8:00 AM	0.65	4.42	0.2	153.1
7/20/07 12:00 PM	0.65	4.29	0.2	151.9
7/20/07 4:00 PM	0.63	4.33	0.2	150.1
7/20/07 8:00 PM	0.62	4.40	0.2	148.2
7/21/07 12:00 AM	0.61	4.46	0.2	147.1
7/21/07 4:00 AM	0.61	4.48	0.2	146.5
7/21/07 8:00 AM	0.60	4.41	0.2	176.9
7/21/07 12:00 PM	1.09	4.52	0.2	208.2
7/21/07 4:00 PM	1.10	4.40	0.2	207.5
7/21/07 8:00 PM	1.07	4.48	0.2	205.3
7/22/07 12:00 AM	1.05	4.51	0.2	203.7
7/22/07 4:00 AM	1.04	4.52	0.2	202.6
7/22/07 8:00 AM	1.04	4.47	0.2	202.2
7/22/07 12:00 PM	1.04	4.34	0.2	201.4
7/22/07 4:00 PM	1.02	4.34	0.2	199.2
7/22/07 8:00 PM	1.00	4.42	0.2	196.5
7/23/07 12:00 AM	0.97	4.50	0.2	194.1
7/23/07 4:00 AM	0.96	4.51	0.2	192.5
7/23/07 8:00 AM	0.95	4.49	0.2	194.1
7/23/07 12:00 PM	0.98	4.52	0.2	196.1
7/23/07 4:00 PM	0.98	4.34	0.2	194.7
7/23/07 8:00 PM	0.96	4.41	0.2	192.5
7/24/07 12:00 AM	0.94	4.49	0.2	190.9
7/24/07 4:00 AM	0.93	4.52	0.2	189.8
7/24/07 8:00 AM	0.92	4.50	0.2	94.6
7/24/07 12:00 PM	-0.23	4.34	0.0	0.0
7/24/07 4:00 PM	-0.20	4.33	0.0	0.0
7/24/07 8:00 PM	-0.20	4.42	0.0	0.0
7/25/07 12:00 AM	-0.20	4.47	0.0	0.0
7/25/07 4:00 AM	-0.20	4.51	0.0	0.0
7/25/07 8:00 AM	-0.20	4.49	0.0	0.0
7/25/07 12:00 PM	-0.20	4.34	0.0	0.0
7/25/07 4:00 PM	-0.20	4.33	0.0	0.0
7/25/07 8:00 PM	-0.20	4.43	0.0	0.0
7/26/07 12:00 AM	-0.20	4.51	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/26/07 4:00 AM	-0.20	4.51	0.0	0.0
7/26/07 8:00 AM	-0.20	4.48	0.0	0.0
7/26/07 12:00 PM	-0.08	4.34	0.0	125.2
7/27/07 4:00 PM	1.52	4.24	0.3	827.5
7/27/07 8:00 PM	1.91	4.44	1.6	1147.1
7/28/07 12:00 AM	1.77	4.51	1.0	704.1
7/28/07 4:00 AM	1.69	4.51	0.6	435.6
7/28/07 8:00 AM	1.64	4.50	0.4	317.3
7/28/07 12:00 PM	1.61	4.34	0.3	269.1
7/28/07 4:00 PM	1.59	4.38	0.3	255.7
7/28/07 8:00 PM	1.57	4.52	0.3	254.6
7/29/07 12:00 AM	1.56	4.53	0.3	253.9
7/29/07 4:00 AM	1.56	4.52	0.3	253.6
7/29/07 8:00 AM	1.55	4.50	0.3	269.9
7/29/07 12:00 PM	1.61	4.36	0.3	282.7
7/29/07 4:00 PM	1.61	4.33	0.3	267.4
7/29/07 8:00 PM	1.58	4.44	0.3	255.3
7/30/07 12:00 AM	1.57	4.51	0.3	254.3
7/30/07 4:00 AM	1.56	4.53	0.3	253.7
7/30/07 8:00 AM	1.55	4.50	0.3	252.3
7/30/07 12:00 PM	1.53	4.50	0.3	250.5
7/30/07 4:00 PM	1.51	4.38	0.3	248.6
7/30/07 8:00 PM	1.49	4.44	0.3	246.6
7/31/07 12:00 AM	1.47	4.50	0.3	244.7
7/31/07 4:00 AM	1.45	4.51	0.3	243.1
7/31/07 8:00 AM	1.43	4.47	0.3	241.3
7/31/07 12:00 PM	1.41	4.38	0.3	239.3
7/31/07 4:00 PM	1.39	4.40	0.3	243.5
7/31/07 8:00 PM	1.50	4.44	0.3	249.0
8/1/07 12:00 AM	1.51	4.49	0.3	249.8
8/1/07 4:00 AM	1.52	4.51	0.3	298.2
8/1/07 8:00 AM	1.64	4.47	0.4	415.1
8/1/07 12:00 PM	1.68	4.44	0.5	393.8
8/1/07 4:00 PM	1.62	4.37	0.3	303.3
8/1/07 8:00 PM	1.62	4.50	0.3	279.6
8/2/07 12:00 AM	1.58	4.51	0.3	254.5
8/2/07 4:00 AM	1.55	4.50	0.3	251.9
8/2/07 8:00 AM	1.53	4.51	0.3	249.6
8/2/07 12:00 PM	1.50	4.50	0.3	247.1
8/2/07 4:00 PM	1.47	4.40	0.3	244.5
8/2/07 8:00 PM	1.44	4.49	0.3	242.1
8/3/07 12:00 AM	1.42	4.50	0.3	239.6
8/3/07 4:00 AM	1.39	4.51	0.3	237.1
8/3/07 8:00 AM	1.36	4.51	0.3	234.7
8/3/07 12:00 PM	1.34	4.38	0.3	232.7
8/3/07 4:00 PM	1.32	4.37	0.3	230.3
8/3/07 8:00 PM	1.29	4.45	0.3	227.4
8/4/07 12:00 AM	1.26	4.52	0.3	224.9
8/4/07 4:00 AM	1.24	4.53	0.2	222.5
8/4/07 8:00 AM	1.22	4.51	0.2	219.9

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/4/07 12:00 PM	1.19	4.37	0.2	217.1
8/4/07 4:00 PM	1.16	4.32	0.2	214.1
8/4/07 8:00 PM	1.13	4.44	0.2	211.1
8/5/07 12:00 AM	1.10	4.52	0.2	208.6
8/5/07 4:00 AM	1.08	4.53	0.2	206.1
8/5/07 8:00 AM	1.06	4.50	0.2	203.2
8/5/07 12:00 PM	1.03	4.34	0.2	200.2
8/5/07 4:00 PM	1.00	4.30	0.2	197.0
8/5/07 8:00 PM	0.97	4.40	0.2	193.7
8/6/07 12:00 AM	0.95	4.48	0.2	191.0
8/6/07 4:00 AM	0.93	4.51	0.2	188.4
8/6/07 8:00 AM	0.90	4.49	0.2	185.5
8/6/07 12:00 PM	0.88	4.37	0.2	182.3
8/6/07 4:00 PM	0.85	4.28	0.2	178.8
8/6/07 8:00 PM	0.82	4.40	0.2	175.6
8/7/07 12:00 AM	0.80	4.46	0.2	173.3
8/7/07 4:00 AM	0.79	4.49	0.2	171.3
8/7/07 8:00 AM	0.77	4.46	0.2	168.9
8/7/07 12:00 PM	0.75	4.34	0.2	166.2
8/7/07 4:00 PM	0.73	4.31	0.2	177.5
8/7/07 8:00 PM	0.93	4.41	0.2	189.9
8/8/07 12:00 AM	0.93	4.49	0.2	188.9
8/8/07 4:00 AM	0.91	4.49	0.2	186.9
8/8/07 8:00 AM	0.89	4.48	0.2	184.3
8/8/07 12:00 PM	0.87	4.34	0.2	181.2
8/8/07 4:00 PM	0.84	4.42	0.2	179.4
8/8/07 8:00 PM	0.84	4.45	0.2	177.4
8/9/07 12:00 AM	0.81	4.48	0.2	174.2
8/9/07 4:00 AM	0.79	4.50	0.2	171.7
8/9/07 8:00 AM	0.77	4.48	0.2	169.2
8/9/07 12:00 PM	0.75	4.33	0.2	166.2
8/9/07 4:00 PM	0.73	4.31	0.2	163.3
8/9/07 8:00 PM	0.71	4.45	0.2	160.9
8/10/07 12:00 AM	0.69	4.49	0.2	159.3
8/10/07 4:00 AM	0.69	4.50	0.2	157.5
8/10/07 8:00 AM	0.67	4.49	0.2	154.8
8/10/07 12:00 PM	0.65	4.35	0.2	151.7
8/10/07 4:00 PM	0.63	4.38	0.2	148.5
8/10/07 8:00 PM	0.61	4.44	0.2	145.9
8/11/07 12:00 AM	0.59	4.47	0.2	144.0
8/11/07 4:00 AM	0.58	4.49	0.2	142.0
8/11/07 8:00 AM	0.57	4.48	0.2	139.6
8/11/07 12:00 PM	0.55	4.32	0.2	138.2
8/11/07 4:00 PM	0.55	4.29	0.2	140.0
8/11/07 8:00 PM	0.57	4.45	0.2	140.7
8/12/07 12:00 AM	0.56	4.48	0.2	138.2
8/12/07 4:00 AM	0.54	4.49	0.2	136.1
8/12/07 8:00 AM	0.53	4.46	0.2	134.1
8/12/07 12:00 PM	0.52	4.35	0.1	132.1
8/12/07 4:00 PM	0.51	4.46	0.1	129.9

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/12/07 8:00 PM	0.50	4.51	0.1	128.3
8/13/07 12:00 AM	0.49	4.52	0.1	127.5
8/13/07 4:00 AM	0.49	4.53	0.1	127.2
8/13/07 8:00 AM	0.48	4.48	0.1	126.4
8/13/07 12:00 PM	0.48	4.34	0.1	125.1
8/13/07 4:00 PM	0.47	4.38	0.1	123.6
8/13/07 8:00 PM	0.46	4.44	0.1	122.2
8/14/07 12:00 AM	0.45	4.50	0.1	121.8
8/14/07 4:00 AM	0.46	4.51	0.1	122.2
8/14/07 8:00 AM	0.46	4.48	0.1	122.0
8/14/07 12:00 PM	0.45	4.34	0.1	178.9
8/14/07 4:00 PM	1.37	4.38	0.3	237.2
8/14/07 8:00 PM	1.39	4.42	0.3	237.3
8/15/07 12:00 AM	1.37	4.49	0.3	235.9
8/15/07 4:00 AM	1.36	4.50	0.3	243.7
8/15/07 8:00 AM	1.54	4.50	0.3	251.5
8/15/07 12:00 PM	1.52	4.34	0.3	249.8
8/15/07 4:00 PM	1.51	4.54	0.3	248.2
8/15/07 8:00 PM	1.49	4.51	0.3	247.3
8/16/07 12:00 AM	1.49	4.53	0.3	247.1
8/16/07 4:00 AM	1.48	4.53	0.3	246.8
8/16/07 8:00 AM	1.48	4.52	0.3	246.0
8/16/07 12:00 PM	1.47	4.43	0.3	244.5
8/16/07 4:00 PM	1.45	4.36	0.3	242.5
8/16/07 8:00 PM	1.42	4.49	0.3	240.7
8/17/07 12:00 AM	1.41	4.53	0.3	239.5
8/17/07 4:00 AM	1.40	4.55	0.3	238.5
8/17/07 8:00 AM	1.39	4.53	0.3	237.1
8/17/07 12:00 PM	1.37	4.41	0.3	235.1
8/17/07 4:00 PM	1.34	4.35	0.3	232.8
8/17/07 8:00 PM	1.32	4.46	0.3	230.6
8/18/07 12:00 AM	1.30	4.53	0.3	228.9
8/18/07 4:00 AM	1.28	4.55	0.3	227.4
8/18/07 8:00 AM	1.27	4.55	0.3	225.5
8/18/07 12:00 PM	1.25	4.39	0.2	223.3
8/18/07 4:00 PM	1.23	4.33	0.2	221.2
8/18/07 8:00 PM	1.20	4.46	0.2	219.1
8/19/07 12:00 AM	1.18	4.53	0.2	217.4
8/19/07 4:00 AM	1.17	4.54	0.2	216.0
8/19/07 8:00 AM	1.16	4.54	0.2	214.3
8/19/07 12:00 PM	1.14	4.41	0.2	212.2
8/19/07 4:00 PM	1.12	4.47	0.2	209.7
8/19/07 8:00 PM	1.09	4.48	0.2	207.3
8/20/07 12:00 AM	1.07	4.54	0.2	205.5
8/20/07 4:00 AM	1.06	4.55	0.2	204.1
8/20/07 8:00 AM	1.05	4.52	0.2	202.3
8/20/07 12:00 PM	1.03	4.40	0.2	199.9
8/20/07 4:00 PM	1.00	4.34	0.2	197.4
8/20/07 8:00 PM	0.98	4.47	0.2	195.0
8/21/07 12:00 AM	0.96	4.53	0.2	193.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/21/07 4:00 AM	0.95	4.53	0.2	191.7
8/21/07 8:00 AM	0.94	4.51	0.2	189.9
8/21/07 12:00 PM	0.92	4.39	0.2	186.9
8/21/07 4:00 PM	0.89	4.33	0.2	183.1
8/21/07 8:00 PM	0.86	4.45	0.2	179.7
8/22/07 12:00 AM	0.83	4.50	0.2	177.0
8/22/07 4:00 AM	0.81	4.53	0.2	174.6
8/22/07 8:00 AM	0.79	4.51	0.2	171.4
8/22/07 12:00 PM	0.77	4.38	0.2	167.7
8/22/07 4:00 PM	0.74	4.32	0.2	164.0
8/22/07 8:00 PM	0.71	4.44	0.2	160.6
8/23/07 12:00 AM	0.69	4.50	0.2	157.5
8/23/07 4:00 AM	0.67	4.53	0.2	154.2
8/23/07 8:00 AM	0.64	4.51	0.2	150.9
8/23/07 12:00 PM	0.62	4.37	0.2	148.9
8/23/07 4:00 PM	0.62	4.39	0.2	174.8
8/23/07 8:00 PM	1.02	4.44	0.2	201.4
8/24/07 12:00 AM	1.03	4.51	0.2	202.0
8/24/07 4:00 AM	1.04	4.52	0.2	201.6
8/24/07 8:00 AM	1.02	4.51	0.2	199.3
8/24/07 12:00 PM	0.99	4.37	0.2	197.8
8/24/07 4:00 PM	1.00	4.41	0.2	197.6
8/24/07 8:00 PM	0.99	4.49	0.2	195.6
8/25/07 12:00 AM	0.96	4.52	0.2	193.0
8/25/07 4:00 AM	0.95	4.53	0.2	190.8
8/25/07 8:00 AM	0.93	4.52	0.2	187.9
8/25/07 12:00 PM	0.90	4.39	0.2	191.1
8/25/07 4:00 PM	0.98	4.51	0.2	197.1
8/25/07 8:00 PM	1.00	4.54	0.2	197.6
8/26/07 12:00 AM	0.99	4.55	0.2	195.9
8/26/07 4:00 AM	0.97	4.57	0.2	193.3
8/26/07 8:00 AM	0.95	4.55	0.2	190.6
8/26/07 12:00 PM	0.92	4.39	0.2	201.2
8/26/07 4:00 PM	1.14	4.47	0.2	214.1
8/26/07 8:00 PM	1.15	4.55	0.2	214.6
8/27/07 12:00 AM	1.15	4.57	0.2	213.4
8/27/07 4:00 AM	1.13	4.56	0.2	211.6
8/27/07 8:00 AM	1.11	4.55	0.2	209.1
8/27/07 12:00 PM	1.09	4.39	0.2	206.1
8/27/07 4:00 PM	1.06	4.48	0.2	202.9
8/27/07 8:00 PM	1.03	4.54	0.2	210.4
8/28/07 12:00 AM	1.20	4.57	0.2	219.1
8/28/07 4:00 AM	1.19	4.58	0.2	217.9
8/28/07 8:00 AM	1.17	4.56	0.2	215.9
8/28/07 12:00 PM	1.15	4.41	0.2	213.0
8/28/07 4:00 PM	1.12	4.37	0.2	209.7
8/28/07 8:00 PM	1.09	4.48	0.2	206.5
8/29/07 12:00 AM	1.06	4.57	0.2	204.0
8/29/07 4:00 AM	1.04	4.58	0.2	201.7
8/29/07 8:00 AM	1.02	4.55	0.2	198.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/29/07 12:00 PM	0.99	4.40	0.2	195.4
8/29/07 4:00 PM	0.96	4.33	0.2	192.2
8/29/07 8:00 PM	0.93	4.46	0.2	189.3
8/30/07 12:00 AM	0.91	4.54	0.2	186.9
8/30/07 4:00 AM	0.89	4.56	0.2	184.6
8/30/07 8:00 AM	0.87	4.53	0.2	181.7
8/30/07 12:00 PM	0.85	4.39	0.2	178.3
8/30/07 4:00 PM	0.82	4.45	0.2	174.8
8/30/07 8:00 PM	0.79	4.48	0.2	171.7
8/31/07 12:00 AM	0.77	4.52	0.2	169.3
8/31/07 4:00 AM	0.76	4.54	0.2	167.3
8/31/07 8:00 AM	0.74	4.53	0.2	164.6
8/31/07 12:00 PM	0.72	4.39	0.2	161.3
8/31/07 4:00 PM	0.69	4.31	0.2	158.1
8/31/07 8:00 PM	0.67	4.44	0.2	155.3
9/1/07 12:00 AM	0.65	4.52	0.2	153.2
9/1/07 4:00 AM	0.64	4.53	0.2	151.0
9/1/07 8:00 AM	0.62	4.54	0.2	148.1
9/1/07 12:00 PM	0.60	4.38	0.2	145.0
9/1/07 4:00 PM	0.58	4.39	0.2	142.0
9/1/07 8:00 PM	0.57	4.45	0.2	139.4
9/2/07 12:00 AM	0.55	4.52	0.2	137.4
9/2/07 4:00 AM	0.54	4.55	0.2	135.8
9/2/07 8:00 AM	0.53	4.54	0.2	134.0
9/2/07 12:00 PM	0.52	4.39	0.1	131.9
9/2/07 4:00 PM	0.51	4.34	0.1	241.7
9/2/07 8:00 PM	1.64	4.46	0.4	496.9
9/3/07 12:00 AM	1.72	4.53	0.7	552.2
9/3/07 4:00 AM	1.68	4.55	0.5	374.9
9/3/07 8:00 AM	1.61	4.54	0.3	270.3
9/3/07 12:00 PM	1.56	4.39	0.3	252.3
9/3/07 4:00 PM	1.52	4.40	0.3	248.8
9/3/07 8:00 PM	1.48	4.61	0.3	245.5
9/4/07 12:00 AM	1.45	4.61	0.3	242.8
9/4/07 4:00 AM	1.42	4.61	0.3	240.2
9/4/07 8:00 AM	1.40	4.58	0.3	237.1
9/4/07 12:00 PM	1.36	4.43	0.3	233.7
9/4/07 4:00 PM	1.32	4.48	0.3	230.2
9/4/07 8:00 PM	1.29	4.53	0.3	227.0
9/5/07 12:00 AM	1.26	4.56	0.3	224.1
9/5/07 4:00 AM	1.23	4.58	0.2	221.4
9/5/07 8:00 AM	1.20	4.56	0.2	218.0
9/5/07 12:00 PM	1.17	4.61	0.2	214.2
9/5/07 4:00 PM	1.13	4.67	0.2	213.4
9/5/07 8:00 PM	1.15	4.72	0.2	212.8
9/6/07 12:00 AM	1.12	4.77	0.2	209.6
9/6/07 4:00 AM	1.09	4.79	0.2	206.6
9/6/07 8:00 AM	1.06	4.77	0.2	203.4
9/6/07 12:00 PM	1.03	4.64	0.2	199.9
9/6/07 4:00 PM	1.00	4.64	0.2	196.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/6/07 8:00 PM	0.97	4.77	0.2	192.7
9/7/07 12:00 AM	0.94	4.79	0.2	189.7
9/7/07 4:00 AM	0.92	4.80	0.2	187.1
9/7/07 8:00 AM	0.89	4.77	0.2	184.0
9/7/07 12:00 PM	0.87	4.64	0.2	180.4
9/7/07 4:00 PM	0.83	4.59	0.2	176.5
9/7/07 8:00 PM	0.80	4.72	0.2	172.9
9/8/07 12:00 AM	0.78	4.79	0.2	170.1
9/8/07 4:00 AM	0.76	4.79	0.2	167.7
9/8/07 8:00 AM	0.74	4.77	0.2	164.7
9/8/07 12:00 PM	0.72	4.65	0.2	161.3
9/8/07 4:00 PM	0.69	4.57	0.2	158.0
9/8/07 8:00 PM	0.67	4.70	0.2	154.7
9/9/07 12:00 AM	0.65	4.76	0.2	152.0
9/9/07 4:00 AM	0.63	4.78	0.2	149.5
9/9/07 8:00 AM	0.61	4.76	0.2	146.2
9/9/07 12:00 PM	0.59	4.64	0.2	142.7
9/9/07 4:00 PM	0.57	4.57	0.2	143.9
9/9/07 8:00 PM	0.61	4.69	0.2	145.4
9/10/07 12:00 AM	0.59	4.75	0.2	143.1
9/10/07 4:00 AM	0.58	4.77	0.2	141.9
9/10/07 8:00 AM	0.57	4.76	0.2	140.1
9/10/07 12:00 PM	0.55	4.64	0.2	137.6
9/10/07 4:00 PM	0.54	4.60	0.2	139.2
9/10/07 8:00 PM	0.57	4.77	0.2	140.5
9/11/07 12:00 AM	0.56	4.77	0.2	137.6
9/11/07 4:00 AM	0.54	4.78	0.2	135.1
9/11/07 8:00 AM	0.52	4.79	0.1	132.7
9/11/07 12:00 PM	0.51	4.69	0.1	130.7
9/11/07 4:00 PM	0.50	4.60	0.1	128.5
9/11/07 8:00 PM	0.49	4.77	0.1	140.5
9/12/07 12:00 AM	0.65	4.79	0.2	153.5
9/12/07 4:00 AM	0.65	4.79	0.2	152.1
9/12/07 8:00 AM	0.63	4.77	0.2	149.4
9/12/07 12:00 PM	0.61	4.63	0.2	146.3
9/12/07 4:00 PM	0.59	4.59	0.2	143.0
9/12/07 8:00 PM	0.57	4.73	0.2	139.9
9/13/07 12:00 AM	0.55	4.77	0.2	137.1
9/13/07 4:00 AM	0.54	4.77	0.2	134.4
9/13/07 8:00 AM	0.52	4.77	0.1	132.0
9/13/07 12:00 PM	0.51	4.63	0.1	129.9
9/13/07 4:00 PM	0.49	4.56	0.1	167.8
9/13/07 8:00 PM	1.08	4.75	0.2	208.4
9/14/07 12:00 AM	1.11	4.79	0.2	208.4
9/14/07 4:00 AM	1.08	4.81	0.2	205.2
9/14/07 8:00 AM	1.05	4.78	0.2	201.9
9/14/07 12:00 PM	1.02	4.63	0.2	198.6
9/14/07 4:00 PM	0.99	4.59	0.2	195.4
9/14/07 8:00 PM	0.96	4.81	0.2	192.2
9/15/07 12:00 AM	0.93	4.82	0.2	189.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/15/07 4:00 AM	0.91	4.83	0.2	187.1
9/15/07 8:00 AM	0.90	4.80	0.2	184.7
9/15/07 12:00 PM	0.87	4.64	0.2	181.9
9/15/07 4:00 PM	0.85	4.60	0.2	178.8
9/15/07 8:00 PM	0.83	4.72	0.2	175.9
9/16/07 12:00 AM	0.80	4.77	0.2	173.5
9/16/07 4:00 AM	0.79	4.79	0.2	171.5
9/16/07 8:00 AM	0.77	4.77	0.2	168.7
9/16/07 12:00 PM	0.75	4.65	0.2	165.4
9/16/07 4:00 PM	0.72	4.64	0.2	162.2
9/16/07 8:00 PM	0.70	4.75	0.2	159.1
9/17/07 12:00 AM	0.68	4.77	0.2	156.2
9/17/07 4:00 AM	0.66	4.79	0.2	153.3
9/17/07 8:00 AM	0.64	4.77	0.2	150.4
9/17/07 12:00 PM	0.62	4.65	0.2	147.7
9/17/07 4:00 PM	0.60	4.56	0.2	144.6
9/17/07 8:00 PM	0.58	4.72	0.2	141.4
9/18/07 12:00 AM	0.56	4.76	0.2	139.3
9/18/07 4:00 AM	0.55	4.79	0.2	137.6
9/18/07 8:00 AM	0.54	4.78	0.2	135.6
9/18/07 12:00 PM	0.53	4.62	0.1	133.1
9/18/07 4:00 PM	0.51	4.59	0.1	130.6
9/18/07 8:00 PM	0.50	4.75	0.1	128.3
9/19/07 12:00 AM	0.49	4.79	0.1	126.8
9/19/07 4:00 AM	0.48	4.80	0.1	125.8
9/19/07 8:00 AM	0.48	4.80	0.1	124.3
9/19/07 12:00 PM	0.46	4.64	0.1	122.6
9/19/07 4:00 PM	0.46	4.66	0.1	121.1
9/19/07 8:00 PM	0.45	4.75	0.1	119.8
9/20/07 12:00 AM	0.44	4.82	0.1	119.7
9/20/07 4:00 AM	0.45	4.82	0.1	119.9
9/20/07 8:00 AM	0.45	4.79	0.1	153.6
9/20/07 12:00 PM	0.91	4.66	0.2	187.4
9/20/07 4:00 PM	0.91	4.66	0.2	186.7
9/20/07 8:00 PM	0.90	4.74	0.2	189.6
9/21/07 12:00 AM	0.96	4.78	0.2	217.8
9/21/07 4:00 AM	1.43	4.78	0.3	242.9
9/21/07 8:00 AM	1.44	4.77	0.3	242.7
9/21/07 12:00 PM	1.43	4.77	0.3	241.5
9/21/07 4:00 PM	1.42	4.69	0.3	248.8
9/21/07 8:00 PM	1.59	4.76	0.3	279.9
9/22/07 12:00 AM	1.62	4.80	0.3	279.8
9/22/07 4:00 AM	1.59	4.81	0.3	255.4
9/22/07 8:00 AM	1.57	4.79	0.3	253.6
9/22/07 12:00 PM	1.55	4.66	0.3	252.0
9/22/07 4:00 PM	1.53	4.67	0.3	412.8
9/22/07 8:00 PM	1.71	4.83	0.6	492.2
9/23/07 12:00 AM	1.66	4.84	0.5	369.3
9/23/07 4:00 AM	1.63	4.82	0.4	303.1
9/23/07 8:00 AM	1.61	4.83	0.3	266.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/23/07 12:00 PM	1.58	4.72	0.3	255.1
9/23/07 4:00 PM	1.56	4.66	0.3	254.1
9/23/07 8:00 PM	1.56	4.84	0.3	253.0
9/24/07 12:00 AM	1.54	4.85	0.3	251.0
9/24/07 4:00 AM	1.52	4.84	0.3	249.2
9/24/07 8:00 AM	1.50	4.84	0.3	247.1
9/24/07 12:00 PM	1.47	4.69	0.3	245.3
9/24/07 4:00 PM	1.46	4.82	0.3	248.2
9/24/07 8:00 PM	1.54	4.85	0.3	251.3
9/25/07 12:00 AM	1.52	4.84	0.3	249.9
9/25/07 4:00 AM	1.51	4.86	0.3	248.3
9/25/07 8:00 AM	1.49	4.83	0.3	246.5
9/25/07 12:00 PM	1.47	4.67	0.3	249.6
9/25/07 4:00 PM	1.56	4.71	0.3	253.2
9/25/07 8:00 PM	1.55	4.83	0.3	252.3
9/26/07 12:00 AM	1.54	4.84	0.3	251.5
9/26/07 4:00 AM	1.53	4.85	0.3	250.7
9/26/07 8:00 AM	1.52	4.85	0.3	249.8
9/26/07 12:00 PM	1.51	4.72	0.3	249.0
9/26/07 4:00 PM	1.50	4.73	0.3	248.1
9/26/07 8:00 PM	1.49	4.79	0.3	247.1
9/27/07 12:00 AM	1.48	4.83	0.3	246.4
9/27/07 4:00 AM	1.47	4.84	0.3	245.7
9/27/07 8:00 AM	1.46	4.84	0.3	244.9
9/27/07 12:00 PM	1.46	4.69	0.3	244.3
9/27/07 4:00 PM	1.45	4.70	0.3	243.5
9/27/07 8:00 PM	1.44	4.76	0.3	242.5
9/28/07 12:00 AM	1.43	4.82	0.3	241.8
9/28/07 4:00 AM	1.42	4.84	0.3	241.0
9/28/07 8:00 AM	1.41	4.84	0.3	240.3
9/28/07 12:00 PM	1.41	4.66	0.3	239.4
9/28/07 4:00 PM	1.40	4.64	0.3	238.5
9/28/07 8:00 PM	1.39	4.74	0.3	237.7
9/29/07 12:00 AM	1.38	4.78	0.3	237.2
9/29/07 4:00 AM	1.38	4.82	0.3	236.9
9/29/07 8:00 AM	1.37	4.82	0.3	236.3
9/29/07 12:00 PM	1.36	4.64	0.3	239.3
9/29/07 4:00 PM	1.44	4.63	0.3	242.5
9/29/07 8:00 PM	1.43	4.74	0.3	241.9
9/30/07 12:00 AM	1.42	4.80	0.3	241.3
9/30/07 4:00 AM	1.42	4.83	0.3	240.8
9/30/07 8:00 AM	1.41	4.84	0.3	239.7
9/30/07 12:00 PM	1.40	4.66	0.3	238.4
9/30/07 4:00 PM	1.39	4.73	0.3	237.1
9/30/07 8:00 PM	1.37	4.79	0.3	235.9
10/1/07 12:00 AM	1.36	4.82	0.3	235.1
10/1/07 4:00 AM	1.35	4.83	0.3	234.6
10/1/07 8:00 AM	1.35	4.83	0.3	233.9
10/1/07 12:00 PM	1.34	4.71	0.3	231.8
10/1/07 4:00 PM	1.30	4.71	0.3	227.3

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/1/07 8:00 PM	1.25	4.80	0.2	221.7
10/2/07 12:00 AM	1.19	4.84	0.2	218.7
10/2/07 4:00 AM	1.19	4.85	0.2	218.4
10/2/07 8:00 AM	1.19	4.85	0.2	217.9
10/2/07 12:00 PM	1.18	4.73	0.2	217.0
10/2/07 4:00 PM	1.17	4.69	0.2	216.1
10/2/07 8:00 PM	1.16	4.79	0.2	215.3
10/3/07 12:00 AM	1.15	4.82	0.2	214.6
10/3/07 4:00 AM	1.15	4.80	0.2	213.8
10/3/07 8:00 AM	1.14	4.79	0.2	213.0
10/3/07 12:00 PM	1.13	4.69	0.2	212.1
10/3/07 4:00 PM	1.12	4.64	0.2	211.2
10/3/07 8:00 PM	1.11	4.73	0.2	210.4
10/4/07 12:00 AM	1.11	4.79	0.2	210.2
10/4/07 4:00 AM	1.11	4.80	0.2	210.2
10/4/07 8:00 AM	1.11	4.78	0.2	209.7
10/4/07 12:00 PM	1.10	4.69	0.2	208.9
10/4/07 4:00 PM	1.09	4.67	0.2	209.0
10/4/07 8:00 PM	1.10	4.78	0.2	209.3
10/5/07 12:00 AM	1.10	4.83	0.2	209.2
10/5/07 4:00 AM	1.10	4.83	0.2	209.2
10/5/07 8:00 AM	1.10	4.80	0.2	208.7
10/5/07 12:00 PM	1.09	4.65	0.2	207.9
10/5/07 4:00 PM	1.08	4.62	0.2	207.6
10/5/07 8:00 PM	1.09	4.76	0.2	207.4
10/6/07 12:00 AM	1.08	4.81	0.2	207.4
10/6/07 4:00 AM	1.09	4.83	0.2	207.5
10/6/07 8:00 AM	1.08	4.81	0.2	207.0
10/6/07 12:00 PM	1.08	4.67	0.2	206.1
10/6/07 4:00 PM	1.07	4.68	0.2	205.0
10/6/07 8:00 PM	1.06	4.80	0.2	204.2
10/7/07 12:00 AM	1.05	4.79	0.2	203.9
10/7/07 4:00 AM	1.05	4.82	0.2	204.1
10/7/07 8:00 AM	1.05	4.80	0.2	203.8
10/7/07 12:00 PM	1.05	4.67	0.2	202.9
10/7/07 4:00 PM	1.04	4.64	0.2	202.0
10/7/07 8:00 PM	1.03	4.78	0.2	201.4
10/8/07 12:00 AM	1.03	4.81	0.2	201.3
10/8/07 4:00 AM	1.03	4.83	0.2	201.6
10/8/07 8:00 AM	1.03	4.81	0.2	201.3
10/8/07 12:00 PM	1.02	4.68	0.2	200.4
10/8/07 4:00 PM	1.02	4.67	0.2	199.2
10/8/07 8:00 PM	1.00	4.78	0.2	198.0
10/9/07 12:00 AM	0.99	4.83	0.2	197.2
10/9/07 4:00 AM	0.99	4.84	0.2	196.5
10/9/07 8:00 AM	0.98	4.81	0.2	195.7
10/9/07 12:00 PM	0.97	4.67	0.2	194.8
10/9/07 4:00 PM	0.97	4.66	0.2	193.8
10/9/07 8:00 PM	0.96	4.79	0.2	192.9
10/10/07 12:00 AM	0.95	4.85	0.2	192.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/10/07 4:00 AM	0.95	4.86	0.2	192.8
10/10/07 8:00 AM	0.95	4.85	0.2	192.2
10/10/07 12:00 PM	0.94	4.70	0.2	191.3
10/10/07 4:00 PM	0.94	4.66	0.2	190.5
10/10/07 8:00 PM	0.93	4.77	0.2	189.7
10/11/07 12:00 AM	0.92	4.83	0.2	189.4
10/11/07 4:00 AM	0.92	4.86	0.2	189.6
10/11/07 8:00 AM	0.93	4.85	0.2	189.3
10/11/07 12:00 PM	0.92	4.66	0.2	188.4
10/11/07 4:00 PM	0.91	4.60	0.2	187.5
10/11/07 8:00 PM	0.90	4.76	0.2	197.0
10/12/07 12:00 AM	1.08	4.84	0.2	206.8
10/12/07 4:00 AM	1.08	4.85	0.2	206.2
10/12/07 8:00 AM	1.07	4.84	0.2	205.2
10/12/07 12:00 PM	1.06	4.67	0.2	204.2
10/12/07 4:00 PM	1.05	4.62	0.2	203.2
10/12/07 8:00 PM	1.04	4.75	0.2	202.2
10/13/07 12:00 AM	1.03	4.83	0.2	201.8
10/13/07 4:00 AM	1.03	4.85	0.2	201.6
10/13/07 8:00 AM	1.03	4.86	0.2	200.8
10/13/07 12:00 PM	1.02	4.69	0.2	199.6
10/13/07 4:00 PM	1.01	4.69	0.2	198.4
10/13/07 8:00 PM	1.00	4.80	0.2	197.4
10/14/07 12:00 AM	0.99	4.85	0.2	197.0
10/14/07 4:00 AM	0.99	4.86	0.2	196.7
10/14/07 8:00 AM	0.98	4.88	0.2	195.8
10/14/07 12:00 PM	0.97	4.70	0.2	194.7
10/14/07 4:00 PM	0.97	4.67	0.2	193.5
10/14/07 8:00 PM	0.95	4.82	0.2	192.4
10/15/07 12:00 AM	0.95	4.87	0.2	191.9
10/15/07 4:00 AM	0.94	4.90	0.2	191.6
10/15/07 8:00 AM	0.94	4.91	0.2	190.8
10/15/07 12:00 PM	0.93	4.74	0.2	189.5
10/15/07 4:00 PM	0.92	4.72	0.2	188.4
10/15/07 8:00 PM	0.91	4.85	0.2	187.3
10/16/07 12:00 AM	0.90	4.90	0.2	186.7
10/16/07 4:00 AM	0.90	4.90	0.2	186.5
10/16/07 8:00 AM	0.90	4.90	0.2	185.9
10/16/07 12:00 PM	0.89	4.73	0.2	184.9
10/16/07 4:00 PM	0.88	4.69	0.2	183.9
10/16/07 8:00 PM	0.87	4.82	0.2	183.0
10/17/07 12:00 AM	0.87	4.88	0.2	182.7
10/17/07 4:00 AM	0.87	4.90	0.2	182.7
10/17/07 8:00 AM	0.87	4.89	0.2	182.1
10/17/07 12:00 PM	0.86	4.74	0.2	181.2
10/17/07 4:00 PM	0.85	4.71	0.2	180.3
10/17/07 8:00 PM	0.85	4.83	0.2	179.5
10/18/07 12:00 AM	0.84	4.88	0.2	179.2
10/18/07 4:00 AM	0.84	4.91	0.2	179.2
10/18/07 8:00 AM	0.84	4.92	0.2	178.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/18/07 12:00 PM	0.83	4.69	0.2	177.9
10/18/07 4:00 PM	0.83	4.68	0.2	176.9
10/18/07 8:00 PM	0.82	4.82	0.2	176.1
10/19/07 12:00 AM	0.81	4.87	0.2	175.8
10/19/07 4:00 AM	0.81	4.87	0.2	175.6
10/19/07 8:00 AM	0.81	4.88	0.2	175.1
10/19/07 12:00 PM	0.80	4.71	0.2	174.2
10/19/07 4:00 PM	0.80	4.68	0.2	173.2
10/19/07 8:00 PM	0.79	4.81	0.2	172.5
10/20/07 12:00 AM	0.79	4.84	0.2	174.0
10/20/07 4:00 AM	0.81	4.88	0.2	180.0
10/20/07 8:00 AM	0.88	4.87	0.2	184.3
10/20/07 12:00 PM	0.88	4.71	0.2	183.9
10/20/07 4:00 PM	0.87	4.69	0.2	183.1
10/20/07 8:00 PM	0.87	4.81	0.2	182.4
10/21/07 12:00 AM	0.86	4.81	0.2	182.6
10/21/07 4:00 AM	0.87	4.85	0.2	184.6
10/21/07 8:00 AM	0.90	4.86	0.2	185.5
10/21/07 12:00 PM	0.89	4.79	0.2	184.7
10/21/07 4:00 PM	0.88	4.83	0.2	211.1
10/21/07 8:00 PM	1.39	4.86	0.3	237.5
10/22/07 12:00 AM	1.38	4.89	0.3	236.6
10/22/07 4:00 AM	1.37	4.89	0.3	235.6
10/22/07 8:00 AM	1.36	4.90	0.3	234.6
10/22/07 12:00 PM	1.34	4.75	0.3	233.5
10/22/07 4:00 PM	1.33	4.71	0.3	232.5
10/22/07 8:00 PM	1.32	4.89	0.3	231.7
10/23/07 12:00 AM	1.32	4.91	0.3	231.1
10/23/07 4:00 AM	1.31	4.91	0.3	230.8
10/23/07 8:00 AM	1.31	4.92	0.3	230.1
10/23/07 12:00 PM	1.30	4.75	0.3	229.3
10/23/07 4:00 PM	1.29	4.70	0.3	228.2
10/23/07 8:00 PM	1.28	4.84	0.3	227.2
10/24/07 12:00 AM	1.27	4.90	0.3	226.7
10/24/07 4:00 AM	1.27	4.92	0.3	226.2
10/24/07 8:00 AM	1.26	4.92	0.3	225.6
10/24/07 12:00 PM	1.25	4.75	0.3	224.7
10/24/07 4:00 PM	1.24	4.72	0.2	223.6
10/24/07 8:00 PM	1.23	4.84	0.2	222.6
10/25/07 12:00 AM	1.22	4.90	0.2	221.8
10/25/07 4:00 AM	1.22	4.90	0.2	220.8
10/25/07 8:00 AM	1.20	4.91	0.2	219.6
10/25/07 12:00 PM	1.19	4.80	0.2	218.5
10/25/07 4:00 PM	1.18	4.86	0.2	217.4
10/25/07 8:00 PM	1.17	4.90	0.2	221.9
10/26/07 12:00 AM	1.27	4.94	0.3	227.1
10/26/07 4:00 AM	1.27	4.95	0.3	227.0
10/26/07 8:00 AM	1.27	4.96	0.3	226.3
10/26/07 12:00 PM	1.26	4.88	0.3	225.3
10/26/07 4:00 PM	1.25	4.86	0.2	224.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/26/07 8:00 PM	1.24	4.94	0.2	223.7
10/27/07 12:00 AM	1.24	4.99	0.2	223.1
10/27/07 4:00 AM	1.23	4.98	0.2	222.7
10/27/07 8:00 AM	1.23	4.97	0.2	222.1
10/27/07 12:00 PM	1.22	4.84	0.2	221.3
10/27/07 4:00 PM	1.21	4.80	0.2	220.5
10/27/07 8:00 PM	1.20	4.89	0.2	219.7
10/28/07 12:00 AM	1.20	4.91	0.2	219.4
10/28/07 4:00 AM	1.20	4.91	0.2	219.2
10/28/07 8:00 AM	1.19	4.92	0.2	218.5
10/28/07 12:00 PM	1.18	4.85	0.2	217.6
10/28/07 4:00 PM	1.17	4.82	0.2	216.6
10/28/07 8:00 PM	1.17	4.89	0.2	215.7
10/29/07 12:00 AM	1.16	4.92	0.2	215.0
10/29/07 4:00 AM	1.15	4.94	0.2	214.5
10/29/07 8:00 AM	1.15	4.94	0.2	213.8
10/29/07 12:00 PM	1.14	4.77	0.2	212.8
10/29/07 4:00 PM	1.13	4.77	0.2	211.7
10/29/07 8:00 PM	1.12	4.88	0.2	210.9
10/30/07 12:00 AM	1.11	4.93	0.2	210.3
10/30/07 4:00 AM	1.11	4.93	0.2	209.9
10/30/07 8:00 AM	1.10	4.92	0.2	209.3
10/30/07 12:00 PM	1.10	4.84	0.2	208.4
10/30/07 4:00 PM	1.09	4.76	0.2	207.5
10/30/07 8:00 PM	1.08	4.90	0.2	206.8
10/31/07 12:00 AM	1.07	4.93	0.2	206.5
10/31/07 4:00 AM	1.08	4.93	0.2	206.4
10/31/07 8:00 AM	1.07	4.92	0.2	205.7
10/31/07 12:00 PM	1.06	4.83	0.2	204.9
10/31/07 4:00 PM	1.06	4.75	0.2	204.9
10/31/07 8:00 PM	1.06	4.88	0.2	205.4
11/1/07 12:00 AM	1.06	4.92	0.2	205.7
11/1/07 4:00 AM	1.07	4.91	0.2	205.8
11/1/07 8:00 AM	1.07	4.90	0.2	205.2
11/1/07 12:00 PM	1.06	4.82	0.2	204.8
11/1/07 4:00 PM	1.06	4.81	0.2	205.2
11/1/07 8:00 PM	1.07	4.90	0.2	205.1
11/2/07 12:00 AM	1.06	4.91	0.2	204.6
11/2/07 4:00 AM	1.06	4.89	0.2	204.4
11/2/07 8:00 AM	1.05	4.88	0.2	203.7
11/2/07 12:00 PM	1.04	4.80	0.2	202.7
11/2/07 4:00 PM	1.04	4.73	0.2	201.6
11/2/07 8:00 PM	1.02	4.86	0.2	200.5
11/3/07 12:00 AM	1.02	4.90	0.2	199.7
11/3/07 4:00 AM	1.01	4.91	0.2	198.9
11/3/07 8:00 AM	1.00	4.93	0.2	197.9
11/3/07 12:00 PM	0.99	4.77	0.2	196.6
11/3/07 4:00 PM	0.98	4.72	0.2	195.5
11/3/07 8:00 PM	0.97	4.88	0.2	194.5
11/4/07 12:00 AM	0.96	4.95	0.2	194.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
11/4/07 4:00 AM	0.96	5.00	0.2	193.9
11/4/07 8:00 AM	0.96	5.02	0.2	193.3
11/4/07 12:00 PM	0.95	4.84	0.2	192.3
11/4/07 4:00 PM	0.94	4.80	0.2	191.2
11/4/07 8:00 PM	0.94	4.99	0.2	190.3
11/5/07 12:00 AM	0.93	5.08	0.2	189.6
11/5/07 4:00 AM	0.92	5.09	0.2	189.0
11/5/07 8:00 AM	0.92	5.10	0.2	188.1
11/5/07 12:00 PM	0.91	4.88	0.2	186.8
11/5/07 4:00 PM	0.90	4.82	0.2	185.7
11/5/07 8:00 PM	0.89	4.98	0.2	184.9
11/6/07 12:00 AM	0.88	5.06	0.2	184.5
11/6/07 4:00 AM	0.88	5.09	0.2	184.4
11/6/07 8:00 AM	0.88	5.11	0.2	183.9
11/6/07 12:00 PM	0.87	4.88	0.2	182.9
11/6/07 4:00 PM	0.87	4.81	0.2	181.8
11/6/07 8:00 PM	0.86	5.00	0.2	180.7
11/7/07 12:00 AM	0.85	5.07	0.2	180.2
11/7/07 4:00 AM	0.85	5.09	0.2	180.2
11/7/07 8:00 AM	0.85	5.10	0.2	179.7
11/7/07 12:00 PM	0.84	4.84	0.2	178.8
11/7/07 4:00 PM	0.83	4.80	0.2	177.9
11/7/07 8:00 PM	0.83	4.98	0.2	176.9
11/8/07 12:00 AM	0.82	5.05	0.2	176.4
11/8/07 4:00 AM	0.82	5.11	0.2	176.3
11/8/07 8:00 AM	0.82	5.10	0.2	175.6
11/8/07 12:00 PM	0.81	4.88	0.2	174.5
11/8/07 4:00 PM	0.80	4.85	0.2	173.5
11/8/07 8:00 PM	0.79	5.00	0.2	172.6
11/9/07 12:00 AM	0.79	5.07	0.2	171.8
11/9/07 4:00 AM	0.78	5.12	0.2	170.8
11/9/07 8:00 AM	0.77	5.13	0.2	169.7
11/9/07 12:00 PM	0.76	4.92	0.2	168.7
11/9/07 4:00 PM	0.75	4.86	0.2	167.7
11/9/07 8:00 PM	0.75	5.00	0.2	166.9
11/10/07 12:00 AM	0.74	5.06	0.2	166.0
11/10/07 4:00 AM	0.74	5.09	0.2	165.2
11/10/07 8:00 AM	0.73	5.11	0.2	164.2
11/10/07 12:00 PM	0.72	4.91	0.2	163.1
11/10/07 4:00 PM	0.71	4.83	0.2	161.9
11/10/07 8:00 PM	0.71	5.00	0.2	161.1
11/11/07 12:00 AM	0.70	5.07	0.2	160.5
11/11/07 4:00 AM	0.70	5.11	0.2	159.8
11/11/07 8:00 AM	0.69	5.12	0.2	158.8
11/11/07 12:00 PM	0.68	4.90	0.2	157.7
11/11/07 4:00 PM	0.67	4.83	0.2	156.6
11/11/07 8:00 PM	0.67	5.01	0.2	155.8
11/12/07 12:00 AM	0.66	5.07	0.2	155.1
11/12/07 4:00 AM	0.66	5.10	0.2	155.0
11/12/07 8:00 AM	0.66	5.11	0.2	154.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
11/12/07 12:00 PM	0.65	4.88	0.2	153.8
11/12/07 4:00 PM	0.65	4.81	0.2	152.7
11/12/07 8:00 PM	0.64	4.97	0.2	151.7
11/13/07 12:00 AM	0.63	5.03	0.2	150.9
11/13/07 4:00 AM	0.63	5.05	0.2	150.1
11/13/07 8:00 AM	0.62	5.06	0.2	149.1
11/13/07 12:00 PM	0.62	4.86	0.2	148.2
11/13/07 4:00 PM	0.61	4.86	0.2	147.4
11/13/07 8:00 PM	0.61	4.97	0.2	146.5
11/14/07 12:00 AM	0.60	5.00	0.2	145.7
11/14/07 4:00 AM	0.60	5.04	0.2	144.9
11/14/07 8:00 AM	0.59	5.04	0.2	144.1
11/14/07 12:00 PM	0.59	4.88	0.2	143.3
11/14/07 4:00 PM	0.58	4.89	0.2	142.2
11/14/07 8:00 PM	0.57	4.98	0.2	141.2
11/15/07 12:00 AM	0.57	5.03	0.2	141.1
11/15/07 4:00 AM	0.57	5.05	0.2	141.4
11/15/07 8:00 AM	0.57	5.05	0.2	141.1
11/15/07 12:00 PM	0.57	4.84	0.2	140.1
11/15/07 4:00 PM	0.56	4.78	0.2	139.0
11/15/07 8:00 PM	0.55	4.96	0.2	138.1
11/16/07 12:00 AM	0.55	5.01	0.2	136.9
11/16/07 4:00 AM	0.54	5.05	0.2	135.4
11/16/07 8:00 AM	0.53	5.05	0.1	133.8
11/16/07 12:00 PM	0.52	4.83	0.1	132.0
11/16/07 4:00 PM	0.51	4.83	0.1	130.6
11/16/07 8:00 PM	0.50	4.94	0.1	129.6
11/17/07 12:00 AM	0.50	5.01	0.1	128.8
11/17/07 4:00 AM	0.49	5.06	0.1	127.8
11/17/07 8:00 AM	0.49	5.10	0.1	126.3
11/17/07 12:00 PM	0.48	4.94	0.1	124.6
11/17/07 4:00 PM	0.47	4.85	0.1	123.7
11/17/07 8:00 PM	0.47	5.02	0.1	123.2
11/18/07 12:00 AM	0.46	5.04	0.1	122.8
11/18/07 4:00 AM	0.46	5.06	0.1	122.7
11/18/07 8:00 AM	0.46	5.07	0.1	122.0
11/18/07 12:00 PM	0.45	4.86	0.1	120.7
11/18/07 4:00 PM	0.45	4.77	0.1	119.6
11/18/07 8:00 PM	0.44	4.96	0.1	118.6
11/19/07 12:00 AM	0.44	5.00	0.1	117.7
11/19/07 4:00 AM	0.43	5.01	0.1	116.9
11/19/07 8:00 AM	0.43	4.99	0.1	115.9
11/19/07 12:00 PM	0.42	4.83	0.1	114.8
11/19/07 4:00 PM	0.42	4.81	0.1	113.5
11/19/07 8:00 PM	0.41	4.94	0.1	112.2
11/20/07 12:00 AM	0.40	4.98	0.1	112.0
11/20/07 4:00 AM	0.41	5.00	0.1	112.3
11/20/07 8:00 AM	0.41	5.01	0.1	111.6
11/20/07 12:00 PM	0.40	4.80	0.1	110.0
11/20/07 4:00 PM	0.39	4.77	0.1	108.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
11/20/07 8:00 PM	0.39	4.92	0.1	107.7
11/21/07 12:00 AM	0.38	4.97	0.1	106.6
11/21/07 4:00 AM	0.38	5.00	0.1	105.4
11/21/07 8:00 AM	0.37	5.02	0.1	104.0
11/21/07 12:00 PM	0.36	4.80	0.1	102.6
11/21/07 4:00 PM	0.36	4.76	0.1	101.3
11/21/07 8:00 PM	0.35	4.92	0.1	100.2
11/22/07 12:00 AM	0.35	4.99	0.1	100.0
11/22/07 4:00 AM	0.35	5.00	0.1	100.6
11/22/07 8:00 AM	0.35	5.02	0.1	100.2
11/22/07 12:00 PM	0.35	4.81	0.1	98.7
11/22/07 4:00 PM	0.34	4.75	0.1	97.7
11/22/07 8:00 PM	0.34	4.92	0.1	96.9
11/23/07 12:00 AM	0.33	5.00	0.1	96.7
11/23/07 4:00 AM	0.33	5.00	0.1	96.9
11/23/07 8:00 AM	0.33	5.00	0.1	97.1
11/23/07 12:00 PM	0.34	4.80	0.1	96.9
11/23/07 4:00 PM	0.33	4.80	0.1	96.0
11/23/07 8:00 PM	0.33	4.91	0.1	94.7
11/24/07 12:00 AM	0.32	4.94	0.1	93.4
11/24/07 4:00 AM	0.32	4.96	0.1	92.0
11/24/07 8:00 AM	0.31	4.97	0.1	90.1
11/24/07 12:00 PM	0.30	4.85	0.1	88.6
11/24/07 4:00 PM	0.30	4.79	0.1	87.6
11/24/07 8:00 PM	0.29	4.92	0.1	86.6
11/25/07 12:00 AM	0.29	4.94	0.1	85.4
11/25/07 4:00 AM	0.29	4.99	0.1	84.3
11/25/07 8:00 AM	0.28	5.00	0.1	83.0
11/25/07 12:00 PM	0.28	4.84	0.1	81.6
11/25/07 4:00 PM	0.27	4.82	0.1	80.7
11/25/07 8:00 PM	0.27	4.90	0.1	79.5
11/26/07 12:00 AM	0.26	4.96	0.1	78.7
11/26/07 4:00 AM	0.26	4.97	0.1	78.7
11/26/07 8:00 AM	0.26	4.97	0.1	77.7
11/26/07 12:00 PM	0.26	4.80	0.1	76.2
11/26/07 4:00 PM	0.25	4.77	0.1	75.8
11/26/07 8:00 PM	0.25	4.89	0.1	75.7
11/27/07 12:00 AM	0.25	4.94	0.1	74.8
11/27/07 4:00 AM	0.25	4.93	0.1	73.5
11/27/07 8:00 AM	0.24	4.97	0.1	71.9
11/27/07 12:00 PM	0.24	4.78	0.1	70.4
11/27/07 4:00 PM	0.23	4.80	0.1	69.2
11/27/07 8:00 PM	0.23	4.92	0.1	67.6
11/28/07 12:00 AM	0.22	4.92	0.1	66.0
11/28/07 4:00 AM	0.22	4.94	0.1	64.5
11/28/07 8:00 AM	0.22	4.94	0.1	62.5
11/28/07 12:00 PM	0.21	4.79	0.1	61.0
11/28/07 4:00 PM	0.21	4.82	0.1	59.6
11/28/07 8:00 PM	0.20	4.88	0.1	57.5
11/29/07 12:00 AM	0.20	4.92	0.1	55.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
11/29/07 4:00 AM	0.19	4.92	0.1	54.2
11/29/07 8:00 AM	0.19	4.93	0.1	52.3
11/29/07 12:00 PM	0.18	4.83	0.1	50.8
11/29/07 4:00 PM	0.18	4.73	0.1	49.1
11/29/07 8:00 PM	0.18	4.88	0.1	47.0
11/30/07 12:00 AM	0.17	4.93	0.1	47.0
11/30/07 4:00 AM	0.18	4.95	0.1	48.6
11/30/07 8:00 AM	0.18	4.95	0.1	48.4
11/30/07 12:00 PM	0.18	4.80	0.1	46.6
11/30/07 4:00 PM	0.17	4.74	0.1	44.5
11/30/07 8:00 PM	0.17	4.89	0.0	41.9
12/1/07 12:00 AM	0.16	4.91	0.0	39.4
12/1/07 4:00 AM	0.16	4.93	0.0	36.7
12/1/07 8:00 AM	0.15	4.94	0.0	33.2
12/1/07 12:00 PM	0.15	4.82	0.0	29.3
12/1/07 4:00 PM	0.14	4.75	0.0	25.5
12/1/07 8:00 PM	0.14	4.89	0.0	21.0
12/2/07 12:00 AM	0.13	4.92	0.0	15.3
12/2/07 4:00 AM	0.13	4.93	0.0	9.2
12/2/07 8:00 AM	0.13	4.95	0.0	3.1
12/2/07 12:00 PM	0.12	4.82	0.0	0.0
12/2/07 4:00 PM	0.12	4.81	0.0	0.0
12/2/07 8:00 PM	0.11	4.87	0.0	0.0
12/3/07 12:00 AM	0.11	4.93	0.0	0.0
12/3/07 4:00 AM	0.10	4.94	0.0	0.0
12/3/07 8:00 AM	0.10	4.96	0.0	0.0
12/3/07 12:00 PM	0.09	4.76	0.0	0.0
12/3/07 4:00 PM	0.09	4.68	0.0	0.0
12/3/07 8:00 PM	0.08	4.87	0.0	0.0
12/4/07 12:00 AM	0.08	4.92	0.0	0.0
12/4/07 4:00 AM	0.08	4.93	0.0	0.0
12/4/07 8:00 AM	0.08	4.95	0.0	0.0
12/4/07 12:00 PM	0.07	4.72	0.0	0.0
12/4/07 4:00 PM	0.06	4.69	0.0	0.0
12/4/07 8:00 PM	0.06	4.86	0.0	0.0
12/5/07 12:00 AM	0.06	4.91	0.0	0.0
12/5/07 4:00 AM	0.06	4.89	0.0	0.0
12/5/07 8:00 AM	0.06	4.95	0.0	0.0
12/5/07 12:00 PM	0.05	4.76	0.0	0.0
12/5/07 4:00 PM	0.04	4.75	0.0	0.0
12/5/07 8:00 PM	0.04	4.94	0.0	0.0
12/6/07 12:00 AM	0.03	4.95	0.0	0.0
12/6/07 4:00 AM	0.04	4.95	0.0	0.0
12/6/07 8:00 AM	0.03	4.96	0.0	0.0
12/6/07 12:00 PM	0.03	4.75	0.0	0.0
12/6/07 4:00 PM	0.02	4.67	0.0	0.0
12/6/07 8:00 PM	0.02	4.77	0.0	0.0
12/7/07 12:00 AM	0.01	4.83	0.0	0.0
12/7/07 4:00 AM	0.01	4.87	0.0	0.0
12/7/07 8:00 AM	0.00	4.89	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
12/7/07 12:00 PM	0.00	4.69	0.0	0.0
12/7/07 4:00 PM	0.00	4.63	0.0	0.0
12/7/07 8:00 PM	-0.01	4.83	0.0	0.0
12/8/07 12:00 AM	-0.01	4.91	0.0	0.0
12/8/07 4:00 AM	-0.01	4.90	0.0	0.0
12/8/07 8:00 AM	-0.02	4.90	0.0	0.0
12/8/07 12:00 PM	-0.02	4.69	0.0	0.0
12/8/07 4:00 PM	-0.02	4.67	0.0	0.0
12/8/07 8:00 PM	-0.03	4.81	0.0	0.0
12/9/07 12:00 AM	-0.04	4.84	0.0	0.0
12/9/07 4:00 AM	-0.04	4.84	0.0	0.0
12/9/07 8:00 AM	-0.04	4.89	0.0	0.0
12/9/07 12:00 PM	-0.05	4.70	0.0	0.0
12/9/07 4:00 PM	-0.05	4.63	0.0	0.0
12/9/07 8:00 PM	-0.06	4.78	0.0	0.0
12/10/07 12:00 AM	-0.06	4.84	0.0	0.0
12/10/07 4:00 AM	-0.06	4.87	0.0	0.0
12/10/07 8:00 AM	-0.06	4.88	0.0	0.0
12/10/07 12:00 PM	-0.07	4.69	0.0	0.0
12/10/07 4:00 PM	-0.07	4.64	0.0	0.0
12/10/07 8:00 PM	-0.08	4.80	0.0	0.0
12/11/07 12:00 AM	-0.08	4.86	0.0	0.0
12/11/07 4:00 AM	-0.09	4.87	0.0	0.0
12/11/07 8:00 AM	-0.09	4.88	0.0	0.0
12/11/07 12:00 PM	-0.10	4.73	0.0	0.0
12/11/07 4:00 PM	-0.10	4.69	0.0	0.0
12/11/07 8:00 PM	-0.11	4.80	0.0	0.0
12/12/07 12:00 AM	-0.11	4.84	0.0	0.0
12/12/07 4:00 AM	-0.11	4.86	0.0	0.0
12/12/07 8:00 AM	-0.10	4.88	0.0	0.0
12/12/07 12:00 PM	-0.11	4.69	0.0	0.0
12/12/07 4:00 PM	-0.07	4.66	0.0	0.0
12/12/07 8:00 PM	-0.07	4.79	0.0	0.0
12/13/07 12:00 AM	-0.07	4.84	0.0	0.0
12/13/07 4:00 AM	-0.07	4.85	0.0	0.0
12/13/07 8:00 AM	-0.07	4.88	0.0	0.0
12/13/07 12:00 PM	-0.07	4.69	0.0	0.0
12/13/07 4:00 PM	-0.07	4.63	0.0	0.0
12/13/07 8:00 PM	-0.07	4.81	0.0	0.0
12/14/07 12:00 AM	-0.07	4.85	0.0	0.0
12/14/07 4:00 AM	-0.07	4.86	0.0	0.0
12/14/07 8:00 AM	-0.07	4.88	0.0	0.0
12/14/07 12:00 PM	-0.07	4.67	0.0	0.0
12/14/07 4:00 PM	-0.07	4.68	0.0	40.2
12/14/07 8:00 PM	0.27	4.75	0.1	79.8
12/15/07 12:00 AM	0.26	4.81	0.1	78.4
12/15/07 4:00 AM	0.26	4.79	0.1	76.8
12/15/07 8:00 AM	0.25	4.81	0.1	75.4
12/15/07 12:00 PM	0.25	4.66	0.1	73.8
12/15/07 4:00 PM	0.24	4.76	0.1	71.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
12/15/07 8:00 PM	0.24	4.82	0.1	70.0
12/16/07 12:00 AM	0.23	4.82	0.1	68.7
12/16/07 4:00 AM	0.23	4.82	0.1	67.7
12/16/07 8:00 AM	0.23	4.79	0.1	67.6
12/16/07 12:00 PM	0.23	4.72	0.1	66.0
12/16/07 4:00 PM	0.22	4.66	0.1	63.0
12/16/07 8:00 PM	0.21	4.78	0.1	60.2
12/17/07 12:00 AM	0.20	4.81	0.1	57.5
12/17/07 4:00 AM	0.20	4.76	0.1	55.6
12/17/07 8:00 AM	0.19	4.80	0.1	52.8
12/17/07 12:00 PM	0.18	4.77	0.1	48.3
12/17/07 4:00 PM	0.17	4.79	0.1	44.5
12/17/07 8:00 PM	0.17	4.92	0.0	42.4
12/18/07 12:00 AM	0.16	4.99	0.0	39.9
12/18/07 4:00 AM	0.16	5.03	0.0	36.1
12/18/07 8:00 AM	0.15	5.10	0.0	30.7
12/18/07 12:00 PM	0.14	4.94	0.0	23.4
12/18/07 4:00 PM	0.13	4.84	0.0	17.2
12/18/07 8:00 PM	0.13	5.02	0.0	12.8
12/19/07 12:00 AM	0.13	5.08	0.0	12.1
12/19/07 4:00 AM	0.13	5.09	0.0	15.5
12/19/07 8:00 AM	0.13	5.09	0.0	8.7
12/19/07 12:00 PM	0.12	4.83	0.0	0.0
12/19/07 4:00 PM	0.12	4.76	0.0	0.0
12/19/07 8:00 PM	0.11	4.90	0.0	0.0
12/20/07 12:00 AM	0.11	4.98	0.0	0.0
12/20/07 4:00 AM	0.12	4.97	0.0	0.0
12/20/07 8:00 AM	0.12	5.00	0.0	0.0
12/20/07 12:00 PM	0.11	4.77	0.0	0.0
12/20/07 4:00 PM	0.11	4.70	0.0	0.0
12/20/07 8:00 PM	0.10	4.88	0.0	0.0
12/21/07 12:00 AM	0.10	4.95	0.0	0.0
12/21/07 4:00 AM	0.10	4.96	0.0	0.0
12/21/07 8:00 AM	0.12	4.96	0.0	14.3
12/21/07 12:00 PM	0.14	4.75	0.0	27.7
12/21/07 4:00 PM	0.14	4.69	0.0	24.4
12/21/07 8:00 PM	0.14	4.82	0.0	21.2
12/22/07 12:00 AM	0.13	4.88	0.0	17.6
12/22/07 4:00 AM	0.13	4.85	0.0	12.8
12/22/07 8:00 AM	0.13	4.84	0.0	5.3
12/22/07 12:00 PM	0.12	4.77	0.0	0.0
12/22/07 4:00 PM	0.11	4.67	0.0	0.0
12/22/07 8:00 PM	0.11	4.85	0.0	0.0
12/23/07 12:00 AM	0.11	4.90	0.0	0.0
12/23/07 4:00 AM	0.10	4.95	0.0	0.0
12/23/07 8:00 AM	0.10	4.97	0.0	0.0
12/23/07 12:00 PM	0.09	4.77	0.0	0.0
12/23/07 4:00 PM	0.09	4.69	0.0	0.0
12/23/07 8:00 PM	0.09	4.84	0.0	0.0
12/24/07 12:00 AM	0.08	4.90	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
12/24/07 4:00 AM	0.08	4.93	0.0	0.0
12/24/07 8:00 AM	0.08	4.93	0.0	0.0
12/24/07 12:00 PM	0.07	4.82	0.0	0.0
12/24/07 4:00 PM	0.07	4.68	0.0	0.0
12/24/07 8:00 PM	0.06	4.85	0.0	0.0
12/25/07 12:00 AM	0.06	4.89	0.0	0.0
12/25/07 4:00 AM	0.06	4.90	0.0	0.0
12/25/07 8:00 AM	0.05	4.91	0.0	0.0
12/25/07 12:00 PM	0.05	4.76	0.0	0.0
12/25/07 4:00 PM	0.05	4.73	0.0	0.0
12/25/07 8:00 PM	0.04	4.83	0.0	0.0
12/26/07 12:00 AM	0.04	4.88	0.0	0.0
12/26/07 4:00 AM	0.04	4.89	0.0	0.0
12/26/07 8:00 AM	0.03	4.89	0.0	0.0
12/26/07 12:00 PM	0.03	4.78	0.0	0.0
12/26/07 4:00 PM	0.02	4.71	0.0	0.0
12/26/07 8:00 PM	0.02	4.84	0.0	0.0
12/27/07 12:00 AM	0.01	4.87	0.0	0.0
12/27/07 4:00 AM	0.01	4.90	0.0	0.0
12/27/07 8:00 AM	0.01	4.92	0.0	0.0
12/27/07 12:00 PM	0.00	4.78	0.0	0.0
12/27/07 4:00 PM	0.00	4.66	0.0	0.0
12/27/07 8:00 PM	-0.01	4.84	0.0	0.0
12/28/07 12:00 AM	-0.01	4.87	0.0	0.0
12/28/07 4:00 AM	-0.01	4.90	0.0	0.0
12/28/07 8:00 AM	-0.02	4.89	0.0	0.0
12/28/07 12:00 PM	-0.02	4.75	0.0	0.0
12/28/07 4:00 PM	-0.02	4.66	0.0	0.0
12/28/07 8:00 PM	-0.03	4.01	0.0	0.0
12/29/07 12:00 AM	-0.03	4.02	0.0	0.0
12/29/07 4:00 AM	-0.03	4.02	0.0	0.0
12/29/07 8:00 AM	-0.04	4.03	0.0	0.0
12/29/07 12:00 PM	-0.04	4.09	0.0	0.0
12/29/07 4:00 PM	-0.04	4.09	0.0	0.0
12/29/07 8:00 PM	-0.05	4.26	0.0	0.0
12/30/07 12:00 AM	-0.05	4.32	0.0	0.0
12/30/07 4:00 AM	-0.05	4.34	0.0	0.0
12/30/07 8:00 AM	-0.05	4.34	0.0	0.0
12/30/07 12:00 PM	-0.05	4.15	0.0	0.0
12/30/07 4:00 PM	-0.06	4.10	0.0	0.0
12/30/07 8:00 PM	-0.07	4.24	0.0	0.0
12/31/07 12:00 AM	-0.07	4.28	0.0	0.0
12/31/07 4:00 AM	-0.07	4.29	0.0	0.0
12/31/07 8:00 AM	-0.07	4.29	0.0	0.0
12/31/07 12:00 PM	-0.07	4.16	0.0	0.0
12/31/07 4:00 PM	-0.08	4.04	0.0	0.0
12/31/07 8:00 PM	-0.08	4.02	0.0	0.0
1/0/00 12:00 AM	0.00	0.00	0.0	0.0
1/1/08 12:00 AM	-0.09	4.00	0.0	0.0
1/1/08 4:00 AM	-0.09	4.01	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
1/1/08 8:00 AM	-0.10	4.03	0.0	35.4
1/1/08 12:00 PM	0.24	4.05	0.1	81.6
1/1/08 4:00 PM	0.32	4.05	0.1	91.8
1/1/08 8:00 PM	0.31	4.13	0.1	89.9
1/2/08 12:00 AM	0.30	4.20	0.1	87.7
1/2/08 4:00 AM	0.29	4.28	0.1	85.2
1/2/08 8:00 AM	0.28	4.33	0.1	82.4
1/2/08 12:00 PM	0.27	4.18	0.1	79.5
1/2/08 4:00 PM	0.26	4.14	0.1	76.8
1/2/08 8:00 PM	0.25	4.32	0.1	74.6
1/3/08 12:00 AM	0.25	4.38	0.1	72.8
1/3/08 4:00 AM	0.24	4.41	0.1	71.1
1/3/08 8:00 AM	0.23	4.41	0.1	68.2
1/3/08 12:00 PM	0.22	4.24	0.1	64.1
1/3/08 4:00 PM	0.21	4.13	0.1	61.3
1/3/08 8:00 PM	0.21	4.28	0.1	59.8
1/4/08 12:00 AM	0.20	4.31	0.1	57.7
1/4/08 4:00 AM	0.20	4.34	0.1	55.9
1/4/08 8:00 AM	0.19	4.34	0.1	52.9
1/4/08 12:00 PM	0.18	4.14	0.1	49.3
1/4/08 4:00 PM	0.18	4.12	0.1	47.2
1/4/08 8:00 PM	0.17	4.20	0.1	46.2
1/5/08 12:00 AM	0.17	4.24	0.1	45.6
1/5/08 4:00 AM	0.17	4.26	0.1	45.6
1/5/08 8:00 AM	0.17	4.24	0.1	43.9
1/5/08 12:00 PM	0.16	4.12	0.0	40.3
1/5/08 4:00 PM	0.16	4.11	0.0	38.5
1/5/08 8:00 PM	0.16	4.17	0.0	37.5
1/6/08 12:00 AM	0.16	4.17	0.0	36.5
1/6/08 4:00 AM	0.15	4.21	0.0	35.4
1/6/08 8:00 AM	0.15	4.22	0.0	32.0
1/6/08 12:00 PM	0.14	4.07	0.0	27.3
1/6/08 4:00 PM	0.14	4.04	0.0	24.9
1/6/08 8:00 PM	0.14	4.26	0.0	23.3
1/7/08 12:00 AM	0.14	4.32	0.0	22.1
1/7/08 4:00 AM	0.14	4.35	0.0	20.2
1/7/08 8:00 AM	0.13	4.34	0.0	13.5
1/7/08 12:00 PM	0.13	4.14	0.0	4.3
1/7/08 4:00 PM	0.12	4.15	0.0	0.0
1/7/08 8:00 PM	0.12	4.25	0.0	0.0
1/8/08 12:00 AM	0.12	4.29	0.0	0.0
1/8/08 4:00 AM	0.11	4.32	0.0	0.0
1/8/08 8:00 AM	0.11	4.36	0.0	0.0
1/8/08 12:00 PM	0.10	4.15	0.0	0.0
1/8/08 4:00 PM	0.10	4.16	0.0	0.0
1/8/08 8:00 PM	0.10	4.26	0.0	0.0
1/9/08 12:00 AM	0.09	4.35	0.0	0.0
1/9/08 4:00 AM	0.09	4.39	0.0	0.0
1/9/08 8:00 AM	0.09	4.40	0.0	0.0
1/9/08 12:00 PM	0.08	4.14	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
1/9/08 4:00 PM	0.08	4.14	0.0	0.0
1/9/08 8:00 PM	0.07	4.27	0.0	0.0
1/10/08 12:00 AM	0.07	4.33	0.0	0.0
1/10/08 4:00 AM	0.07	4.35	0.0	0.0
1/10/08 8:00 AM	0.07	4.36	0.0	0.0
1/10/08 12:00 PM	0.06	4.15	0.0	0.0
1/10/08 4:00 PM	0.06	4.09	0.0	0.0
1/10/08 8:00 PM	0.06	4.26	0.0	0.0
1/11/08 12:00 AM	0.06	4.34	0.0	0.0
1/11/08 4:00 AM	0.05	4.35	0.0	0.0
1/11/08 8:00 AM	0.05	4.36	0.0	0.0
1/11/08 12:00 PM	0.04	4.15	0.0	0.0
1/11/08 4:00 PM	0.04	4.17	0.0	0.0
1/11/08 8:00 PM	0.04	4.23	0.0	0.0
1/12/08 12:00 AM	0.03	4.29	0.0	0.0
1/12/08 4:00 AM	0.03	4.32	0.0	0.0
1/12/08 8:00 AM	0.03	4.34	0.0	0.0
1/12/08 12:00 PM	0.02	4.08	0.0	0.0
1/12/08 4:00 PM	0.02	4.17	0.0	0.0
1/12/08 8:00 PM	0.01	4.25	0.0	0.0
1/13/08 12:00 AM	0.01	4.27	0.0	0.0
1/13/08 4:00 AM	0.01	4.31	0.0	0.0
1/13/08 8:00 AM	0.01	4.30	0.0	0.0
1/13/08 12:00 PM	0.01	4.19	0.0	0.0
1/13/08 4:00 PM	0.00	4.16	0.0	0.0
1/13/08 8:00 PM	0.00	4.24	0.0	0.0
1/14/08 12:00 AM	0.00	4.25	0.0	0.0
1/14/08 4:00 AM	-0.01	4.28	0.0	0.0
1/14/08 8:00 AM	-0.01	4.34	0.0	0.0
1/14/08 12:00 PM	-0.01	4.25	0.0	0.0
1/14/08 4:00 PM	-0.03	4.16	0.0	0.0
1/14/08 8:00 PM	-0.03	3.92	0.0	0.0
1/15/08 12:00 AM	-0.03	3.90	0.0	0.0
1/15/08 4:00 AM	-0.03	3.89	0.0	0.0
1/15/08 8:00 AM	-0.03	3.92	0.0	0.0
1/15/08 12:00 PM	-0.04	4.01	0.0	0.0
1/15/08 4:00 PM	-0.05	3.97	0.0	0.0
1/15/08 8:00 PM	-0.05	3.86	0.0	0.0
1/16/08 12:00 AM	-0.06	3.88	0.0	0.0
1/16/08 4:00 AM	-0.06	3.91	0.0	0.0
1/16/08 8:00 AM	-0.07	3.91	0.0	0.0
1/16/08 12:00 PM	-0.08	4.02	0.0	0.0
1/16/08 4:00 PM	-0.08	3.97	0.0	0.0
1/16/08 8:00 PM	-0.09	3.96	0.0	0.0
1/17/08 12:00 AM	-0.09	3.96	0.0	0.0
1/17/08 4:00 AM	-0.10	3.99	0.0	0.0
1/17/08 8:00 AM	-0.10	3.98	0.0	0.0
1/17/08 12:00 PM	-0.02	4.02	0.0	0.0
1/17/08 4:00 PM	-0.02	4.07	0.0	0.0
1/17/08 8:00 PM	-0.03	4.11	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
1/18/08 12:00 AM	-0.03	4.14	0.0	0.0
1/18/08 4:00 AM	-0.03	4.16	0.0	0.0
1/18/08 8:00 AM	-0.04	4.15	0.0	0.0
1/18/08 12:00 PM	-0.04	4.14	0.0	0.0
1/18/08 4:00 PM	-0.04	4.05	0.0	0.0
1/18/08 8:00 PM	-0.04	4.19	0.0	0.0
1/19/08 12:00 AM	-0.05	4.23	0.0	0.0
1/19/08 4:00 AM	-0.05	4.23	0.0	0.0
1/19/08 8:00 AM	-0.05	4.21	0.0	0.0
1/19/08 12:00 PM	-0.06	4.08	0.0	0.0
1/19/08 4:00 PM	-0.06	4.11	0.0	0.0
1/19/08 8:00 PM	-0.06	4.01	0.0	0.0
1/20/08 12:00 AM	0.04	4.03	0.0	21.4
1/20/08 4:00 AM	0.17	4.14	0.0	44.1
1/20/08 8:00 AM	0.17	4.21	0.1	43.2
1/20/08 12:00 PM	0.16	4.18	0.0	38.1
1/20/08 4:00 PM	0.15	4.20	0.0	32.2
1/20/08 8:00 PM	0.14	4.24	0.0	26.9
1/21/08 12:00 AM	0.14	4.26	0.0	21.9
1/21/08 4:00 AM	0.13	4.25	0.0	15.8
1/21/08 8:00 AM	0.13	4.24	0.0	6.1
1/21/08 12:00 PM	0.12	4.04	0.0	0.0
1/21/08 4:00 PM	0.11	4.09	0.0	0.0
1/21/08 8:00 PM	0.11	4.20	0.0	0.0
1/22/08 12:00 AM	0.11	4.24	0.0	0.0
1/22/08 4:00 AM	0.11	4.26	0.0	0.0
1/22/08 8:00 AM	0.11	4.24	0.0	0.0
1/22/08 12:00 PM	0.10	4.08	0.0	0.0
1/22/08 4:00 PM	0.10	4.11	0.0	0.0
1/22/08 8:00 PM	0.09	4.25	0.0	0.0
1/23/08 12:00 AM	0.09	4.29	0.0	0.0
1/23/08 4:00 AM	0.09	4.32	0.0	0.0
1/23/08 8:00 AM	0.09	4.31	0.0	0.0
1/23/08 12:00 PM	0.09	4.20	0.0	0.0
1/23/08 4:00 PM	0.09	4.14	0.0	0.0
1/23/08 8:00 PM	0.08	4.26	0.0	0.0
1/24/08 12:00 AM	0.08	4.31	0.0	0.0
1/24/08 4:00 AM	0.08	4.29	0.0	0.0
1/24/08 8:00 AM	0.07	4.30	0.0	0.0
1/24/08 12:00 PM	0.07	4.26	0.0	0.0
1/24/08 4:00 PM	0.07	4.17	0.0	0.0
1/24/08 8:00 PM	0.06	4.29	0.0	0.0
1/25/08 12:00 AM	0.06	4.32	0.0	0.0
1/25/08 4:00 AM	0.05	4.34	0.0	0.0
1/25/08 8:00 AM	0.05	4.39	0.0	0.0
1/25/08 12:00 PM	0.04	4.29	0.0	0.0
1/25/08 4:00 PM	0.03	4.19	0.0	0.0
1/25/08 8:00 PM	0.03	4.33	0.0	0.0
1/26/08 12:00 AM	0.03	4.38	0.0	0.0
1/26/08 4:00 AM	0.03	4.40	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
1/26/08 8:00 AM	0.03	4.42	0.0	0.0
1/26/08 12:00 PM	0.02	4.20	0.0	0.0
1/26/08 4:00 PM	0.01	4.11	0.0	0.0
1/26/08 8:00 PM	0.01	4.29	0.0	0.0
1/27/08 12:00 AM	0.01	4.32	0.0	0.0
1/27/08 4:00 AM	0.01	4.30	0.0	0.0
1/27/08 8:00 AM	0.01	4.27	0.0	0.0
1/27/08 12:00 PM	0.00	4.20	0.0	0.0
1/27/08 4:00 PM	0.00	4.13	0.0	0.0
1/27/08 8:00 PM	-0.01	4.33	0.0	0.0
1/28/08 12:00 AM	-0.01	4.40	0.0	0.0
1/28/08 4:00 AM	-0.01	4.42	0.0	0.0
1/28/08 8:00 AM	-0.02	4.47	0.0	0.0
1/28/08 12:00 PM	-0.03	4.27	0.0	0.0
1/28/08 4:00 PM	-0.04	4.13	0.0	0.0
1/28/08 8:00 PM	-0.04	3.99	0.0	0.0
1/29/08 12:00 AM	-0.04	3.99	0.0	0.0
1/29/08 4:00 AM	-0.04	4.03	0.0	0.0
1/29/08 8:00 AM	-0.04	4.04	0.0	0.0
1/29/08 12:00 PM	-0.05	4.05	0.0	0.0
1/29/08 4:00 PM	-0.06	4.03	0.0	0.0
1/29/08 8:00 PM	-0.06	3.97	0.0	0.0
1/30/08 12:00 AM	-0.06	3.97	0.0	0.0
1/30/08 4:00 AM	-0.07	4.00	0.0	0.0
1/30/08 8:00 AM	-0.07	4.01	0.0	0.0
1/30/08 12:00 PM	-0.08	4.04	0.0	0.0
1/30/08 4:00 PM	-0.08	4.03	0.0	0.0
1/30/08 8:00 PM	-0.09	3.97	0.0	0.0
1/31/08 12:00 AM	-0.09	3.98	0.0	0.0
1/31/08 4:00 AM	-0.09	3.99	0.0	0.0
1/31/08 8:00 AM	-0.09	4.01	0.0	0.0
1/31/08 12:00 PM	-0.10	4.07	0.0	0.0
1/31/08 4:00 PM	-0.11	4.04	0.0	0.0
1/31/08 8:00 PM	-0.11	3.95	0.0	0.0
2/1/08 12:00 AM	-0.12	3.95	0.0	0.0
2/1/08 4:00 AM	-0.12	3.96	0.0	0.0
2/1/08 8:00 AM	-0.12	3.97	0.0	0.0
2/1/08 12:00 PM	-0.11	4.03	0.0	0.0
2/1/08 4:00 PM	-0.09	4.01	0.0	0.0
2/1/08 8:00 PM	-0.10	3.96	0.0	0.0
2/2/08 12:00 AM	-0.10	3.95	0.0	0.0
2/2/08 4:00 AM	-0.10	3.96	0.0	0.0
2/2/08 8:00 AM	-0.10	3.96	0.0	0.0
2/2/08 12:00 PM	-0.10	4.02	0.0	0.0
2/2/08 4:00 PM	-0.10	3.98	0.0	0.0
2/2/08 8:00 PM	-0.10	3.92	0.0	0.0
2/3/08 12:00 AM	-0.10	3.92	0.0	0.0
2/3/08 4:00 AM	-0.10	3.93	0.0	0.0
2/3/08 8:00 AM	-0.10	3.94	0.0	0.0
2/3/08 12:00 PM	-0.10	3.99	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
2/3/08 4:00 PM	-0.10	3.96	0.0	0.0
2/3/08 8:00 PM	-0.10	3.90	0.0	0.0
2/4/08 12:00 AM	-0.10	3.92	0.0	0.0
2/4/08 4:00 AM	-0.10	3.90	0.0	0.0
2/4/08 8:00 AM	-0.10	3.94	0.0	0.0
2/4/08 12:00 PM	-0.10	4.00	0.0	0.0
2/4/08 4:00 PM	-0.10	3.92	0.0	0.0
2/4/08 8:00 PM	-0.10	3.87	0.0	0.0
2/5/08 12:00 AM	-0.10	3.89	0.0	0.0
2/5/08 4:00 AM	-0.10	3.89	0.0	0.0
2/5/08 8:00 AM	-0.10	3.92	0.0	0.0
2/5/08 12:00 PM	-0.10	3.98	0.0	0.0
2/5/08 4:00 PM	-0.10	3.93	0.0	0.0
2/5/08 8:00 PM	-0.10	3.88	0.0	0.0
2/6/08 12:00 AM	-0.10	3.88	0.0	0.0
2/6/08 4:00 AM	-0.10	3.92	0.0	0.0
2/6/08 8:00 AM	-0.10	3.92	0.0	0.0
2/6/08 12:00 PM	-0.10	3.95	0.0	0.0
2/6/08 4:00 PM	-0.10	3.92	0.0	0.0
2/6/08 8:00 PM	-0.08	3.91	0.0	0.0
2/7/08 12:00 AM	-0.08	3.92	0.0	0.0
2/7/08 4:00 AM	-0.09	3.93	0.0	0.0
2/7/08 8:00 AM	-0.09	3.95	0.0	0.0
2/7/08 12:00 PM	-0.08	3.99	0.0	0.0
2/7/08 4:00 PM	-0.08	3.96	0.0	0.0
2/7/08 8:00 PM	-0.09	3.93	0.0	0.0
2/8/08 12:00 AM	-0.09	3.92	0.0	0.0
2/8/08 4:00 AM	-0.09	3.93	0.0	0.0
2/8/08 8:00 AM	-0.09	3.96	0.0	0.0
2/8/08 12:00 PM	-0.09	3.99	0.0	0.0
2/8/08 4:00 PM	-0.08	3.97	0.0	0.0
2/8/08 8:00 PM	-0.09	3.94	0.0	0.0
2/9/08 12:00 AM	-0.09	3.92	0.0	0.0
2/9/08 4:00 AM	-0.09	3.93	0.0	0.0
2/9/08 8:00 AM	-0.09	3.96	0.0	0.0
2/9/08 12:00 PM	-0.09	4.00	0.0	0.0
2/9/08 4:00 PM	-0.08	3.95	0.0	0.0
2/9/08 8:00 PM	-0.09	3.93	0.0	0.0
2/10/08 12:00 AM	-0.09	3.92	0.0	0.0
2/10/08 4:00 AM	-0.09	3.92	0.0	0.0
2/10/08 8:00 AM	-0.09	3.93	0.0	0.0
2/10/08 12:00 PM	-0.09	3.97	0.0	0.0
2/10/08 4:00 PM	-0.09	3.90	0.0	0.0
2/10/08 8:00 PM	-0.09	3.86	0.0	0.0
2/11/08 12:00 AM	-0.09	3.85	0.0	0.0
2/11/08 4:00 AM	-0.08	3.87	0.0	0.0
2/11/08 8:00 AM	-0.08	3.90	0.0	0.0
2/11/08 12:00 PM	-0.09	3.95	0.0	0.0
2/11/08 4:00 PM	-0.09	3.90	0.0	0.0
2/11/08 8:00 PM	-0.09	3.84	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
2/12/08 12:00 AM	-0.09	3.85	0.0	0.0
2/12/08 4:00 AM	-0.09	3.87	0.0	0.0
2/12/08 8:00 AM	-0.09	3.91	0.0	0.0
2/12/08 12:00 PM	-0.09	3.94	0.0	0.0
2/12/08 4:00 PM	-0.09	3.94	0.0	0.0
2/12/08 8:00 PM	-0.09	3.98	0.0	59.4
2/13/08 12:00 AM	0.44	4.24	0.1	144.6
2/13/08 4:00 AM	0.77	4.30	0.2	169.3
2/13/08 8:00 AM	0.76	4.28	0.2	178.2
2/13/08 12:00 PM	0.91	4.34	0.2	192.6
2/13/08 4:00 PM	0.99	4.44	0.2	195.0
2/13/08 8:00 PM	0.95	4.42	0.2	190.6
2/14/08 12:00 AM	0.92	4.45	0.2	186.0
2/14/08 4:00 AM	0.87	4.44	0.2	180.8
2/14/08 8:00 AM	0.83	4.45	0.2	175.6
2/14/08 12:00 PM	0.79	4.50	0.2	170.2
2/14/08 4:00 PM	0.75	4.49	0.2	164.7
2/14/08 8:00 PM	0.71	4.44	0.2	159.5
2/15/08 12:00 AM	0.67	4.46	0.2	154.1
2/15/08 4:00 AM	0.64	4.46	0.2	148.7
2/15/08 8:00 AM	0.60	4.46	0.2	143.3
2/15/08 12:00 PM	0.57	4.52	0.2	138.1
2/15/08 4:00 PM	0.53	4.49	0.2	132.9
2/15/08 8:00 PM	0.50	4.46	0.1	127.6
2/16/08 12:00 AM	0.47	4.46	0.1	123.0
2/16/08 4:00 AM	0.45	4.47	0.1	118.9
2/16/08 8:00 AM	0.43	4.46	0.1	114.6
2/16/08 12:00 PM	0.41	4.45	0.1	110.0
2/16/08 4:00 PM	0.38	4.37	0.1	105.6
2/16/08 8:00 PM	0.36	4.52	0.1	101.5
2/17/08 12:00 AM	0.35	4.57	0.1	98.3
2/17/08 4:00 AM	0.33	4.60	0.1	95.7
2/17/08 8:00 AM	0.32	4.60	0.1	93.2
2/17/08 12:00 PM	0.31	4.42	0.1	91.1
2/17/08 4:00 PM	0.31	4.36	0.1	89.1
2/17/08 8:00 PM	0.30	4.49	0.1	87.0
2/18/08 12:00 AM	0.29	4.53	0.1	85.4
2/18/08 4:00 AM	0.29	4.52	0.1	84.4
2/18/08 8:00 AM	0.28	4.50	0.1	83.3
2/18/08 12:00 PM	0.28	4.41	0.1	82.2
2/18/08 4:00 PM	0.27	4.37	0.1	80.9
2/18/08 8:00 PM	0.27	4.50	0.1	78.8
2/19/08 12:00 AM	0.26	4.53	0.1	79.3
2/19/08 4:00 AM	0.27	4.57	0.1	80.7
2/19/08 8:00 AM	0.27	4.62	0.1	75.4
2/19/08 12:00 PM	0.24	4.49	0.1	68.8
2/19/08 4:00 PM	0.23	4.39	0.1	64.4
2/19/08 8:00 PM	0.21	4.56	0.1	67.1
2/20/08 12:00 AM	0.24	4.60	0.1	72.4
2/20/08 4:00 AM	0.24	4.64	0.1	72.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
2/20/08 8:00 AM	0.24	4.66	0.1	63.3
2/20/08 12:00 PM	0.19	4.49	0.1	57.9
2/20/08 4:00 PM	0.21	4.43	0.1	61.3
2/20/08 8:00 PM	0.21	4.51	0.1	60.1
2/21/08 12:00 AM	0.20	4.56	0.1	59.0
2/21/08 4:00 AM	0.20	4.57	0.1	58.5
2/21/08 8:00 AM	0.20	4.56	0.1	58.4
2/21/08 12:00 PM	0.20	4.45	0.1	58.2
2/21/08 4:00 PM	0.20	4.38	0.1	57.2
2/21/08 8:00 PM	0.20	4.48	0.1	56.2
2/22/08 12:00 AM	0.20	4.52	0.1	56.2
2/22/08 4:00 AM	0.20	4.51	0.1	56.9
2/22/08 8:00 AM	0.20	4.53	0.1	56.4
2/22/08 12:00 PM	0.19	4.38	0.1	55.2
2/22/08 4:00 PM	0.19	4.38	0.1	54.0
2/22/08 8:00 PM	0.19	4.49	0.1	51.9
2/23/08 12:00 AM	0.18	4.52	0.1	50.5
2/23/08 4:00 AM	0.18	4.52	0.1	49.5
2/23/08 8:00 AM	0.18	4.51	0.1	48.2
2/23/08 12:00 PM	0.18	4.42	0.1	46.6
2/23/08 4:00 PM	0.17	4.38	0.1	45.0
2/23/08 8:00 PM	0.17	4.49	0.0	43.3
2/24/08 12:00 AM	0.17	4.52	0.0	42.4
2/24/08 4:00 AM	0.17	4.51	0.0	43.0
2/24/08 8:00 AM	0.17	4.52	0.0	42.1
2/24/08 12:00 PM	0.16	4.41	0.0	40.8
2/24/08 4:00 PM	0.16	4.37	0.0	39.6
2/24/08 8:00 PM	0.16	4.49	0.0	36.7
2/25/08 12:00 AM	0.15	4.52	0.0	34.3
2/25/08 4:00 AM	0.15	4.52	0.0	33.5
2/25/08 8:00 AM	0.15	4.53	0.0	32.1
2/25/08 12:00 PM	0.15	4.39	0.0	29.3
2/25/08 4:00 PM	0.14	4.33	0.0	25.9
2/25/08 8:00 PM	0.14	4.48	0.0	33.0
2/26/08 12:00 AM	0.17	4.52	0.0	48.2
2/26/08 4:00 AM	0.19	4.53	0.1	51.3
2/26/08 8:00 AM	0.18	4.51	0.1	33.5
2/26/08 12:00 PM	0.13	4.40	0.0	16.0
2/26/08 4:00 PM	0.13	4.37	0.0	6.8
2/26/08 8:00 PM	0.12	4.45	0.0	0.0
2/27/08 12:00 AM	0.12	4.46	0.0	0.0
2/27/08 4:00 AM	0.12	4.48	0.0	0.0
2/27/08 8:00 AM	0.11	4.55	0.0	0.0
2/27/08 12:00 PM	0.11	4.55	0.0	0.0
2/27/08 4:00 PM	0.10	4.50	0.0	0.0
2/27/08 8:00 PM	0.09	4.63	0.0	0.0
2/28/08 12:00 AM	0.08	4.69	0.0	0.0
2/28/08 4:00 AM	0.08	4.71	0.0	0.0
2/28/08 8:00 AM	0.08	4.76	0.0	0.0
2/28/08 12:00 PM	0.06	4.58	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
2/28/08 4:00 PM	0.06	4.51	0.0	0.0
2/28/08 8:00 PM	0.05	4.65	0.0	0.0
2/29/08 12:00 AM	0.05	4.72	0.0	0.0
2/29/08 4:00 AM	0.05	4.72	0.0	0.0
2/29/08 8:00 AM	0.04	4.74	0.0	0.0
2/29/08 12:00 PM	0.03	4.50	0.0	0.0
2/29/08 4:00 PM	0.02	4.40	0.0	0.0
2/29/08 8:00 PM	0.02	4.54	0.0	0.0
3/1/08 12:00 AM	0.02	4.62	0.0	0.0
3/1/08 4:00 AM	0.02	4.65	0.0	0.0
3/1/08 8:00 AM	0.02	4.67	0.0	0.0
3/1/08 12:00 PM	0.01	4.42	0.0	0.0
3/1/08 4:00 PM	0.01	4.36	0.0	0.0
3/1/08 8:00 PM	0.01	4.51	0.0	0.0
3/2/08 12:00 AM	0.01	4.57	0.0	0.0
3/2/08 4:00 AM	0.00	4.59	0.0	0.0
3/2/08 8:00 AM	0.00	4.61	0.0	0.0
3/2/08 12:00 PM	-0.01	4.43	0.0	0.0
3/2/08 4:00 PM	-0.01	4.36	0.0	0.0
3/2/08 8:00 PM	-0.02	4.48	0.0	0.0
3/3/08 12:00 AM	0.00	4.57	0.0	0.0
3/3/08 4:00 AM	-0.02	4.60	0.0	0.0
3/3/08 8:00 AM	-0.03	4.59	0.0	0.0
3/3/08 12:00 PM	-0.03	4.37	0.0	0.0
3/3/08 4:00 PM	-0.04	4.32	0.0	0.0
3/3/08 8:00 PM	-0.04	4.44	0.0	0.0
3/4/08 12:00 AM	-0.04	4.50	0.0	0.0
3/4/08 4:00 AM	-0.04	4.04	0.0	0.0
3/4/08 8:00 AM	-0.02	4.06	0.0	0.0
3/4/08 12:00 PM	-0.02	4.09	0.0	0.0
3/4/08 4:00 PM	-0.02	4.06	0.0	0.0
3/4/08 8:00 PM	-0.02	4.04	0.0	0.0
3/5/08 12:00 AM	-0.03	4.05	0.0	0.0
3/5/08 4:00 AM	-0.02	4.05	0.0	0.0
3/5/08 8:00 AM	0.02	4.08	0.0	0.0
3/5/08 12:00 PM	0.02	4.12	0.0	0.0
3/5/08 4:00 PM	0.02	4.05	0.0	0.0
3/5/08 8:00 PM	0.01	4.02	0.0	0.0
3/6/08 12:00 AM	0.02	4.01	0.0	0.0
3/6/08 4:00 AM	0.01	4.02	0.0	0.0
3/6/08 8:00 AM	0.01	4.03	0.0	0.0
3/6/08 12:00 PM	0.00	4.07	0.0	0.0
3/6/08 4:00 PM	0.00	4.04	0.0	0.0
3/6/08 8:00 PM	0.06	4.01	0.0	0.0
3/7/08 12:00 AM	-0.01	4.01	0.0	0.0
3/7/08 4:00 AM	-0.01	4.02	0.0	0.0
3/7/08 8:00 AM	-0.01	4.03	0.0	0.0
3/7/08 12:00 PM	-0.02	4.08	0.0	0.0
3/7/08 4:00 PM	-0.02	4.04	0.0	0.0
3/7/08 8:00 PM	-0.03	4.01	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
3/8/08 12:00 AM	-0.03	4.01	0.0	39.9
3/8/08 4:00 AM	0.27	4.09	0.1	83.8
3/8/08 8:00 AM	0.30	4.16	0.1	86.8
3/8/08 12:00 PM	0.29	4.10	0.1	84.0
3/8/08 4:00 PM	0.28	4.12	0.1	80.2
3/8/08 8:00 PM	0.26	4.24	0.1	76.6
3/9/08 12:00 AM	0.25	4.31	0.1	75.1
3/9/08 4:00 AM	0.25	4.35	0.1	75.4
3/9/08 8:00 AM	0.25	4.36	0.1	73.9
3/9/08 12:00 PM	0.24	4.14	0.1	70.8
3/9/08 4:00 PM	0.23	4.06	0.1	68.8
3/9/08 8:00 PM	0.23	4.20	0.1	67.2
3/10/08 12:00 AM	0.22	4.26	0.1	65.3
3/10/08 4:00 AM	0.22	4.28	0.1	63.7
3/10/08 8:00 AM	0.21	4.27	0.1	61.6
3/10/08 12:00 PM	0.21	4.10	0.1	63.9
3/10/08 4:00 PM	0.23	4.18	0.1	72.2
3/10/08 8:00 PM	0.26	4.21	0.1	77.2
3/11/08 12:00 AM	0.26	4.26	0.1	75.0
3/11/08 4:00 AM	0.24	4.27	0.1	72.0
3/11/08 8:00 AM	0.24	4.28	0.1	56.9
3/11/08 12:00 PM	0.17	4.17	0.0	46.0
3/11/08 4:00 PM	0.18	4.11	0.1	51.5
3/11/08 8:00 PM	0.19	4.23	0.1	52.3
3/12/08 12:00 AM	0.18	4.25	0.1	50.6
3/12/08 4:00 AM	0.18	4.25	0.1	49.5
3/12/08 8:00 AM	0.18	4.24	0.1	48.0
3/12/08 12:00 PM	0.17	4.13	0.1	47.0
3/12/08 4:00 PM	0.17	4.11	0.1	44.7
3/12/08 8:00 PM	0.17	4.27	0.0	40.8
3/13/08 12:00 AM	0.16	4.06	0.0	39.4
3/13/08 4:00 AM	0.16	4.08	0.0	39.2
3/13/08 8:00 AM	0.16	4.12	0.0	36.1
3/13/08 12:00 PM	0.15	4.06	0.0	32.1
3/13/08 4:00 PM	0.15	4.07	0.0	28.6
3/13/08 8:00 PM	0.14	4.23	0.0	24.8
3/14/08 12:00 AM	0.14	4.02	0.0	21.6
3/14/08 4:00 AM	0.13	4.03	0.0	18.8
3/14/08 8:00 AM	0.13	4.05	0.0	8.7
3/14/08 12:00 PM	0.12	4.09	0.0	19.8
3/14/08 4:00 PM	0.16	4.04	0.0	43.1
3/14/08 8:00 PM	0.17	4.14	0.1	45.4
3/15/08 12:00 AM	0.17	4.20	0.0	43.5
3/15/08 4:00 AM	0.17	4.19	0.0	42.4
3/15/08 8:00 AM	0.16	4.19	0.0	40.3
3/15/08 12:00 PM	0.16	4.09	0.0	39.2
3/15/08 4:00 PM	0.16	4.07	0.0	37.4
3/15/08 8:00 PM	0.15	4.04	0.0	33.8
3/16/08 12:00 AM	0.15	4.05	0.0	32.7
3/16/08 4:00 AM	0.15	4.05	0.0	37.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
3/16/08 8:00 AM	0.16	4.07	0.0	21.0
3/16/08 12:00 PM	0.12	4.09	0.0	12.2
3/16/08 4:00 PM	0.14	4.05	0.0	24.1
3/16/08 8:00 PM	0.14	4.02	0.0	21.5
3/17/08 12:00 AM	0.13	4.04	0.0	17.2
3/17/08 4:00 AM	0.13	4.02	0.0	11.8
3/17/08 8:00 AM	0.13	4.04	0.0	4.3
3/17/08 12:00 PM	0.12	4.05	0.0	0.0
3/17/08 4:00 PM	0.12	4.01	0.0	0.0
3/17/08 8:00 PM	0.11	3.99	0.0	0.0
3/18/08 12:00 AM	0.10	3.99	0.0	0.0
3/18/08 4:00 AM	0.10	3.99	0.0	0.0
3/18/08 8:00 AM	0.10	4.01	0.0	0.0
3/18/08 12:00 PM	0.10	4.03	0.0	0.0
3/18/08 4:00 PM	0.09	3.96	0.0	0.0
3/18/08 8:00 PM	0.08	3.97	0.0	0.0
3/19/08 12:00 AM	0.08	3.98	0.0	0.0
3/19/08 4:00 AM	0.08	3.99	0.0	0.0
3/19/08 8:00 AM	0.08	4.02	0.0	0.0
3/19/08 12:00 PM	0.04	4.03	0.0	0.0
3/19/08 4:00 PM	0.05	3.99	0.0	0.0
3/19/08 8:00 PM	0.04	3.99	0.0	0.0
3/20/08 12:00 AM	0.03	3.98	0.0	0.0
3/20/08 4:00 AM	0.04	3.99	0.0	0.0
3/20/08 8:00 AM	0.04	4.00	0.0	0.0
3/20/08 12:00 PM	0.04	4.01	0.0	0.0
3/20/08 4:00 PM	0.03	3.99	0.0	0.0
3/20/08 8:00 PM	0.03	3.94	0.0	0.0
3/21/08 12:00 AM	0.02	3.94	0.0	0.0
3/21/08 4:00 AM	0.02	3.94	0.0	0.0
3/21/08 8:00 AM	0.01	3.95	0.0	0.0
3/21/08 12:00 PM	0.01	3.98	0.0	0.0
3/21/08 4:00 PM	0.00	3.95	0.0	0.0
3/21/08 8:00 PM	-0.01	3.89	0.0	0.0
3/22/08 12:00 AM	-0.01	3.91	0.0	0.0
3/22/08 4:00 AM	-0.01	3.91	0.0	0.0
3/22/08 8:00 AM	-0.01	3.92	0.0	0.0
3/22/08 12:00 PM	-0.01	3.93	0.0	0.0
3/22/08 4:00 PM	0.10	4.03	0.0	0.0
3/22/08 8:00 PM	0.13	4.01	0.0	0.0
3/23/08 12:00 AM	0.12	4.04	0.0	34.3
3/23/08 4:00 AM	0.23	4.09	0.1	68.5
3/23/08 8:00 AM	0.23	4.11	0.1	67.4
3/23/08 12:00 PM	0.22	4.12	0.1	68.2
3/23/08 4:00 PM	0.23	4.13	0.1	69.4
3/23/08 8:00 PM	0.23	4.09	0.1	66.6
3/24/08 12:00 AM	0.22	4.09	0.1	63.6
3/24/08 4:00 AM	0.21	4.11	0.1	65.6
3/24/08 8:00 AM	0.23	4.11	0.1	67.6
3/24/08 12:00 PM	0.22	4.12	0.1	65.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
3/24/08 4:00 PM	0.22	4.08	0.1	62.5
3/24/08 8:00 PM	0.21	4.02	0.1	58.5
3/25/08 12:00 AM	0.20	4.01	0.1	55.7
3/25/08 4:00 AM	0.19	4.02	0.1	53.8
3/25/08 8:00 AM	0.19	4.03	0.1	50.2
3/25/08 12:00 PM	0.18	4.05	0.1	45.5
3/25/08 4:00 PM	0.17	4.02	0.0	41.7
3/25/08 8:00 PM	0.16	3.97	0.0	38.7
3/26/08 12:00 AM	0.16	3.98	0.0	35.9
3/26/08 4:00 AM	0.15	3.98	0.0	33.5
3/26/08 8:00 AM	0.15	4.00	0.0	28.8
3/26/08 12:00 PM	0.14	4.03	0.0	23.6
3/26/08 4:00 PM	0.14	3.99	0.0	17.1
3/26/08 8:00 PM	0.13	3.96	0.0	6.1
3/27/08 12:00 AM	0.13	3.96	0.0	0.0
3/27/08 4:00 AM	0.12	3.97	0.0	0.0
3/27/08 8:00 AM	0.13	3.98	0.0	0.0
3/27/08 12:00 PM	0.12	4.02	0.0	0.0
3/27/08 4:00 PM	0.12	3.96	0.0	0.0
3/27/08 8:00 PM	0.11	3.93	0.0	0.0
3/28/08 12:00 AM	0.10	3.94	0.0	0.0
3/28/08 4:00 AM	0.10	3.93	0.0	0.0
3/28/08 8:00 AM	0.10	3.97	0.0	0.0
3/28/08 12:00 PM	0.09	4.00	0.0	0.0
3/28/08 4:00 PM	0.09	3.95	0.0	0.0
3/28/08 8:00 PM	0.10	3.92	0.0	0.0
3/29/08 12:00 AM	0.09	3.94	0.0	0.0
3/29/08 4:00 AM	0.09	3.91	0.0	0.0
3/29/08 8:00 AM	0.09	3.96	0.0	0.0
3/29/08 12:00 PM	0.03	3.98	0.0	0.0
3/29/08 4:00 PM	0.07	3.93	0.0	0.0
3/29/08 8:00 PM	0.06	3.89	0.0	0.0
3/30/08 12:00 AM	0.06	3.90	0.0	0.0
3/30/08 4:00 AM	0.05	3.90	0.0	0.0
3/30/08 8:00 AM	0.05	3.92	0.0	0.0
3/30/08 12:00 PM	0.04	3.96	0.0	0.0
3/30/08 4:00 PM	0.04	3.90	0.0	0.0
3/30/08 8:00 PM	0.03	3.85	0.0	0.0
3/31/08 12:00 AM	0.03	3.89	0.0	0.0
3/31/08 4:00 AM	0.03	3.90	0.0	0.0
3/31/08 8:00 AM	0.03	3.92	0.0	0.0
3/31/08 12:00 PM	0.03	3.96	0.0	0.0
3/31/08 4:00 PM	0.02	3.87	0.0	0.0
3/31/08 8:00 PM	0.01	3.85	0.0	0.0
4/1/08 12:00 AM	0.01	3.89	0.0	0.0
4/1/08 4:00 AM	0.00	3.90	0.0	0.0
4/1/08 8:00 AM	0.00	3.90	0.0	0.0
4/1/08 12:00 PM	0.00	3.94	0.0	0.0
4/1/08 4:00 PM	0.02	3.91	0.0	0.0
4/1/08 8:00 PM	0.06	3.95	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
4/2/08 12:00 AM	0.08	3.98	0.0	0.0
4/2/08 4:00 AM	0.08	3.99	0.0	0.0
4/2/08 8:00 AM	0.07	4.01	0.0	0.0
4/2/08 12:00 PM	0.07	4.03	0.0	0.0
4/2/08 4:00 PM	0.07	3.95	0.0	78.4
4/2/08 8:00 PM	0.67	4.26	0.2	154.8
4/3/08 12:00 AM	0.65	4.33	0.2	150.7
4/3/08 4:00 AM	0.62	4.36	0.2	146.1
4/3/08 8:00 AM	0.59	4.38	0.2	141.4
4/3/08 12:00 PM	0.55	4.41	0.2	136.4
4/3/08 4:00 PM	0.52	4.38	0.1	142.0
4/3/08 8:00 PM	0.63	4.39	0.2	147.8
4/4/08 12:00 AM	0.60	4.39	0.2	143.5
4/4/08 4:00 AM	0.57	4.40	0.2	139.0
4/4/08 8:00 AM	0.54	4.41	0.2	134.4
4/4/08 12:00 PM	0.51	4.44	0.1	129.7
4/4/08 4:00 PM	0.49	4.40	0.1	124.8
4/4/08 8:00 PM	0.46	4.38	0.1	120.0
4/5/08 12:00 AM	0.43	4.37	0.1	115.5
4/5/08 4:00 AM	0.41	4.38	0.1	111.1
4/5/08 8:00 AM	0.39	4.40	0.1	106.9
4/5/08 12:00 PM	0.37	4.42	0.1	102.6
4/5/08 4:00 PM	0.35	4.37	0.1	98.2
4/5/08 8:00 PM	0.33	4.34	0.1	94.4
4/6/08 12:00 AM	0.32	4.33	0.1	120.4
4/6/08 4:00 AM	0.61	4.45	0.2	151.1
4/6/08 8:00 AM	0.66	4.46	0.2	152.4
4/6/08 12:00 PM	0.63	4.49	0.2	148.0
4/6/08 4:00 PM	0.60	4.46	0.2	143.4
4/6/08 8:00 PM	0.57	4.46	0.2	169.0
4/7/08 12:00 AM	0.99	4.54	0.2	207.1
4/7/08 4:00 AM	1.18	4.54	0.2	215.9
4/7/08 8:00 AM	1.15	4.54	0.2	213.0
4/7/08 12:00 PM	1.12	4.40	0.2	209.8
4/7/08 4:00 PM	1.09	4.45	0.2	206.6
4/7/08 8:00 PM	1.06	4.65	0.2	203.5
4/8/08 12:00 AM	1.03	4.70	0.2	200.4
4/8/08 4:00 AM	1.01	4.72	0.2	197.3
4/8/08 8:00 AM	0.98	4.73	0.2	194.1
4/8/08 12:00 PM	0.95	4.65	0.2	190.7
4/8/08 4:00 PM	0.92	4.55	0.2	187.9
4/8/08 8:00 PM	0.90	4.64	0.2	188.4
4/9/08 12:00 AM	0.93	4.70	0.2	187.3
4/9/08 4:00 AM	0.88	4.73	0.2	183.5
4/9/08 8:00 AM	0.87	4.72	0.2	177.8
4/9/08 12:00 PM	0.79	4.61	0.2	171.9
4/9/08 4:00 PM	0.77	4.56	0.2	169.1
4/9/08 8:00 PM	0.75	4.63	0.2	165.9
4/10/08 12:00 AM	0.73	4.72	0.2	163.1
4/10/08 4:00 AM	0.71	4.76	0.2	160.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
4/10/08 8:00 AM	0.69	4.71	0.2	157.5
4/10/08 12:00 PM	0.67	4.54	0.2	154.5
4/10/08 4:00 PM	0.65	4.49	0.2	151.6
4/10/08 8:00 PM	0.63	4.59	0.2	148.4
4/11/08 12:00 AM	0.60	4.69	0.2	145.4
4/11/08 4:00 AM	0.59	4.73	0.2	142.8
4/11/08 8:00 AM	0.57	4.69	0.2	139.8
4/11/08 12:00 PM	0.55	4.52	0.2	135.1
4/11/08 4:00 PM	0.51	4.48	0.1	133.6
4/11/08 8:00 PM	0.53	4.58	0.2	136.0
4/12/08 12:00 AM	0.54	4.64	0.2	135.9
4/12/08 4:00 AM	0.53	4.63	0.2	132.8
4/12/08 8:00 AM	0.50	4.62	0.1	127.7
4/12/08 12:00 PM	0.47	4.53	0.1	123.9
4/12/08 4:00 PM	0.46	4.51	0.1	121.1
4/12/08 8:00 PM	0.44	4.58	0.1	118.3
4/13/08 12:00 AM	0.43	4.62	0.1	115.8
4/13/08 4:00 AM	0.42	4.64	0.1	113.6
4/13/08 8:00 AM	0.41	4.59	0.1	112.8
4/13/08 12:00 PM	0.41	4.53	0.1	111.8
4/13/08 4:00 PM	0.40	4.53	0.1	109.1
4/13/08 8:00 PM	0.38	4.64	0.1	106.1
4/14/08 12:00 AM	0.37	4.70	0.1	103.4
4/14/08 4:00 AM	0.36	4.79	0.1	101.4
4/14/08 8:00 AM	0.35	4.73	0.1	99.0
4/14/08 12:00 PM	0.34	4.59	0.1	96.1
4/14/08 4:00 PM	0.33	4.56	0.1	93.3
4/14/08 8:00 PM	0.31	4.67	0.1	90.4
4/15/08 12:00 AM	0.30	4.72	0.1	87.6
4/15/08 4:00 AM	0.29	4.75	0.1	84.7
4/15/08 8:00 AM	0.28	4.81	0.1	82.0
4/15/08 12:00 PM	0.27	4.69	0.1	79.4
4/15/08 4:00 PM	0.26	4.67	0.1	77.0
4/15/08 8:00 PM	0.25	4.74	0.1	74.7
4/16/08 12:00 AM	0.25	4.79	0.1	72.8
4/16/08 4:00 AM	0.24	4.82	0.1	71.3
4/16/08 8:00 AM	0.24	4.77	0.1	68.9
4/16/08 12:00 PM	0.23	4.62	0.1	66.6
4/16/08 4:00 PM	0.22	4.57	0.1	64.3
4/16/08 8:00 PM	0.21	4.67	0.1	61.9
4/17/08 12:00 AM	0.21	4.76	0.1	61.2
4/17/08 4:00 AM	0.21	4.80	0.1	60.9
4/17/08 8:00 AM	0.21	4.76	0.1	59.1
4/17/08 12:00 PM	0.20	4.59	0.1	57.1
4/17/08 4:00 PM	0.20	4.57	0.1	55.2
4/17/08 8:00 PM	0.19	4.66	0.1	53.3
4/18/08 12:00 AM	0.19	4.73	0.1	53.7
4/18/08 4:00 AM	0.19	4.78	0.1	54.7
4/18/08 8:00 AM	0.19	4.75	0.1	53.0
4/18/08 12:00 PM	0.18	4.54	0.1	51.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
4/18/08 4:00 PM	0.18	4.52	0.1	49.3
4/18/08 8:00 PM	0.18	4.61	0.1	46.2
4/19/08 12:00 AM	0.17	4.67	0.0	44.3
4/19/08 4:00 AM	0.17	4.71	0.0	42.6
4/19/08 8:00 AM	0.16	4.69	0.0	39.6
4/19/08 12:00 PM	0.16	4.59	0.0	37.2
4/19/08 4:00 PM	0.16	4.53	0.0	34.5
4/19/08 8:00 PM	0.15	4.63	0.0	31.5
4/20/08 12:00 AM	0.15	4.69	0.0	32.3
4/20/08 4:00 AM	0.15	4.73	0.0	34.6
4/20/08 8:00 AM	0.15	4.67	0.0	33.2
4/20/08 12:00 PM	0.15	4.53	0.0	30.9
4/20/08 4:00 PM	0.15	4.48	0.0	27.1
4/20/08 8:00 PM	0.14	4.56	0.0	21.0
4/21/08 12:00 AM	0.13	4.67	0.0	16.7
4/21/08 4:00 AM	0.13	4.67	0.0	10.6
4/21/08 8:00 AM	0.13	4.65	0.0	3.1
4/21/08 12:00 PM	0.12	4.52	0.0	0.0
4/21/08 4:00 PM	0.12	4.49	0.0	0.0
4/21/08 8:00 PM	0.11	4.59	0.0	0.0
4/22/08 12:00 AM	0.10	4.65	0.0	0.0
4/22/08 4:00 AM	0.11	4.64	0.0	0.0
4/22/08 8:00 AM	0.11	4.63	0.0	0.0
4/22/08 12:00 PM	0.10	4.48	0.0	0.0
4/22/08 4:00 PM	0.10	4.43	0.0	0.0
4/22/08 8:00 PM	0.09	4.13	0.0	0.0
4/23/08 12:00 AM	0.09	4.21	0.0	0.0
4/23/08 4:00 AM	0.09	4.26	0.0	0.0
4/23/08 8:00 AM	0.09	4.18	0.0	0.0
4/23/08 12:00 PM	0.08	4.05	0.0	0.0
4/23/08 4:00 PM	0.08	4.05	0.0	0.0
4/23/08 8:00 PM	0.07	4.04	0.0	0.0
4/24/08 12:00 AM	0.06	3.99	0.0	0.0
4/24/08 4:00 AM	0.06	3.99	0.0	0.0
4/24/08 8:00 AM	0.06	3.98	0.0	0.0
4/24/08 12:00 PM	0.05	4.06	0.0	0.0
4/24/08 4:00 PM	0.04	4.03	0.0	0.0
4/24/08 8:00 PM	0.03	3.93	0.0	0.0
4/25/08 12:00 AM	0.03	3.96	0.0	0.0
4/25/08 4:00 AM	0.03	4.01	0.0	0.0
4/25/08 8:00 AM	0.04	4.02	0.0	0.0
4/25/08 12:00 PM	0.03	4.04	0.0	0.0
4/25/08 4:00 PM	0.02	4.01	0.0	0.0
4/25/08 8:00 PM	0.02	3.97	0.0	0.0
4/26/08 12:00 AM	0.01	4.00	0.0	0.0
4/26/08 4:00 AM	0.01	4.02	0.0	0.0
4/26/08 8:00 AM	0.00	4.02	0.0	0.0
4/26/08 12:00 PM	0.00	4.05	0.0	0.0
4/26/08 4:00 PM	-0.01	3.92	0.0	0.0
4/26/08 8:00 PM	-0.02	3.94	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
4/27/08 12:00 AM	-0.02	3.99	0.0	0.0
4/27/08 4:00 AM	-0.02	3.98	0.0	0.0
4/27/08 8:00 AM	-0.02	3.99	0.0	0.0
4/27/08 12:00 PM	-0.02	4.01	0.0	0.0
4/27/08 4:00 PM	-0.02	3.95	0.0	0.0
4/27/08 8:00 PM	-0.03	3.93	0.0	0.0
4/28/08 12:00 AM	-0.04	3.94	0.0	0.0
4/28/08 4:00 AM	-0.04	3.95	0.0	0.0
4/28/08 8:00 AM	-0.04	4.03	0.0	0.0
4/28/08 12:00 PM	-0.04	4.01	0.0	0.0
4/28/08 4:00 PM	-0.04	3.99	0.0	0.0
4/28/08 8:00 PM	-0.05	3.92	0.0	0.0
4/29/08 12:00 AM	-0.06	3.93	0.0	0.0
4/29/08 4:00 AM	-0.06	4.03	0.0	0.0
4/29/08 8:00 AM	-0.06	4.00	0.0	0.0
4/29/08 12:00 PM	-0.06	4.01	0.0	0.0
4/29/08 4:00 PM	-0.06	3.98	0.0	0.0
4/29/08 8:00 PM	-0.07	3.94	0.0	0.0
4/30/08 12:00 AM	-0.07	3.94	0.0	0.0
4/30/08 4:00 AM	-0.08	3.94	0.0	0.0
4/30/08 8:00 AM	-0.08	3.95	0.0	0.0
4/30/08 12:00 PM	-0.09	3.97	0.0	0.0
4/30/08 4:00 PM	-0.09	3.97	0.0	0.0
4/30/08 8:00 PM	-0.11	3.93	0.0	0.0
5/1/08 12:00 AM	-0.11	3.93	0.0	0.0
5/1/08 4:00 AM	-0.11	3.94	0.0	0.0
5/1/08 8:00 AM	-0.11	3.96	0.0	0.0
5/1/08 12:00 PM	-0.12	3.99	0.0	0.0
5/1/08 4:00 PM	-0.12	3.95	0.0	0.0
5/1/08 8:00 PM	-0.14	3.91	0.0	0.0
5/2/08 12:00 AM	-0.14	3.91	0.0	0.0
5/2/08 4:00 AM	-0.14	3.92	0.0	0.0
5/2/08 8:00 AM	-0.14	3.96	0.0	0.0
5/2/08 12:00 PM	-0.14	3.99	0.0	0.0
5/2/08 4:00 PM	-0.15	3.93	0.0	0.0
5/2/08 8:00 PM	-0.07	3.91	0.0	0.0
5/3/08 12:00 AM	-0.07	3.92	0.0	0.0
5/3/08 4:00 AM	-0.07	3.91	0.0	0.0
5/3/08 8:00 AM	-0.07	3.95	0.0	0.0
5/3/08 12:00 PM	-0.07	3.96	0.0	0.0
5/3/08 4:00 PM	-0.07	3.92	0.0	0.0
5/3/08 8:00 PM	-0.07	3.91	0.0	0.0
5/4/08 12:00 AM	0.08	3.98	0.0	30.6
5/4/08 4:00 AM	0.21	4.11	0.1	61.3
5/4/08 8:00 AM	0.21	4.13	0.1	60.4
5/4/08 12:00 PM	0.20	4.19	0.1	59.0
5/4/08 4:00 PM	0.20	4.15	0.1	55.8
5/4/08 8:00 PM	0.19	4.10	0.1	51.2
5/5/08 12:00 AM	0.18	4.14	0.1	48.2
5/5/08 4:00 AM	0.17	4.13	0.1	45.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/5/08 8:00 AM	0.17	4.13	0.0	43.0
5/5/08 12:00 PM	0.16	4.15	0.0	40.8
5/5/08 4:00 PM	0.16	4.11	0.0	35.7
5/5/08 8:00 PM	0.15	4.08	0.0	28.9
5/6/08 12:00 AM	0.14	4.09	0.0	28.3
5/6/08 4:00 AM	0.15	4.08	0.0	31.5
5/6/08 8:00 AM	0.15	4.09	0.0	30.2
5/6/08 12:00 PM	0.14	4.12	0.0	26.3
5/6/08 4:00 PM	0.14	4.08	0.0	16.9
5/6/08 8:00 PM	0.13	4.06	0.0	4.3
5/7/08 12:00 AM	0.12	4.05	0.0	0.0
5/7/08 4:00 AM	0.12	4.06	0.0	0.0
5/7/08 8:00 AM	0.11	4.07	0.0	0.0
5/7/08 12:00 PM	0.10	4.09	0.0	0.0
5/7/08 4:00 PM	0.10	4.02	0.0	0.0
5/7/08 8:00 PM	0.09	4.01	0.0	0.0
5/8/08 12:00 AM	0.08	4.02	0.0	0.0
5/8/08 4:00 AM	0.08	4.03	0.0	0.0
5/8/08 8:00 AM	0.08	4.05	0.0	0.0
5/8/08 12:00 PM	0.08	4.06	0.0	0.0
5/8/08 4:00 PM	0.07	4.00	0.0	0.0
5/8/08 8:00 PM	0.06	4.00	0.0	0.0
5/9/08 12:00 AM	0.06	4.03	0.0	0.0
5/9/08 4:00 AM	0.05	4.00	0.0	0.0
5/9/08 8:00 AM	0.05	4.04	0.0	0.0
5/9/08 12:00 PM	0.03	4.04	0.0	0.0
5/9/08 4:00 PM	0.04	3.97	0.0	0.0
5/9/08 8:00 PM	0.03	3.96	0.0	0.0
5/10/08 12:00 AM	0.03	4.01	0.0	0.0
5/10/08 4:00 AM	0.03	3.97	0.0	0.0
5/10/08 8:00 AM	0.03	4.00	0.0	0.0
5/10/08 12:00 PM	0.03	3.98	0.0	0.0
5/10/08 4:00 PM	0.03	3.99	0.0	0.0
5/10/08 8:00 PM	0.01	3.96	0.0	0.0
5/11/08 12:00 AM	0.01	3.98	0.0	0.0
5/11/08 4:00 AM	0.00	3.98	0.0	0.0
5/11/08 8:00 AM	0.00	4.00	0.0	0.0
5/11/08 12:00 PM	-0.01	3.98	0.0	0.0
5/11/08 4:00 PM	-0.01	3.95	0.0	0.0
5/11/08 8:00 PM	-0.02	3.97	0.0	0.0
5/12/08 12:00 AM	-0.03	3.98	0.0	0.0
5/12/08 4:00 AM	-0.02	3.99	0.0	0.0
5/12/08 8:00 AM	-0.02	3.99	0.0	0.0
5/12/08 12:00 PM	-0.03	3.94	0.0	0.0
5/12/08 4:00 PM	-0.03	3.92	0.0	0.0
5/12/08 8:00 PM	-0.05	3.92	0.0	0.0
5/13/08 12:00 AM	-0.06	3.93	0.0	0.0
5/13/08 4:00 AM	-0.05	3.92	0.0	0.0
5/13/08 8:00 AM	-0.05	3.95	0.0	0.0
5/13/08 12:00 PM	-0.06	3.96	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/13/08 4:00 PM	-0.06	3.92	0.0	0.0
5/13/08 8:00 PM	-0.08	3.87	0.0	0.0
5/14/08 12:00 AM	-0.09	3.89	0.0	0.0
5/14/08 4:00 AM	-0.09	3.88	0.0	0.0
5/14/08 8:00 AM	-0.09	3.90	0.0	0.0
5/14/08 12:00 PM	-0.10	3.90	0.0	0.0
5/14/08 4:00 PM	-0.12	3.87	0.0	0.0
5/14/08 8:00 PM	-0.08	3.82	0.0	0.0
5/15/08 12:00 AM	-0.06	3.86	0.0	0.0
5/15/08 4:00 AM	-0.06	3.85	0.0	0.0
5/15/08 8:00 AM	-0.07	3.86	0.0	0.0
5/15/08 12:00 PM	-0.08	3.87	0.0	0.0
5/15/08 4:00 PM	-0.07	3.85	0.0	0.0
5/15/08 8:00 PM	-0.07	3.83	0.0	0.0
5/16/08 12:00 AM	-0.07	3.85	0.0	0.0
5/16/08 4:00 AM	-0.07	3.85	0.0	0.0
5/16/08 8:00 AM	-0.07	3.86	0.0	0.0
5/16/08 12:00 PM	-0.07	3.82	0.0	0.0
5/16/08 4:00 PM	-0.07	3.80	0.0	0.0
5/16/08 8:00 PM	-0.07	3.82	0.0	0.0
5/17/08 12:00 AM	-0.07	3.86	0.0	0.0
5/17/08 4:00 AM	-0.07	3.84	0.0	0.0
5/17/08 8:00 AM	-0.07	3.81	0.0	0.0
5/17/08 12:00 PM	-0.07	3.78	0.0	0.0
5/17/08 4:00 PM	-0.07	3.75	0.0	0.0
5/17/08 8:00 PM	-0.07	3.72	0.0	0.0
5/18/08 12:00 AM	-0.07	3.78	0.0	0.0
5/18/08 4:00 AM	-0.07	3.78	0.0	0.0
5/18/08 8:00 AM	-0.07	3.82	0.0	0.0
5/18/08 12:00 PM	-0.07	3.80	0.0	0.0
5/18/08 4:00 PM	-0.07	3.78	0.0	0.0
5/18/08 8:00 PM	-0.07	3.73	0.0	0.0
5/19/08 12:00 AM	-0.07	3.75	0.0	0.0
5/19/08 4:00 AM	-0.07	3.76	0.0	0.0
5/19/08 8:00 AM	-0.07	3.77	0.0	0.0
5/19/08 12:00 PM	-0.07	3.78	0.0	0.0
5/19/08 4:00 PM	-0.07	3.73	0.0	0.0
5/19/08 8:00 PM	-0.07	3.74	0.0	0.0
5/20/08 12:00 AM	-0.07	3.77	0.0	0.0
5/20/08 4:00 AM	-0.07	3.79	0.0	0.0
5/20/08 8:00 AM	-0.07	3.79	0.0	0.0
5/20/08 12:00 PM	-0.07	3.76	0.0	0.0
5/20/08 4:00 PM	-0.07	3.77	0.0	0.0
5/20/08 8:00 PM	-0.07	3.73	0.0	0.0
5/21/08 12:00 AM	-0.07	3.76	0.0	0.0
5/21/08 4:00 AM	-0.07	3.76	0.0	0.0
5/21/08 8:00 AM	-0.07	3.76	0.0	0.0
5/21/08 12:00 PM	-0.07	3.77	0.0	0.0
5/21/08 4:00 PM	-0.07	3.74	0.0	0.0
5/21/08 8:00 PM	-0.07	3.72	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/22/08 12:00 AM	-0.07	3.73	0.0	0.0
5/22/08 4:00 AM	-0.07	3.75	0.0	0.0
5/22/08 8:00 AM	-0.07	3.76	0.0	0.0
5/22/08 12:00 PM	-0.07	3.75	0.0	0.0
5/22/08 4:00 PM	-0.07	3.72	0.0	0.0
5/22/08 8:00 PM	-0.07	3.68	0.0	0.0
5/23/08 12:00 AM	-0.07	3.71	0.0	0.0
5/23/08 4:00 AM	-0.07	3.72	0.0	0.0
5/23/08 8:00 AM	-0.07	3.76	0.0	0.0
5/23/08 12:00 PM	-0.07	3.74	0.0	0.0
5/23/08 4:00 PM	-0.06	3.72	0.0	0.0
5/23/08 8:00 PM	-0.07	3.68	0.0	0.0
5/24/08 12:00 AM	-0.07	3.69	0.0	0.0
5/24/08 4:00 AM	-0.07	3.71	0.0	0.0
5/24/08 8:00 AM	-0.07	3.73	0.0	0.0
5/24/08 12:00 PM	-0.07	3.69	0.0	0.0
5/24/08 4:00 PM	-0.07	3.67	0.0	0.0
5/24/08 8:00 PM	-0.07	3.65	0.0	0.0
5/25/08 12:00 AM	-0.07	3.66	0.0	0.0
5/25/08 4:00 AM	-0.07	3.66	0.0	0.0
5/25/08 8:00 AM	-0.07	3.66	0.0	0.0
5/25/08 12:00 PM	-0.07	3.65	0.0	0.0
5/25/08 4:00 PM	-0.07	3.63	0.0	0.0
5/25/08 8:00 PM	-0.07	3.58	0.0	0.0
5/26/08 12:00 AM	-0.07	3.59	0.0	0.0
5/26/08 4:00 AM	-0.07	3.58	0.0	0.0
5/26/08 8:00 AM	-0.07	3.61	0.0	0.0
5/26/08 12:00 PM	-0.07	3.61	0.0	0.0
5/26/08 4:00 PM	-0.07	3.57	0.0	0.0
5/26/08 8:00 PM	-0.07	3.54	0.0	0.0
5/27/08 12:00 AM	-0.07	3.56	0.0	0.0
5/27/08 4:00 AM	-0.07	3.56	0.0	0.0
5/27/08 8:00 AM	-0.07	3.59	0.0	0.0
5/27/08 12:00 PM	-0.07	3.59	0.0	0.0
5/27/08 4:00 PM	-0.07	3.57	0.0	0.0
5/27/08 8:00 PM	-0.07	3.54	0.0	0.0
5/28/08 12:00 AM	-0.07	3.55	0.0	0.0
5/28/08 4:00 AM	-0.03	3.54	0.0	0.0
5/28/08 8:00 AM	-0.02	3.57	0.0	0.0
5/28/08 12:00 PM	-0.08	3.58	0.0	0.0
5/28/08 4:00 PM	-0.07	3.56	0.0	0.0
5/28/08 8:00 PM	-0.08	3.52	0.0	0.0
5/29/08 12:00 AM	-0.09	3.54	0.0	0.0
5/29/08 4:00 AM	-0.07	3.54	0.0	0.0
5/29/08 8:00 AM	-0.07	3.56	0.0	0.0
5/29/08 12:00 PM	-0.07	3.54	0.0	0.0
5/29/08 4:00 PM	-0.07	3.46	0.0	0.0
5/29/08 8:00 PM	-0.07	3.44	0.0	0.0
5/30/08 12:00 AM	-0.07	3.41	0.0	0.0
5/30/08 4:00 AM	-0.07	3.49	0.0	0.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
5/30/08 8:00 AM	-0.07	3.53	0.0	0.0
5/30/08 12:00 PM	-0.07	3.36	0.0	0.0
5/30/08 4:00 PM	-0.07	3.41	0.0	0.0
5/30/08 8:00 PM	-0.07	3.44	0.0	0.0
5/31/08 12:00 AM	-0.07	3.43	0.0	0.0
5/31/08 4:00 AM	-0.07	3.43	0.0	0.0
5/31/08 8:00 AM	-0.07	3.46	0.0	0.0
5/31/08 12:00 PM	-0.07	3.46	0.0	0.0
5/31/08 4:00 PM	-0.07	3.46	0.0	0.0
5/31/08 8:00 PM	-0.07	3.43	0.0	0.0
6/1/08 12:00 AM	-0.07	3.42	0.0	0.0
6/1/08 4:00 AM	-0.07	3.41	0.0	0.0
6/1/08 8:00 AM	-0.07	3.46	0.0	0.0
6/1/08 12:00 PM	-0.07	3.49	0.0	0.0
6/1/08 4:00 PM	-0.07	3.42	0.0	0.0
6/1/08 8:00 PM	-0.07	3.51	0.0	61.9
6/2/08 12:00 AM	0.47	4.12	0.1	122.1
6/2/08 4:00 AM	0.45	4.06	0.1	116.4
6/2/08 8:00 AM	0.41	4.06	0.1	103.5
6/2/08 12:00 PM	0.32	4.07	0.1	94.0
6/2/08 4:00 PM	0.32	4.07	0.1	91.8
6/2/08 8:00 PM	0.31	4.02	0.1	106.2
6/3/08 12:00 AM	0.46	4.12	0.1	120.4
6/3/08 4:00 AM	0.44	4.13	0.1	116.7
6/3/08 8:00 AM	0.42	4.15	0.1	113.1
6/3/08 12:00 PM	0.40	4.17	0.1	136.5
6/3/08 4:00 PM	0.71	4.26	0.2	159.9
6/3/08 8:00 PM	0.68	4.26	0.2	156.3
6/4/08 12:00 AM	0.65	4.25	0.2	152.4
6/4/08 4:00 AM	0.63	4.26	0.2	149.0
6/4/08 8:00 AM	0.61	4.27	0.2	145.5
6/4/08 12:00 PM	0.58	4.29	0.2	141.8
6/4/08 4:00 PM	0.56	4.29	0.2	139.0
6/4/08 8:00 PM	0.55	4.28	0.2	136.4
6/5/08 12:00 AM	0.53	4.29	0.1	133.0
6/5/08 4:00 AM	0.51	4.29	0.1	129.6
6/5/08 8:00 AM	0.49	4.30	0.1	126.1
6/5/08 12:00 PM	0.47	4.31	0.1	120.4
6/5/08 4:00 PM	0.43	4.33	0.1	125.1
6/5/08 8:00 PM	0.52	4.31	0.1	132.1
6/6/08 12:00 AM	0.50	4.32	0.1	128.8
6/6/08 4:00 AM	0.49	4.32	0.1	127.6
6/6/08 8:00 AM	0.49	4.33	0.1	122.2
6/6/08 12:00 PM	0.43	4.37	0.1	114.4
6/6/08 4:00 PM	0.41	4.32	0.1	112.0
6/6/08 8:00 PM	0.40	4.33	0.1	110.3
6/7/08 12:00 AM	0.39	4.32	0.1	107.5
6/7/08 4:00 AM	0.38	4.32	0.1	105.2
6/7/08 8:00 AM	0.37	4.33	0.1	102.7
6/7/08 12:00 PM	0.35	4.36	0.1	100.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/7/08 4:00 PM	0.34	4.33	0.1	96.4
6/7/08 8:00 PM	0.32	4.30	0.1	92.8
6/8/08 12:00 AM	0.31	4.33	0.1	90.5
6/8/08 4:00 AM	0.31	4.37	0.1	89.1
6/8/08 8:00 AM	0.30	4.29	0.1	87.1
6/8/08 12:00 PM	0.29	4.16	0.1	85.0
6/8/08 4:00 PM	0.28	4.37	0.1	136.0
6/8/08 8:00 PM	0.91	4.42	0.2	189.3
6/9/08 12:00 AM	0.94	4.46	0.2	189.4
6/9/08 4:00 AM	0.91	4.46	0.2	186.0
6/9/08 8:00 AM	0.88	4.40	0.2	182.2
6/9/08 12:00 PM	0.85	4.31	0.2	178.3
6/9/08 4:00 PM	0.82	4.42	0.2	174.7
6/9/08 8:00 PM	0.79	4.43	0.2	170.8
6/10/08 12:00 AM	0.76	4.45	0.2	166.7
6/10/08 4:00 AM	0.73	4.46	0.2	162.7
6/10/08 8:00 AM	0.70	4.41	0.2	158.7
6/10/08 12:00 PM	0.67	4.30	0.2	154.8
6/10/08 4:00 PM	0.65	4.26	0.2	151.1
6/10/08 8:00 PM	0.62	4.34	0.2	147.0
6/11/08 12:00 AM	0.59	4.41	0.2	143.2
6/11/08 4:00 AM	0.57	4.45	0.2	139.4
6/11/08 8:00 AM	0.55	4.43	0.2	135.4
6/11/08 12:00 PM	0.52	4.30	0.1	131.6
6/11/08 4:00 PM	0.50	4.28	0.1	134.2
6/11/08 8:00 PM	0.55	4.39	0.2	137.1
6/12/08 12:00 AM	0.54	4.44	0.2	133.9
6/12/08 4:00 AM	0.51	4.44	0.1	130.3
6/12/08 8:00 AM	0.49	4.40	0.1	126.7
6/12/08 12:00 PM	0.47	4.25	0.1	123.5
6/12/08 4:00 PM	0.46	4.24	0.1	452.1
6/12/08 8:00 PM	1.75	4.49	0.9	683.4
6/13/08 12:00 AM	1.71	4.47	0.6	500.0
6/13/08 4:00 AM	1.66	4.48	0.5	359.3
6/13/08 8:00 AM	1.62	4.42	0.3	279.6
6/13/08 12:00 PM	1.58	4.33	0.3	254.3
6/13/08 4:00 PM	1.55	4.33	0.3	890.4
6/13/08 8:00 PM	1.95	4.48	1.7	1360.5
6/14/08 12:00 AM	1.83	4.49	1.3	950.4
6/14/08 4:00 AM	1.74	4.49	0.8	562.9
6/14/08 8:00 AM	1.66	4.44	0.5	347.1
6/14/08 12:00 PM	1.61	4.33	0.3	265.0
6/14/08 4:00 PM	1.56	4.37	0.3	252.1
6/14/08 8:00 PM	1.52	4.42	0.3	248.6
6/15/08 12:00 AM	1.48	4.45	0.3	245.0
6/15/08 4:00 AM	1.44	4.46	0.3	241.5
6/15/08 8:00 AM	1.41	4.40	0.3	238.0
6/15/08 12:00 PM	1.37	4.31	0.3	234.3
6/15/08 4:00 PM	1.33	4.38	0.3	230.6
6/15/08 8:00 PM	1.29	4.56	0.3	227.1

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/16/08 12:00 AM	1.26	4.65	0.3	224.0
6/16/08 4:00 AM	1.23	4.68	0.2	222.9
6/16/08 8:00 AM	1.23	4.57	0.2	220.7
6/16/08 12:00 PM	1.19	4.52	0.2	215.4
6/16/08 4:00 PM	1.13	4.53	0.2	210.8
6/16/08 8:00 PM	1.10	4.56	0.2	207.5
6/17/08 12:00 AM	1.07	4.63	0.2	204.6
6/17/08 4:00 AM	1.05	4.67	0.2	201.8
6/17/08 8:00 AM	1.02	4.58	0.2	201.6
6/17/08 12:00 PM	1.04	4.53	0.2	201.3
6/17/08 4:00 PM	1.01	4.52	0.2	198.1
6/17/08 8:00 PM	0.98	4.55	0.2	194.8
6/18/08 12:00 AM	0.96	4.59	0.2	191.1
6/18/08 4:00 AM	0.92	4.62	0.2	186.5
6/18/08 8:00 AM	0.88	4.60	0.2	182.3
6/18/08 12:00 PM	0.85	4.57	0.2	202.6
6/18/08 4:00 PM	1.25	4.58	0.2	225.6
6/18/08 8:00 PM	1.27	4.58	0.3	902.1
6/19/08 12:00 AM	1.97	4.72	1.8	1529.2
6/19/08 4:00 AM	1.93	4.70	1.6	1327.1
6/19/08 8:00 AM	1.83	4.65	1.3	854.1
6/19/08 12:00 PM	1.70	4.65	0.6	417.2
6/19/08 4:00 PM	1.62	4.59	0.3	276.9
6/19/08 8:00 PM	1.56	4.60	0.3	252.5
6/20/08 12:00 AM	1.53	4.70	0.3	249.2
6/20/08 4:00 AM	1.49	4.71	0.3	245.6
6/20/08 8:00 AM	1.45	4.67	0.3	243.0
6/20/08 12:00 PM	1.43	4.60	0.3	240.6
6/20/08 4:00 PM	1.39	4.65	0.3	240.3
6/20/08 8:00 PM	1.43	4.71	0.3	240.3
6/21/08 12:00 AM	1.39	4.70	0.3	237.0
6/21/08 4:00 AM	1.36	4.71	0.3	233.7
6/21/08 8:00 AM	1.33	4.67	0.3	230.5
6/21/08 12:00 PM	1.29	4.63	0.3	227.1
6/21/08 4:00 PM	1.26	4.70	0.3	226.3
6/21/08 8:00 PM	1.27	4.84	0.3	226.1
6/22/08 12:00 AM	1.25	4.85	0.3	223.4
6/22/08 4:00 AM	1.22	4.86	0.2	220.1
6/22/08 8:00 AM	1.19	4.78	0.2	216.7
6/22/08 12:00 PM	1.15	4.68	0.2	213.5
6/22/08 4:00 PM	1.13	4.66	0.2	215.3
6/22/08 8:00 PM	1.19	4.80	0.2	217.7
6/23/08 12:00 AM	1.17	4.84	0.2	215.4
6/23/08 4:00 AM	1.14	4.84	0.2	212.1
6/23/08 8:00 AM	1.11	4.78	0.2	207.3
6/23/08 12:00 PM	1.05	4.66	0.2	202.9
6/23/08 4:00 PM	1.03	4.71	0.2	200.9
6/23/08 8:00 PM	1.02	4.80	0.2	200.1
6/24/08 12:00 AM	1.01	4.84	0.2	198.5
6/24/08 4:00 AM	0.99	4.85	0.2	195.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
6/24/08 8:00 AM	0.97	4.79	0.2	192.5
6/24/08 12:00 PM	0.94	4.73	0.2	189.3
6/24/08 4:00 PM	0.91	4.77	0.2	186.0
6/24/08 8:00 PM	0.88	4.78	0.2	182.3
6/25/08 12:00 AM	0.85	4.77	0.2	179.0
6/25/08 4:00 AM	0.83	4.77	0.2	176.1
6/25/08 8:00 AM	0.80	4.74	0.2	173.0
6/25/08 12:00 PM	0.78	4.66	0.2	170.9
6/25/08 4:00 PM	0.77	4.74	0.2	168.9
6/25/08 8:00 PM	0.75	4.77	0.2	165.1
6/26/08 12:00 AM	0.72	4.77	0.2	160.5
6/26/08 4:00 AM	0.68	4.77	0.2	156.9
6/26/08 8:00 AM	0.67	4.75	0.2	154.2
6/26/08 12:00 PM	0.64	4.67	0.2	151.7
6/26/08 4:00 PM	0.63	4.63	0.2	150.8
6/26/08 8:00 PM	0.63	4.72	0.2	149.4
6/27/08 12:00 AM	0.61	4.71	0.2	146.5
6/27/08 4:00 AM	0.59	4.70	0.2	143.6
6/27/08 8:00 AM	0.57	4.70	0.2	140.7
6/27/08 12:00 PM	0.56	4.73	0.2	138.1
6/27/08 4:00 PM	0.54	4.71	0.2	135.3
6/27/08 8:00 PM	0.52	4.70	0.1	162.9
6/28/08 12:00 AM	0.95	4.75	0.2	191.3
6/28/08 4:00 AM	0.93	4.74	0.2	190.9
6/28/08 8:00 AM	0.94	4.72	0.2	186.2
6/28/08 12:00 PM	0.86	4.65	0.2	179.9
6/28/08 4:00 PM	0.84	4.73	0.2	195.0
6/28/08 8:00 PM	1.12	4.77	0.2	216.2
6/29/08 12:00 AM	1.21	4.79	0.2	219.3
6/29/08 4:00 AM	1.18	4.79	0.2	216.0
6/29/08 8:00 AM	1.15	4.73	0.2	212.5
6/29/08 12:00 PM	1.11	4.64	0.2	208.9
6/29/08 4:00 PM	1.08	4.60	0.2	213.8
6/29/08 8:00 PM	1.21	4.79	0.2	219.5
6/30/08 12:00 AM	1.19	4.80	0.2	215.5
6/30/08 4:00 AM	1.13	4.80	0.2	210.7
6/30/08 8:00 AM	1.10	4.76	0.2	207.0
6/30/08 12:00 PM	1.06	4.64	0.2	203.9
6/30/08 4:00 PM	1.04	4.60	0.2	200.9
6/30/08 8:00 PM	1.01	4.71	0.2	200.1
7/1/08 12:00 AM	1.02	4.80	0.2	199.2
7/1/08 4:00 AM	0.99	4.79	0.2	196.0
7/1/08 8:00 AM	0.97	4.73	0.2	192.7
7/1/08 12:00 PM	0.94	4.64	0.2	189.6
7/1/08 4:00 PM	0.91	4.59	0.2	186.2
7/1/08 8:00 PM	0.88	4.82	0.2	182.1
7/2/08 12:00 AM	0.85	4.88	0.2	178.0
7/2/08 4:00 AM	0.81	4.88	0.2	174.5
7/2/08 8:00 AM	0.79	4.81	0.2	171.6
7/2/08 12:00 PM	0.77	4.71	0.2	174.1

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/2/08 4:00 PM	0.83	4.80	0.2	176.6
7/2/08 8:00 PM	0.81	4.87	0.2	173.5
7/3/08 12:00 AM	0.78	4.88	0.2	170.2
7/3/08 4:00 AM	0.76	4.88	0.2	166.8
7/3/08 8:00 AM	0.73	4.83	0.2	163.5
7/3/08 12:00 PM	0.71	4.71	0.2	164.0
7/3/08 4:00 PM	0.74	4.81	0.2	163.8
7/3/08 8:00 PM	0.71	4.82	0.2	159.8
7/4/08 12:00 AM	0.68	4.89	0.2	156.4
7/4/08 4:00 AM	0.66	4.88	0.2	153.1
7/4/08 8:00 AM	0.64	4.84	0.2	150.3
7/4/08 12:00 PM	0.62	4.70	0.2	147.9
7/4/08 4:00 PM	0.60	4.66	0.2	144.3
7/4/08 8:00 PM	0.57	4.80	0.2	140.1
7/5/08 12:00 AM	0.55	4.86	0.2	136.9
7/5/08 4:00 AM	0.53	4.89	0.2	134.3
7/5/08 8:00 AM	0.52	4.83	0.1	131.4
7/5/08 12:00 PM	0.50	4.70	0.1	128.7
7/5/08 4:00 PM	0.49	4.73	0.1	130.5
7/5/08 8:00 PM	0.52	4.82	0.1	131.4
7/6/08 12:00 AM	0.50	4.87	0.1	127.9
7/6/08 4:00 AM	0.48	4.87	0.1	124.6
7/6/08 8:00 AM	0.46	4.83	0.1	121.8
7/6/08 12:00 PM	0.45	4.71	0.1	181.4
7/6/08 4:00 PM	1.43	4.88	0.3	247.2
7/6/08 8:00 PM	1.54	4.86	0.3	252.0
7/7/08 12:00 AM	1.53	4.89	0.3	249.4
7/7/08 4:00 AM	1.48	4.87	0.3	246.1
7/7/08 8:00 AM	1.46	4.83	0.3	243.9
7/7/08 12:00 PM	1.44	4.73	0.3	245.3
7/7/08 4:00 PM	1.49	4.85	0.3	246.6
7/7/08 8:00 PM	1.47	4.84	0.3	262.2
7/8/08 12:00 AM	1.61	4.88	0.3	269.0
7/8/08 4:00 AM	1.59	4.86	0.3	256.3
7/8/08 8:00 AM	1.56	4.84	0.3	252.3
7/8/08 12:00 PM	1.53	4.71	0.3	268.8
7/8/08 4:00 PM	1.61	4.91	0.3	415.4
7/8/08 8:00 PM	1.70	4.93	0.6	456.8
7/9/08 12:00 AM	1.65	4.94	0.4	321.4
7/9/08 4:00 AM	1.61	4.94	0.3	264.7
7/9/08 8:00 AM	1.58	4.87	0.3	255.1
7/9/08 12:00 PM	1.57	4.76	0.3	254.0
7/9/08 4:00 PM	1.56	4.74	0.3	253.3
7/9/08 8:00 PM	1.55	4.90	0.3	252.0
7/10/08 12:00 AM	1.53	4.91	0.3	250.6
7/10/08 4:00 AM	1.52	4.93	0.3	249.8
7/10/08 8:00 AM	1.51	4.87	0.3	249.0
7/10/08 12:00 PM	1.50	4.76	0.3	248.6
7/10/08 4:00 PM	1.50	4.69	0.3	251.7
7/10/08 8:00 PM	1.57	4.88	0.3	253.5

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/11/08 12:00 AM	1.54	4.91	0.3	251.8
7/11/08 4:00 AM	1.53	4.92	0.3	250.8
7/11/08 8:00 AM	1.52	4.85	0.3	250.1
7/11/08 12:00 PM	1.51	4.76	0.3	249.4
7/11/08 4:00 PM	1.51	4.69	0.3	247.9
7/11/08 8:00 PM	1.48	4.82	0.3	246.3
7/12/08 12:00 AM	1.47	4.88	0.3	246.1
7/12/08 4:00 AM	1.48	4.90	0.3	246.0
7/12/08 8:00 AM	1.47	4.84	0.3	245.2
7/12/08 12:00 PM	1.46	4.76	0.3	246.3
7/12/08 4:00 PM	1.49	4.92	0.3	1587.2
7/12/08 8:00 PM	2.83	4.97	3.3	2779.4
7/13/08 12:00 AM	2.59	4.96	2.9	2499.0
7/13/08 4:00 AM	2.41	4.93	2.6	2248.1
7/13/08 8:00 AM	2.26	4.90	2.4	2571.4
7/13/08 12:00 PM	2.90	4.95	3.3	2971.4
7/13/08 4:00 PM	2.83	4.85	3.3	2838.8
7/13/08 8:00 PM	2.68	4.85	3.1	2669.9
7/14/08 12:00 AM	2.56	4.91	2.9	2511.3
7/14/08 4:00 AM	2.45	4.90	2.7	2342.6
7/14/08 8:00 AM	2.33	4.86	2.5	2171.7
7/14/08 12:00 PM	2.23	0.00	2.3	1979.7
7/14/08 4:00 PM	2.11	0.00	2.1	1784.5
7/14/08 8:00 PM	2.03	0.00	1.9	1606.8
7/15/08 12:00 AM	1.95	0.00	1.7	1764.0
7/15/08 4:00 AM	2.19	0.00	2.2	1988.1
7/15/08 8:00 AM	2.16	0.00	2.2	2630.9
7/15/08 12:00 PM	3.16	0.00	3.7	3250.4
7/15/08 4:00 PM	3.07	0.00	3.6	3210.2
7/15/08 8:00 PM	3.08	0.00	3.6	3146.5
7/16/08 12:00 AM	2.95	0.00	3.4	3016.0
7/16/08 4:00 AM	2.85	0.00	3.3	2926.9
7/16/08 8:00 AM	2.80	0.00	3.2	2887.8
7/16/08 12:00 PM	2.79	0.00	3.2	2946.7
7/16/08 4:00 PM	2.90	0.00	3.4	2942.6
7/16/08 8:00 PM	2.78	0.00	3.2	2792.9
7/17/08 12:00 AM	2.66	0.00	3.0	2646.9
7/17/08 4:00 AM	2.55	0.00	2.9	2537.5
7/17/08 8:00 AM	2.50	0.00	2.8	2418.7
7/17/08 12:00 PM	2.39	0.00	2.6	2269.2
7/17/08 4:00 PM	2.30	0.00	2.4	2122.1
7/17/08 8:00 PM	2.21	0.00	2.3	1969.9
7/18/08 12:00 AM	2.12	0.00	2.1	1806.5
7/18/08 4:00 AM	2.04	0.00	1.9	1644.6
7/18/08 8:00 AM	1.97	0.00	1.7	1493.9
7/18/08 12:00 PM	1.91	0.00	1.6	1333.3
7/18/08 4:00 PM	1.85	0.00	1.4	1161.1
7/18/08 8:00 PM	1.80	0.00	1.2	939.9
7/19/08 12:00 AM	1.76	0.00	0.9	707.7
7/19/08 4:00 AM	1.71	0.00	0.7	568.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/19/08 8:00 AM	1.69	0.00	0.6	488.5
7/19/08 12:00 PM	1.67	0.00	0.5	417.7
7/19/08 4:00 PM	1.65	0.00	0.4	742.3
7/19/08 8:00 PM	1.81	0.00	1.2	936.1
7/20/08 12:00 AM	1.75	0.00	0.9	698.6
7/20/08 4:00 AM	1.72	0.00	0.7	566.1
7/20/08 8:00 AM	1.69	0.00	0.6	464.9
7/20/08 12:00 PM	1.66	0.00	0.5	392.6
7/20/08 4:00 PM	1.65	0.00	0.4	337.6
7/20/08 8:00 PM	1.63	0.00	0.3	291.5
7/21/08 12:00 AM	1.61	0.00	0.3	275.6
7/21/08 4:00 AM	1.61	0.00	0.3	269.0
7/21/08 8:00 AM	1.59	0.00	0.3	258.1
7/21/08 12:00 PM	1.59	0.00	0.3	256.0
7/21/08 4:00 PM	1.57	0.00	0.3	254.7
7/21/08 8:00 PM	1.57	0.00	0.3	254.2
7/22/08 12:00 AM	1.56	0.00	0.3	253.3
7/22/08 4:00 AM	1.55	0.00	0.3	252.7
7/22/08 8:00 AM	1.54	0.00	0.3	252.3
7/22/08 12:00 PM	1.54	0.00	0.3	251.9
7/22/08 4:00 PM	1.53	0.00	0.3	251.5
7/22/08 8:00 PM	1.53	0.00	0.3	251.6
7/23/08 12:00 AM	1.54	0.00	0.3	251.7
7/23/08 4:00 AM	1.53	0.00	0.3	251.6
7/23/08 8:00 AM	1.54	0.00	0.3	251.6
7/23/08 12:00 PM	1.53	0.00	0.3	250.5
7/23/08 4:00 PM	1.51	0.00	0.3	249.7
7/23/08 8:00 PM	1.51	0.00	0.3	249.4
7/24/08 12:00 AM	1.51	0.00	0.3	248.9
7/24/08 4:00 AM	1.50	0.00	0.3	248.5
7/24/08 8:00 AM	1.50	0.00	0.3	247.8
7/24/08 12:00 PM	1.49	0.00	0.3	247.8
7/24/08 4:00 PM	1.50	0.00	0.3	248.9
7/24/08 8:00 PM	1.51	0.00	0.3	248.9
7/25/08 12:00 AM	1.50	0.00	0.3	248.5
7/25/08 4:00 AM	1.50	0.00	0.3	248.6
7/25/08 8:00 AM	1.50	0.00	0.3	248.0
7/25/08 12:00 PM	1.49	0.00	0.3	246.8
7/25/08 4:00 PM	1.47	0.00	0.3	245.4
7/25/08 8:00 PM	1.46	0.00	0.3	245.1
7/26/08 12:00 AM	1.47	0.00	0.3	244.6
7/26/08 4:00 AM	1.45	0.00	0.3	243.8
7/26/08 8:00 AM	1.45	0.00	0.3	243.5
7/26/08 12:00 PM	1.44	0.00	0.3	242.8
7/26/08 4:00 PM	1.43	0.00	0.3	241.5
7/26/08 8:00 PM	1.42	0.00	0.3	240.8
7/27/08 12:00 AM	1.42	0.00	0.3	241.0
7/27/08 4:00 AM	1.42	0.00	0.3	240.9
7/27/08 8:00 AM	1.41	0.00	0.3	240.3
7/27/08 12:00 PM	1.41	0.00	0.3	239.4

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
7/27/08 4:00 PM	1.39	0.00	0.3	238.7
7/27/08 8:00 PM	1.39	0.00	0.3	237.5
7/28/08 12:00 AM	1.37	0.00	0.3	236.5
7/28/08 4:00 AM	1.37	0.00	0.3	236.1
7/28/08 8:00 AM	1.36	0.00	0.3	236.6
7/28/08 12:00 PM	1.38	0.00	0.3	236.8
7/28/08 4:00 PM	1.37	0.00	0.3	236.1
7/28/08 8:00 PM	1.37	0.00	0.3	235.9
7/29/08 12:00 AM	1.36	0.00	0.3	234.5
7/29/08 4:00 AM	1.34	0.00	0.3	233.2
7/29/08 8:00 AM	1.33	0.00	0.3	233.5
7/29/08 12:00 PM	1.35	0.00	0.3	233.0
7/29/08 4:00 PM	1.32	0.00	0.3	231.7
7/29/08 8:00 PM	1.32	0.00	0.3	231.3
7/30/08 12:00 AM	1.31	0.00	0.3	230.7
7/30/08 4:00 AM	1.31	0.00	0.3	230.1
7/30/08 8:00 AM	1.30	0.00	0.3	229.2
7/30/08 12:00 PM	1.29	0.00	0.3	227.7
7/30/08 4:00 PM	1.27	0.00	0.3	226.5
7/30/08 8:00 PM	1.26	0.00	0.3	225.7
7/31/08 12:00 AM	1.26	0.00	0.3	224.1
7/31/08 4:00 AM	1.23	0.00	0.2	222.7
7/31/08 8:00 AM	1.23	0.00	0.2	221.5
7/31/08 12:00 PM	1.21	0.00	0.2	219.0
7/31/08 4:00 PM	1.18	0.00	0.2	215.6
7/31/08 8:00 PM	1.14	0.00	0.2	212.7
8/1/08 12:00 AM	1.12	0.00	0.2	210.6
8/1/08 4:00 AM	1.10	0.00	0.2	208.5
8/1/08 8:00 AM	1.08	0.00	0.2	204.9
8/1/08 12:00 PM	1.04	0.00	0.2	201.8
8/1/08 4:00 PM	1.03	0.00	0.2	198.8
8/1/08 8:00 PM	0.98	0.00	0.2	195.5
8/2/08 12:00 AM	0.97	0.00	0.2	193.7
8/2/08 4:00 AM	0.95	0.00	0.2	191.9
8/2/08 8:00 AM	0.94	0.00	0.2	189.5
8/2/08 12:00 PM	0.91	0.00	0.2	186.2
8/2/08 4:00 PM	0.88	0.00	0.2	183.0
8/2/08 8:00 PM	0.86	0.00	0.2	180.4
8/3/08 12:00 AM	0.84	0.00	0.2	177.9
8/3/08 4:00 AM	0.82	0.00	0.2	175.5
8/3/08 8:00 AM	0.80	0.00	0.2	172.7
8/3/08 12:00 PM	0.78	0.00	0.2	168.3
8/3/08 4:00 PM	0.73	0.00	0.2	164.7
8/3/08 8:00 PM	0.72	0.00	0.2	162.8
8/4/08 12:00 AM	0.71	0.00	0.2	160.5
8/4/08 4:00 AM	0.69	0.00	0.2	158.3
8/4/08 8:00 AM	0.68	0.00	0.2	155.9
8/4/08 12:00 PM	0.66	0.00	0.2	165.1
8/4/08 4:00 PM	0.81	0.00	0.2	175.6
8/4/08 8:00 PM	0.81	0.00	0.2	174.0

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/5/08 12:00 AM	0.79	0.00	0.2	171.0
8/5/08 4:00 AM	0.77	0.00	0.2	168.1
8/5/08 8:00 AM	0.74	0.00	0.2	165.3
8/5/08 12:00 PM	0.72	0.00	0.2	162.6
8/5/08 4:00 PM	0.70	0.00	0.2	183.9
8/5/08 8:00 PM	1.07	0.00	0.2	206.5
8/6/08 12:00 AM	1.08	0.00	0.2	205.4
8/6/08 4:00 AM	1.05	0.00	0.2	203.2
8/6/08 8:00 AM	1.03	0.00	0.2	200.7
8/6/08 12:00 PM	1.01	0.00	0.2	198.1
8/6/08 4:00 PM	0.99	0.00	0.2	195.5
8/6/08 8:00 PM	0.97	0.00	0.2	192.9
8/7/08 12:00 AM	0.94	0.00	0.2	190.4
8/7/08 4:00 AM	0.92	0.00	0.2	188.1
8/7/08 8:00 AM	0.90	0.00	0.2	185.7
8/7/08 12:00 PM	0.88	0.00	0.2	183.2
8/7/08 4:00 PM	0.86	0.00	0.2	180.7
8/7/08 8:00 PM	0.84	0.00	0.2	178.1
8/8/08 12:00 AM	0.82	0.00	0.2	175.7
8/8/08 4:00 AM	0.80	0.00	0.2	173.4
8/8/08 8:00 AM	0.79	0.00	0.2	171.0
8/8/08 12:00 PM	0.77	0.00	0.2	168.3
8/8/08 4:00 PM	0.75	0.00	0.2	165.9
8/8/08 8:00 PM	0.73	0.00	0.2	165.7
8/9/08 12:00 AM	0.74	0.00	0.2	165.8
8/9/08 4:00 AM	0.73	0.00	0.2	164.2
8/9/08 8:00 AM	0.72	0.00	0.2	163.4
8/9/08 12:00 PM	0.72	0.00	0.2	168.8
8/9/08 4:00 PM	0.80	0.00	0.2	172.9
8/9/08 8:00 PM	0.78	0.00	0.2	170.5
8/10/08 12:00 AM	0.76	0.00	0.2	167.9
8/10/08 4:00 AM	0.74	0.00	0.2	165.4
8/10/08 8:00 AM	0.73	0.00	0.2	163.3
8/10/08 12:00 PM	0.71	0.00	0.2	161.1
8/10/08 4:00 PM	0.69	0.00	0.2	158.4
8/10/08 8:00 PM	0.67	0.00	0.2	155.7
8/11/08 12:00 AM	0.66	0.00	0.2	153.6
8/11/08 4:00 AM	0.64	0.00	0.2	151.6
8/11/08 8:00 AM	0.63	0.00	0.2	149.4
8/11/08 12:00 PM	0.62	0.00	0.2	147.5
8/11/08 4:00 PM	0.60	0.00	0.2	145.1
8/11/08 8:00 PM	0.58	0.00	0.2	142.1
8/12/08 12:00 AM	0.57	0.00	0.2	139.2
8/12/08 4:00 AM	0.55	0.00	0.2	136.4
8/12/08 8:00 AM	0.53	0.00	0.2	142.4
8/12/08 12:00 PM	0.62	0.00	0.2	148.4
8/12/08 4:00 PM	0.61	0.00	0.2	145.5
8/12/08 8:00 PM	0.59	0.00	0.2	142.8
8/13/08 12:00 AM	0.57	0.00	0.2	140.4
8/13/08 4:00 AM	0.56	0.00	0.2	137.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/13/08 8:00 AM	0.54	0.00	0.2	134.9
8/13/08 12:00 PM	0.52	0.00	0.1	131.9
8/13/08 4:00 PM	0.50	0.00	0.1	128.8
8/13/08 8:00 PM	0.49	0.00	0.1	125.9
8/14/08 12:00 AM	0.47	0.00	0.1	123.5
8/14/08 4:00 AM	0.46	0.00	0.1	121.4
8/14/08 8:00 AM	0.45	0.00	0.1	119.7
8/14/08 12:00 PM	0.44	0.00	0.1	117.8
8/14/08 4:00 PM	0.43	0.00	0.1	115.6
8/14/08 8:00 PM	0.42	0.00	0.1	113.8
8/15/08 12:00 AM	0.41	0.00	0.1	113.4
8/15/08 4:00 AM	0.41	0.00	0.1	113.6
8/15/08 8:00 AM	0.41	0.00	0.1	112.6
8/15/08 12:00 PM	0.40	0.00	0.1	111.1
8/15/08 4:00 PM	0.40	0.00	0.1	109.5
8/15/08 8:00 PM	0.39	0.00	0.1	108.2
8/16/08 12:00 AM	0.38	0.00	0.1	107.6
8/16/08 4:00 AM	0.38	0.00	0.1	107.8
8/16/08 8:00 AM	0.38	0.00	0.1	107.1
8/16/08 12:00 PM	0.38	0.00	0.1	105.9
8/16/08 4:00 PM	0.37	0.00	0.1	104.5
8/16/08 8:00 PM	0.36	0.00	0.1	103.4
8/17/08 12:00 AM	0.36	0.00	0.1	103.5
8/17/08 4:00 AM	0.37	0.00	0.1	104.0
8/17/08 8:00 AM	0.37	0.00	0.1	103.7
8/17/08 12:00 PM	0.36	0.00	0.1	102.4
8/17/08 4:00 PM	0.36	0.00	0.1	111.5
8/17/08 8:00 PM	0.45	0.00	0.1	120.9
8/18/08 12:00 AM	0.45	0.00	0.1	119.0
8/18/08 4:00 AM	0.43	0.00	0.1	116.6
8/18/08 8:00 AM	0.42	0.00	0.1	114.5
8/18/08 12:00 PM	0.41	0.00	0.1	112.6
8/18/08 4:00 PM	0.40	0.00	0.1	111.1
8/18/08 8:00 PM	0.40	0.00	0.1	124.6
8/19/08 12:00 AM	0.55	0.00	0.2	188.3
8/19/08 4:00 AM	1.39	0.00	0.3	700.4
8/19/08 8:00 AM	1.82	0.00	1.3	1882.7
8/19/08 12:00 PM	2.57	0.00	2.9	2587.7
8/19/08 4:00 PM	2.55	0.00	2.9	2457.1
8/19/08 8:00 PM	2.39	0.00	2.6	2207.8
8/20/08 12:00 AM	2.22	0.00	2.3	1939.6
8/20/08 4:00 AM	2.08	0.00	2.0	1677.8
8/20/08 8:00 AM	1.96	0.00	1.7	1400.7
8/20/08 12:00 PM	1.85	0.00	1.4	1045.2
8/20/08 4:00 PM	1.76	0.00	0.9	695.1
8/20/08 8:00 PM	1.70	0.00	0.6	513.1
8/21/08 12:00 AM	1.68	0.00	0.5	974.7
8/21/08 4:00 AM	1.93	0.00	1.6	1352.3
8/21/08 8:00 AM	1.85	0.00	1.4	1441.3
8/21/08 12:00 PM	2.01	0.00	1.8	1675.8

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/21/08 4:00 PM	2.03	0.00	1.9	1592.1
8/21/08 8:00 PM	1.94	0.00	1.6	1364.1
8/22/08 12:00 AM	1.85	0.00	1.4	1064.4
8/22/08 4:00 AM	1.77	0.00	1.0	752.5
8/22/08 8:00 AM	1.72	0.00	0.7	540.0
8/22/08 12:00 PM	1.68	0.00	0.5	497.5
8/22/08 4:00 PM	1.70	0.00	0.6	628.9
8/22/08 8:00 PM	1.74	0.00	0.8	624.1
8/23/08 12:00 AM	1.69	0.00	0.6	474.2
8/23/08 4:00 AM	1.67	0.00	0.5	455.4
8/23/08 8:00 AM	1.68	0.00	0.5	433.2
8/23/08 12:00 PM	1.65	0.00	0.4	343.0
8/23/08 4:00 PM	1.62	0.00	0.3	287.8
8/23/08 8:00 PM	1.60	0.00	0.3	262.3
8/24/08 12:00 AM	1.59	0.00	0.3	255.7
8/24/08 4:00 AM	1.58	0.00	0.3	254.6
8/24/08 8:00 AM	1.56	0.00	0.3	253.5
8/24/08 12:00 PM	1.55	0.00	0.3	252.5
8/24/08 4:00 PM	1.54	0.00	0.3	251.4
8/24/08 8:00 PM	1.53	0.00	0.3	250.4
8/25/08 12:00 AM	1.52	0.00	0.3	249.8
8/25/08 4:00 AM	1.51	0.00	0.3	249.2
8/25/08 8:00 AM	1.50	0.00	0.3	248.2
8/25/08 12:00 PM	1.49	0.00	0.3	364.4
8/25/08 4:00 PM	1.68	0.00	0.5	460.7
8/25/08 8:00 PM	1.67	0.00	0.5	392.0
8/26/08 12:00 AM	1.64	0.00	0.4	317.5
8/26/08 4:00 AM	1.62	0.00	0.3	274.8
8/26/08 8:00 AM	1.59	0.00	0.3	256.7
8/26/08 12:00 PM	1.57	0.00	0.3	254.5
8/26/08 4:00 PM	1.56	0.00	0.3	253.0
8/26/08 8:00 PM	1.54	0.00	0.3	251.7
8/27/08 12:00 AM	1.53	0.00	0.3	251.0
8/27/08 4:00 AM	1.53	0.00	0.3	250.7
8/27/08 8:00 AM	1.52	0.00	0.3	250.0
8/27/08 12:00 PM	1.51	0.00	0.3	248.6
8/27/08 4:00 PM	1.49	0.00	0.3	247.2
8/27/08 8:00 PM	1.48	0.00	0.3	246.1
8/28/08 12:00 AM	1.47	0.00	0.3	245.6
8/28/08 4:00 AM	1.47	0.00	0.3	244.9
8/28/08 8:00 AM	1.46	0.00	0.3	243.8
8/28/08 12:00 PM	1.44	0.00	0.3	242.5
8/28/08 4:00 PM	1.43	0.00	0.3	241.0
8/28/08 8:00 PM	1.41	0.00	0.3	239.8
8/29/08 12:00 AM	1.40	0.00	0.3	239.1
8/29/08 4:00 AM	1.40	0.00	0.3	238.5
8/29/08 8:00 AM	1.39	0.00	0.3	237.4
8/29/08 12:00 PM	1.37	0.00	0.3	235.8
8/29/08 4:00 PM	1.35	0.00	0.3	234.1
8/29/08 8:00 PM	1.34	0.00	0.3	232.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
8/30/08 12:00 AM	1.32	0.00	0.3	231.7
8/30/08 4:00 AM	1.32	0.00	0.3	231.0
8/30/08 8:00 AM	1.31	0.00	0.3	229.7
8/30/08 12:00 PM	1.29	0.00	0.3	228.6
8/30/08 4:00 PM	1.29	0.00	0.3	234.3
8/30/08 8:00 PM	1.41	0.00	0.3	240.3
8/31/08 12:00 AM	1.41	0.00	0.3	240.3
8/31/08 4:00 AM	1.41	0.00	0.3	245.6
8/31/08 8:00 AM	1.53	0.00	0.3	252.0
8/31/08 12:00 PM	1.55	0.00	0.3	529.7
8/31/08 4:00 PM	1.76	0.00	0.9	1235.7
8/31/08 8:00 PM	2.01	0.00	1.9	1545.9
9/1/08 12:00 AM	1.91	0.00	1.6	1284.6
9/1/08 4:00 AM	1.82	0.00	1.3	938.6
9/1/08 8:00 AM	1.74	0.00	0.8	618.8
9/1/08 12:00 PM	1.69	0.00	0.6	433.6
9/1/08 4:00 PM	1.65	0.00	0.4	328.7
9/1/08 8:00 PM	1.62	0.00	0.3	277.1
9/2/08 12:00 AM	1.60	0.00	0.3	258.4
9/2/08 4:00 AM	1.58	0.00	0.3	254.9
9/2/08 8:00 AM	1.56	0.00	0.3	253.5
9/2/08 12:00 PM	1.55	0.00	0.3	252.0
9/2/08 4:00 PM	1.53	0.00	0.3	250.4
9/2/08 8:00 PM	1.51	0.00	0.3	249.1
9/3/08 12:00 AM	1.50	0.00	0.3	248.4
9/3/08 4:00 AM	1.50	0.00	0.3	247.9
9/3/08 8:00 AM	1.49	0.00	0.3	246.9
9/3/08 12:00 PM	1.48	0.00	0.3	245.5
9/3/08 4:00 PM	1.46	0.00	0.3	244.0
9/3/08 8:00 PM	1.44	0.00	0.3	242.8
9/4/08 12:00 AM	1.43	0.00	0.3	241.9
9/4/08 4:00 AM	1.42	0.00	0.3	241.0
9/4/08 8:00 AM	1.41	0.00	0.3	239.8
9/4/08 12:00 PM	1.40	0.00	0.3	238.3
9/4/08 4:00 PM	1.38	0.00	0.3	236.7
9/4/08 8:00 PM	1.36	0.00	0.3	235.3
9/5/08 12:00 AM	1.35	0.00	0.3	234.2
9/5/08 4:00 AM	1.34	0.00	0.3	233.1
9/5/08 8:00 AM	1.33	0.00	0.3	231.9
9/5/08 12:00 PM	1.31	0.00	0.3	230.4
9/5/08 4:00 PM	1.30	0.00	0.3	229.0
9/5/08 8:00 PM	1.29	0.00	0.3	227.6
9/6/08 12:00 AM	1.27	0.00	0.3	226.5
9/6/08 4:00 AM	1.26	0.00	0.3	225.8
9/6/08 8:00 AM	1.26	0.00	0.3	224.8
9/6/08 12:00 PM	1.24	0.00	0.2	223.3
9/6/08 4:00 PM	1.23	0.00	0.2	221.7
9/6/08 8:00 PM	1.21	0.00	0.2	220.5
9/7/08 12:00 AM	1.20	0.00	0.2	219.7
9/7/08 4:00 AM	1.20	0.00	0.2	219.2

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/7/08 8:00 AM	1.19	0.00	0.2	218.1
9/7/08 12:00 PM	1.18	0.00	0.2	216.4
9/7/08 4:00 PM	1.16	0.00	0.2	214.8
9/7/08 8:00 PM	1.15	0.00	0.2	213.5
9/8/08 12:00 AM	1.13	0.00	0.2	212.7
9/8/08 4:00 AM	1.13	0.00	0.2	212.2
9/8/08 8:00 AM	1.12	0.00	0.2	211.2
9/8/08 12:00 PM	1.11	0.00	0.2	209.5
9/8/08 4:00 PM	1.09	0.00	0.2	215.0
9/8/08 8:00 PM	1.22	0.00	0.2	221.2
9/9/08 12:00 AM	1.21	0.00	0.2	220.2
9/9/08 4:00 AM	1.20	0.00	0.2	218.9
9/9/08 8:00 AM	1.19	0.00	0.2	217.5
9/9/08 12:00 PM	1.17	0.00	0.2	217.7
9/9/08 4:00 PM	1.19	0.00	0.2	233.2
9/9/08 8:00 PM	1.49	0.00	0.3	250.8
9/10/08 12:00 AM	1.56	0.00	0.3	253.6
9/10/08 4:00 AM	1.55	0.00	0.3	1449.9
9/10/08 8:00 AM	2.60	0.00	2.9	2594.0
9/10/08 12:00 PM	2.53	0.00	2.8	2403.6
9/10/08 4:00 PM	2.34	0.00	2.5	2124.0
9/10/08 8:00 PM	2.17	0.00	2.2	1846.3
9/11/08 12:00 AM	2.03	0.00	1.9	1567.4
9/11/08 4:00 AM	1.91	0.00	1.6	1277.7
9/11/08 8:00 AM	1.82	0.00	1.3	915.6
9/11/08 12:00 PM	1.74	0.00	0.8	574.5
9/11/08 4:00 PM	1.67	0.00	0.5	387.7
9/11/08 8:00 PM	1.63	0.00	0.4	300.0
9/12/08 12:00 AM	1.61	0.00	0.3	264.9
9/12/08 4:00 AM	1.59	0.00	0.3	255.7
9/12/08 8:00 AM	1.58	0.00	0.3	254.5
9/12/08 12:00 PM	1.56	0.00	0.3	252.9
9/12/08 4:00 PM	1.54	0.00	0.3	251.3
9/12/08 8:00 PM	1.53	0.00	0.3	250.4
9/13/08 12:00 AM	1.52	0.00	0.3	249.9
9/13/08 4:00 AM	1.51	0.00	0.3	249.8
9/13/08 8:00 AM	1.51	0.00	0.3	249.4
9/13/08 12:00 PM	1.50	0.00	0.3	248.1
9/13/08 4:00 PM	1.49	0.00	0.3	246.7
9/13/08 8:00 PM	1.47	0.00	0.3	245.5
9/14/08 12:00 AM	1.46	0.00	0.3	244.5
9/14/08 4:00 AM	1.45	0.00	0.3	243.6
9/14/08 8:00 AM	1.44	0.00	0.3	242.5
9/14/08 12:00 PM	1.43	0.00	0.3	240.9
9/14/08 4:00 PM	1.41	0.00	0.3	719.2
9/14/08 8:00 PM	1.84	0.00	1.3	1615.7
9/15/08 12:00 AM	2.20	0.00	2.3	1893.6
9/15/08 4:00 AM	2.05	0.00	1.9	1607.8
9/15/08 8:00 AM	1.93	0.00	1.6	1306.2
9/15/08 12:00 PM	1.82	0.00	1.3	918.1

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/15/08 4:00 PM	1.73	0.00	0.8	571.3
9/15/08 8:00 PM	1.68	0.00	0.5	549.3
9/16/08 12:00 AM	1.72	0.00	0.7	558.1
9/16/08 4:00 AM	1.68	0.00	0.5	422.2
9/16/08 8:00 AM	1.65	0.00	0.4	330.2
9/16/08 12:00 PM	1.62	0.00	0.3	273.8
9/16/08 4:00 PM	1.59	0.00	0.3	1059.0
9/16/08 8:00 PM	2.11	0.00	2.1	1750.3
9/17/08 12:00 AM	2.00	0.00	1.8	1497.8
9/17/08 4:00 AM	1.89	0.00	1.5	1208.7
9/17/08 8:00 AM	1.80	0.00	1.2	847.4
9/17/08 12:00 PM	1.72	0.00	0.7	532.8
9/17/08 4:00 PM	1.67	0.00	0.5	1693.1
9/17/08 8:00 PM	2.85	0.00	3.3	2864.0
9/18/08 12:00 AM	2.70	0.00	3.1	2614.9
9/18/08 4:00 AM	2.47	0.00	2.7	2288.5
9/18/08 8:00 AM	2.25	0.00	2.4	1945.3
9/18/08 12:00 PM	2.06	0.00	2.0	1579.3
9/18/08 4:00 PM	1.90	0.00	1.5	1139.2
9/18/08 8:00 PM	1.77	0.00	1.0	705.7
9/19/08 12:00 AM	1.69	0.00	0.6	432.7
9/19/08 4:00 AM	1.64	0.00	0.4	305.6
9/19/08 8:00 AM	1.60	0.00	0.3	261.1
9/19/08 12:00 PM	1.57	0.00	0.3	253.5
9/19/08 4:00 PM	1.54	0.00	0.3	251.3
9/19/08 8:00 PM	1.52	0.00	0.3	249.7
9/20/08 12:00 AM	1.51	0.00	0.3	248.6
9/20/08 4:00 AM	1.50	0.00	0.3	247.7
9/20/08 8:00 AM	1.48	0.00	0.3	246.3
9/20/08 12:00 PM	1.47	0.00	0.3	244.5
9/20/08 4:00 PM	1.45	0.00	0.3	242.7
9/20/08 8:00 PM	1.43	0.00	0.3	241.1
9/21/08 12:00 AM	1.41	0.00	0.3	239.5
9/21/08 4:00 AM	1.39	0.00	0.3	237.9
9/21/08 8:00 AM	1.38	0.00	0.3	236.3
9/21/08 12:00 PM	1.36	0.00	0.3	234.4
9/21/08 4:00 PM	1.34	0.00	0.3	903.6
9/21/08 8:00 PM	1.97	0.00	1.7	1559.0
9/22/08 12:00 AM	1.96	0.00	1.7	1361.7
9/22/08 4:00 AM	1.83	0.00	1.3	924.7
9/22/08 8:00 AM	1.73	0.00	0.7	545.5
9/22/08 12:00 PM	1.66	0.00	0.5	350.6
9/22/08 4:00 PM	1.61	0.00	0.3	285.0
9/22/08 8:00 PM	1.62	0.00	0.3	767.8
9/23/08 12:00 AM	1.85	0.00	1.4	1024.2
9/23/08 4:00 AM	1.76	0.00	0.9	644.8
9/23/08 8:00 AM	1.68	0.00	0.5	408.0
9/23/08 12:00 PM	1.63	0.00	0.4	292.9
9/23/08 4:00 PM	1.59	0.00	0.3	255.7
9/23/08 8:00 PM	1.56	0.00	0.3	253.3

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
9/24/08 12:00 AM	1.54	0.00	0.3	251.6
9/24/08 4:00 AM	1.53	0.00	0.3	250.4
9/24/08 8:00 AM	1.51	0.00	0.3	249.0
9/24/08 12:00 PM	1.50	0.00	0.3	247.1
9/24/08 4:00 PM	1.47	0.00	0.3	245.2
9/24/08 8:00 PM	1.46	0.00	0.3	243.7
9/25/08 12:00 AM	1.44	0.00	0.3	242.2
9/25/08 4:00 AM	1.42	0.00	0.3	240.5
9/25/08 8:00 AM	1.40	0.00	0.3	238.7
9/25/08 12:00 PM	1.38	0.00	0.3	236.7
9/25/08 4:00 PM	1.36	0.00	0.3	234.7
9/25/08 8:00 PM	1.34	0.00	0.3	233.3
9/26/08 12:00 AM	1.33	0.00	0.3	232.1
9/26/08 4:00 AM	1.32	0.00	0.3	231.2
9/26/08 8:00 AM	1.31	0.00	0.3	229.8
9/26/08 12:00 PM	1.29	0.00	0.3	227.8
9/26/08 4:00 PM	1.27	0.00	0.3	225.8
9/26/08 8:00 PM	1.25	0.00	0.2	224.3
9/27/08 12:00 AM	1.24	0.00	0.2	223.1
9/27/08 4:00 AM	1.23	0.00	0.2	222.0
9/27/08 8:00 AM	1.22	0.00	0.2	220.6
9/27/08 12:00 PM	1.20	0.00	0.2	218.6
9/27/08 4:00 PM	1.18	0.00	0.2	233.6
9/27/08 8:00 PM	1.51	0.00	0.3	249.1
9/28/08 12:00 AM	1.50	0.00	0.3	247.9
9/28/08 4:00 AM	1.48	0.00	0.3	246.3
9/28/08 8:00 AM	1.47	0.00	0.3	246.4
9/28/08 12:00 PM	1.49	0.00	0.3	250.2
9/28/08 4:00 PM	1.55	0.00	0.3	252.8
9/28/08 8:00 PM	1.54	0.00	0.3	251.5
9/29/08 12:00 AM	1.52	0.00	0.3	249.7
9/29/08 4:00 AM	1.50	0.00	0.3	248.0
9/29/08 8:00 AM	1.49	0.00	0.3	246.4
9/29/08 12:00 PM	1.47	0.00	0.3	244.3
9/29/08 4:00 PM	1.44	0.00	0.3	1179.1
9/29/08 8:00 PM	2.25	0.00	2.4	1974.4
9/30/08 12:00 AM	2.09	0.00	2.0	1703.8
9/30/08 4:00 AM	1.97	0.00	1.7	1407.4
9/30/08 8:00 AM	1.85	0.00	1.4	1021.6
9/30/08 12:00 PM	1.76	0.00	0.9	1021.6
9/30/08 4:00 PM	1.85	0.00	1.4	1003.5
9/30/08 8:00 PM	1.75	0.00	0.9	623.7
10/1/08 12:00 AM	1.68	0.00	0.5	412.5
10/1/08 4:00 AM	1.64	0.00	0.4	314.3
10/1/08 8:00 AM	1.61	0.00	0.3	270.4
10/1/08 12:00 PM	1.58	0.00	0.3	255.0
10/1/08 4:00 PM	1.56	0.00	0.3	253.2
10/1/08 8:00 PM	1.54	0.00	0.3	251.8
10/2/08 12:00 AM	1.53	0.00	0.3	250.6
10/2/08 4:00 AM	1.52	0.00	0.3	249.6

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
10/2/08 8:00 AM	1.51	0.00	0.3	248.4
10/2/08 12:00 PM	1.49	0.00	0.3	246.8
10/2/08 4:00 PM	1.47	0.00	0.3	245.4
10/2/08 8:00 PM	1.46	0.00	0.3	244.3
10/3/08 12:00 AM	1.45	0.00	0.3	243.5
10/3/08 4:00 AM	1.44	0.00	0.3	242.9
10/3/08 8:00 AM	1.43	0.00	0.3	241.7
10/3/08 12:00 PM	1.42	0.00	0.3	239.9
10/3/08 4:00 PM	1.40	0.00	0.3	238.3
10/3/08 8:00 PM	1.38	0.00	0.3	237.0
10/4/08 12:00 AM	1.37	0.00	0.3	235.9
10/4/08 4:00 AM	1.36	0.00	0.3	235.0
10/4/08 8:00 AM	1.35	0.00	0.3	234.1
10/4/08 12:00 PM	1.34	0.00	0.3	232.9
10/4/08 4:00 PM	1.32	0.00	0.3	237.3
10/4/08 8:00 PM	1.44	0.00	0.3	242.4
10/5/08 12:00 AM	1.43	0.00	0.3	241.7
10/5/08 4:00 AM	1.42	0.00	0.3	240.7
10/5/08 8:00 AM	1.41	0.00	0.3	239.7
10/5/08 12:00 PM	1.40	0.00	0.3	238.3
10/5/08 4:00 PM	1.38	0.00	0.3	236.9
10/5/08 8:00 PM	1.37	0.00	0.3	235.8
10/6/08 12:00 AM	1.36	0.00	0.3	235.2
10/6/08 4:00 AM	1.36	0.00	0.3	234.8
10/6/08 8:00 AM	1.35	0.00	0.3	233.8
10/6/08 12:00 PM	1.34	0.00	0.3	232.6
10/6/08 4:00 PM	1.32	0.00	0.3	233.8
10/6/08 8:00 PM	1.36	0.00	0.3	234.8
10/7/08 12:00 AM	1.35	0.00	0.3	233.5
10/7/08 4:00 AM	1.33	0.00	0.3	232.2
10/7/08 8:00 AM	1.32	0.00	0.3	230.5
10/7/08 12:00 PM	1.30	0.00	0.3	228.5
10/7/08 4:00 PM	1.28	0.00	0.3	235.8
10/7/08 8:00 PM	1.45	0.00	0.3	243.3
10/8/08 12:00 AM	1.43	0.00	0.3	241.7
10/8/08 4:00 AM	1.42	0.00	0.3	240.5
10/8/08 8:00 AM	1.41	0.00	0.3	239.1
10/8/08 12:00 PM	1.39	0.00	0.3	237.1
10/8/08 4:00 PM	1.37	0.00	0.3	235.3
10/8/08 8:00 PM	1.35	0.00	0.3	233.8
10/9/08 12:00 AM	1.34	0.00	0.3	232.7
10/9/08 4:00 AM	1.33	0.00	0.3	231.6
10/9/08 8:00 AM	1.31	0.00	0.3	230.2
10/9/08 12:00 PM	1.30	0.00	0.3	228.7
10/9/08 4:00 PM	1.28	0.00	0.3	226.7
10/9/08 8:00 PM	1.26	0.00	0.3	224.3
10/10/08 12:00 AM	1.23	0.00	0.2	222.2
10/10/08 4:00 AM	1.22	0.00	0.2	220.4
10/10/08 8:00 AM	1.20	0.00	0.2	218.1
10/10/08 12:00 PM	1.17	0.00	0.2	216.7

Wal-Mart Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Downstream WSEL (ft)	Flow (cfs)	Incremental Volume (cf)
			Total =	4467677.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
5/4/06 3:00 PM	-2.71	0.0	0.0
Data range not printed - WSEL below invert for entire range			
7/11/06 2:00 PM	-0.28	0.0	0.0
7/11/06 3:00 PM	-0.01	0.0	42.0
7/11/06 4:00 PM	0.01	0.0	49.2
7/11/06 5:00 PM	0.01	0.0	72.4
7/11/06 6:00 PM	0.02	0.0	94.4
7/11/06 7:00 PM	0.02	0.0	136.9
7/11/06 8:00 PM	0.03	0.0	192.1
7/11/06 9:00 PM	0.03	0.1	214.6
7/11/06 10:00 PM	0.04	0.1	222.4
7/11/06 11:00 PM	0.04	0.1	230.3
7/12/06 12:00 AM	0.04	0.1	238.3
7/12/06 1:00 AM	0.04	0.1	250.5
7/12/06 2:00 AM	0.04	0.1	254.5
7/12/06 3:00 AM	0.04	0.1	254.5
7/12/06 4:00 AM	0.04	0.1	262.8
7/12/06 5:00 AM	0.04	0.1	275.4
7/12/06 6:00 AM	0.04	0.1	288.1
7/12/06 7:00 AM	0.04	0.1	288.1
7/12/06 8:00 AM	0.04	0.1	296.8
7/12/06 9:00 AM	0.04	0.1	327.6
7/12/06 10:00 AM	0.05	0.1	363.9
7/12/06 11:00 AM	0.05	0.1	368.5
7/12/06 12:00 PM	0.05	0.1	345.5
7/12/06 1:00 PM	0.05	0.1	345.5
7/12/06 2:00 PM	0.05	0.1	378.0
7/12/06 3:00 PM	0.05	0.1	382.6
7/12/06 4:00 PM	0.05	0.1	392.2
7/12/06 5:00 PM	0.05	0.1	392.2
7/12/06 6:00 PM	0.05	0.1	373.1
7/12/06 7:00 PM	0.05	0.1	373.1
7/12/06 8:00 PM	0.05	0.1	363.8
7/12/06 9:00 PM	0.05	0.1	359.2
7/12/06 10:00 PM	0.05	0.1	359.2
7/12/06 11:00 PM	0.05	0.1	354.6
7/13/06 12:00 AM	0.05	0.1	336.4
7/13/06 1:00 AM	0.05	0.1	331.9
7/13/06 2:00 AM	0.05	0.1	327.5
7/13/06 3:00 AM	0.04	0.1	318.5
7/13/06 4:00 AM	0.04	0.1	318.5
7/13/06 5:00 AM	0.04	0.1	318.5
7/13/06 6:00 AM	0.04	0.1	309.8
7/13/06 7:00 AM	0.04	0.1	309.8
7/13/06 8:00 AM	0.04	0.1	314.1
7/13/06 9:00 AM	0.04	0.1	309.7
7/13/06 10:00 AM	0.04	0.1	292.5
7/13/06 11:00 AM	0.04	0.1	310.4
7/13/06 12:00 PM	0.05	0.1	363.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/13/06 1:00 PM	0.05	0.1	373.1
7/13/06 2:00 PM	0.05	0.1	363.8
7/13/06 3:00 PM	0.05	0.1	469.1
7/13/06 4:00 PM	0.07	0.2	762.9
7/13/06 5:00 PM	0.09	0.3	957.8
7/13/06 6:00 PM	0.09	0.3	977.1
7/13/06 7:00 PM	0.10	0.3	1002.9
7/13/06 8:00 PM	0.10	0.3	996.5
7/13/06 9:00 PM	0.09	0.3	970.6
7/13/06 10:00 PM	0.09	0.3	970.6
7/13/06 11:00 PM	0.09	0.3	970.6
7/14/06 12:00 AM	0.09	0.3	938.9
7/14/06 1:00 AM	0.09	0.3	926.1
7/14/06 2:00 AM	0.09	0.3	957.9
7/14/06 3:00 AM	0.09	0.3	977.1
7/14/06 4:00 AM	0.09	0.3	983.5
7/14/06 5:00 AM	0.10	0.3	977.1
7/14/06 6:00 AM	0.09	0.3	964.2
7/14/06 7:00 AM	0.09	0.3	964.2
7/14/06 8:00 AM	0.09	0.3	951.5
7/14/06 9:00 AM	0.09	0.3	938.7
7/14/06 10:00 AM	0.09	0.3	926.1
7/14/06 11:00 AM	0.09	0.3	919.8
7/14/06 12:00 PM	0.09	0.3	932.4
7/14/06 1:00 PM	0.09	0.3	945.1
7/14/06 2:00 PM	0.09	0.3	926.2
7/14/06 3:00 PM	0.09	0.3	900.9
7/14/06 4:00 PM	0.09	0.3	876.2
7/14/06 5:00 PM	0.09	0.2	901.4
7/14/06 6:00 PM	0.09	0.3	932.5
7/14/06 7:00 PM	0.09	0.3	894.8
7/14/06 8:00 PM	0.09	0.2	876.0
7/14/06 9:00 PM	0.09	0.2	876.0
7/14/06 10:00 PM	0.09	0.2	857.6
7/14/06 11:00 PM	0.09	0.2	833.0
7/15/06 12:00 AM	0.08	0.2	814.8
7/15/06 1:00 AM	0.08	0.2	790.7
7/15/06 2:00 AM	0.08	0.2	772.8
7/15/06 3:00 AM	0.08	0.2	766.9
7/15/06 4:00 AM	0.08	0.2	761.0
7/15/06 5:00 AM	0.08	0.2	743.3
7/15/06 6:00 AM	0.08	0.2	731.6
7/15/06 7:00 AM	0.08	0.2	708.5
7/15/06 8:00 AM	0.07	0.2	685.4
7/15/06 9:00 AM	0.07	0.2	696.9
7/15/06 10:00 AM	0.08	0.2	714.1
7/15/06 11:00 AM	0.08	0.2	719.9
7/15/06 12:00 PM	0.08	0.2	725.7
7/15/06 1:00 PM	0.08	0.2	743.3
7/15/06 2:00 PM	0.08	0.2	731.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/15/06 3:00 PM	0.08	0.2	708.3
7/15/06 4:00 PM	0.08	0.2	720.0
7/15/06 5:00 PM	0.08	0.2	720.0
7/15/06 6:00 PM	0.08	0.2	674.3
7/15/06 7:00 PM	0.07	0.2	623.6
7/15/06 8:00 PM	0.07	0.2	574.7
7/15/06 9:00 PM	0.06	0.2	553.0
7/15/06 10:00 PM	0.07	0.2	532.2
7/15/06 11:00 PM	0.06	0.1	500.7
7/16/06 12:00 AM	0.06	0.1	500.7
7/16/06 1:00 AM	0.06	0.1	490.4
7/16/06 2:00 AM	0.06	0.1	480.2
7/16/06 3:00 AM	0.06	0.1	465.2
7/16/06 4:00 AM	0.06	0.1	445.2
7/16/06 5:00 AM	0.06	0.1	435.3
7/16/06 6:00 AM	0.05	0.1	425.5
7/16/06 7:00 AM	0.05	0.1	415.8
7/16/06 8:00 AM	0.05	0.1	411.0
7/16/06 9:00 AM	0.05	0.1	401.4
7/16/06 10:00 AM	0.05	0.1	387.2
7/16/06 11:00 AM	0.05	0.1	396.7
7/16/06 12:00 PM	0.05	0.1	406.2
7/16/06 1:00 PM	0.05	0.1	396.6
7/16/06 2:00 PM	0.05	0.1	396.6
7/16/06 3:00 PM	0.05	0.1	396.6
7/16/06 4:00 PM	0.05	0.1	359.6
7/16/06 5:00 PM	0.05	0.1	327.4
7/16/06 6:00 PM	0.05	0.1	318.6
7/16/06 7:00 PM	0.04	0.1	309.7
7/16/06 8:00 PM	0.04	0.1	296.8
7/16/06 9:00 PM	0.04	0.1	292.4
7/16/06 10:00 PM	0.04	0.1	284.0
7/16/06 11:00 PM	0.04	0.1	258.7
7/17/06 12:00 AM	0.04	0.1	250.4
7/17/06 1:00 AM	0.04	0.1	246.4
7/17/06 2:00 AM	0.04	0.1	238.3
7/17/06 3:00 AM	0.04	0.1	226.4
7/17/06 4:00 AM	0.04	0.1	207.0
7/17/06 5:00 AM	0.03	0.1	191.8
7/17/06 6:00 AM	0.03	0.1	184.3
7/17/06 7:00 AM	0.03	0.1	173.4
7/17/06 8:00 AM	0.03	0.0	159.2
7/17/06 9:00 AM	0.03	0.0	152.2
7/17/06 10:00 AM	0.03	0.0	159.2
7/17/06 11:00 AM	0.03	0.0	159.2
7/17/06 12:00 PM	0.03	0.0	148.7
7/17/06 1:00 PM	0.03	0.0	141.9
7/17/06 2:00 PM	0.03	0.0	145.4
7/17/06 3:00 PM	0.03	0.0	142.0
7/17/06 4:00 PM	0.02	0.0	142.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/17/06 5:00 PM	0.03	0.0	135.6
7/17/06 6:00 PM	0.02	0.0	109.6
7/17/06 7:00 PM	0.02	0.0	103.4
7/17/06 8:00 PM	0.02	0.0	91.8
7/17/06 9:00 PM	0.02	0.0	74.5
7/17/06 10:00 PM	0.02	0.0	64.0
7/17/06 11:00 PM	0.01	0.0	56.3
7/18/06 12:00 AM	0.01	0.0	49.2
7/18/06 1:00 AM	0.01	0.0	42.0
7/18/06 2:00 AM	0.01	0.0	37.7
7/18/06 3:00 AM	0.01	0.0	29.4
7/18/06 4:00 AM	0.01	0.0	23.5
7/18/06 5:00 AM	0.01	0.0	19.9
7/18/06 6:00 AM	0.01	0.0	15.0
7/18/06 7:00 AM	0.00	0.0	10.4
7/18/06 8:00 AM	0.00	0.0	5.6
7/18/06 9:00 AM	0.00	0.0	5.6
7/18/06 10:00 AM	0.00	0.0	5.6
7/18/06 11:00 AM	0.00	0.0	2.3
7/18/06 12:00 PM	0.00	0.0	1.1
7/18/06 1:00 PM	0.00	0.0	0.0
7/18/06 2:00 PM	0.00	0.0	76.1
7/18/06 3:00 PM	0.03	0.0	148.7
7/18/06 4:00 PM	0.03	0.0	166.7
7/18/06 5:00 PM	0.03	0.1	188.0
7/18/06 6:00 PM	0.03	0.1	203.3
7/18/06 7:00 PM	0.04	0.1	207.0
7/18/06 8:00 PM	0.03	0.1	195.5
7/18/06 9:00 PM	0.03	0.1	180.9
7/18/06 10:00 PM	0.03	0.0	159.2
7/18/06 11:00 PM	0.03	0.0	142.0
7/19/06 12:00 AM	0.02	0.0	131.9
7/19/06 1:00 AM	0.02	0.0	128.6
7/19/06 2:00 AM	0.02	0.0	119.0
7/19/06 3:00 AM	0.02	0.0	109.5
7/19/06 4:00 AM	0.02	0.0	103.4
7/19/06 5:00 AM	0.02	0.0	94.4
7/19/06 6:00 AM	0.02	0.0	85.7
7/19/06 7:00 AM	0.02	0.0	80.0
7/19/06 8:00 AM	0.02	0.0	71.9
7/19/06 9:00 AM	0.02	0.0	71.9
7/19/06 10:00 AM	0.02	0.0	69.3
7/19/06 11:00 AM	0.01	0.0	58.8
7/19/06 12:00 PM	0.01	0.0	66.8
7/19/06 1:00 PM	0.02	0.0	74.5
7/19/06 2:00 PM	0.02	0.0	54.7
7/19/06 3:00 PM	0.01	0.0	35.5
7/19/06 4:00 PM	0.01	0.0	33.4
7/19/06 5:00 PM	0.01	0.0	22.6
7/19/06 6:00 PM	0.00	0.0	8.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/19/06 7:00 PM	0.00	0.0	2.1
7/19/06 8:00 PM	0.00	0.0	0.0
7/19/06 9:00 PM	0.00	0.0	0.0
7/19/06 10:00 PM	-0.01	0.0	0.0
Data range not printed - WSEL below invert for entire range			
7/22/06 12:00 AM	-0.02	0.0	0.0
7/22/06 1:00 AM	-0.02	0.0	0.0
7/22/06 2:00 AM	-0.02	0.0	5.9
7/22/06 3:00 AM	0.00	0.0	1896.5
7/22/06 4:00 AM	0.23	1.1	3976.1
7/22/06 5:00 AM	0.25	1.2	4160.6
7/22/06 6:00 AM	0.25	1.2	4150.2
7/22/06 7:00 AM	0.25	1.2	4129.4
7/22/06 8:00 AM	0.25	1.1	4968.9
7/22/06 9:00 AM	0.31	1.6	6431.2
7/22/06 10:00 AM	0.35	2.0	7120.3
7/22/06 11:00 AM	0.36	2.0	7295.5
7/22/06 12:00 PM	0.37	2.1	7333.1
7/22/06 1:00 PM	0.36	2.0	7295.3
7/22/06 2:00 PM	0.36	2.0	7232.7
7/22/06 3:00 PM	0.36	2.0	7120.2
7/22/06 4:00 PM	0.36	2.0	7020.8
7/22/06 5:00 PM	0.35	1.9	6946.4
7/22/06 6:00 PM	0.35	1.9	6860.2
7/22/06 7:00 PM	0.35	1.9	6749.6
7/22/06 8:00 PM	0.34	1.9	6639.8
7/22/06 9:00 PM	0.34	1.8	6554.7
7/22/06 10:00 PM	0.34	1.8	6458.1
7/22/06 11:00 PM	0.33	1.8	6325.7
7/23/06 12:00 AM	0.33	1.7	6313.7
7/23/06 1:00 AM	0.33	1.8	6325.7
7/23/06 2:00 AM	0.33	1.8	6361.7
7/23/06 3:00 AM	0.33	1.8	9452.0
7/23/06 4:00 AM	0.52	3.5	13015.6
7/23/06 5:00 AM	0.55	3.8	13579.8
7/23/06 6:00 AM	0.55	3.8	13533.5
7/23/06 7:00 AM	0.55	3.7	13410.1
7/23/06 8:00 AM	0.54	3.7	13317.9
7/23/06 9:00 AM	0.54	3.7	13134.3
7/23/06 10:00 AM	0.53	3.6	12799.7
7/23/06 11:00 AM	0.52	3.5	12617.8
7/23/06 12:00 PM	0.52	3.5	12527.6
7/23/06 1:00 PM	0.52	3.5	12169.0
7/23/06 2:00 PM	0.50	3.3	11827.1
7/23/06 3:00 PM	0.50	3.3	11548.2
7/23/06 4:00 PM	0.49	3.2	11416.2
7/23/06 5:00 PM	0.49	3.2	11242.4
7/23/06 6:00 PM	0.48	3.1	10938.3
7/23/06 7:00 PM	0.47	3.0	10752.0
7/23/06 8:00 PM	0.47	3.0	10595.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/23/06 9:00 PM	0.46	2.9	10424.9
7/23/06 10:00 PM	0.46	2.9	10185.2
7/23/06 11:00 PM	0.45	2.8	9947.5
7/24/06 12:00 AM	0.44	2.7	9739.1
7/24/06 1:00 AM	0.44	2.7	9532.5
7/24/06 2:00 AM	0.43	2.6	9354.3
7/24/06 3:00 AM	0.43	2.6	9204.7
7/24/06 4:00 AM	0.42	2.5	9028.7
7/24/06 5:00 AM	0.42	2.5	8854.0
7/24/06 6:00 AM	0.41	2.4	8667.0
7/24/06 7:00 AM	0.40	2.4	8494.6
7/24/06 8:00 AM	0.40	2.3	8349.5
7/24/06 9:00 AM	0.40	2.3	8205.4
7/24/06 10:00 AM	0.39	2.3	8088.0
7/24/06 11:00 AM	0.39	2.2	7958.5
7/24/06 12:00 PM	0.38	2.2	7790.9
7/24/06 1:00 PM	0.38	2.1	7624.6
7/24/06 2:00 PM	0.37	2.1	7472.0
7/24/06 3:00 PM	0.37	2.1	7333.2
7/24/06 4:00 PM	0.36	2.0	7157.8
7/24/06 5:00 PM	0.36	2.0	7033.1
7/24/06 6:00 PM	0.35	1.9	6934.2
7/24/06 7:00 PM	0.35	1.9	6823.2
7/24/06 8:00 PM	0.35	1.9	6713.0
7/24/06 9:00 PM	0.34	1.8	6591.1
7/24/06 10:00 PM	0.34	1.8	6482.1
7/24/06 11:00 PM	0.33	1.8	6349.8
7/25/06 12:00 AM	0.33	1.7	6206.4
7/25/06 1:00 AM	0.32	1.7	6087.6
7/25/06 2:00 AM	0.32	1.7	5993.3
7/25/06 3:00 AM	0.32	1.7	5887.7
7/25/06 4:00 AM	0.31	1.6	5771.1
7/25/06 5:00 AM	0.31	1.6	5689.9
7/25/06 6:00 AM	0.31	1.6	5597.8
7/25/06 7:00 AM	0.30	1.5	5471.7
7/25/06 8:00 AM	0.30	1.5	5369.2
7/25/06 9:00 AM	0.29	1.5	5278.7
7/25/06 10:00 AM	0.29	1.5	5256.1
7/25/06 11:00 AM	0.29	1.5	5222.5
7/25/06 12:00 PM	0.29	1.4	5077.2
7/25/06 1:00 PM	0.28	1.4	4999.2
7/25/06 2:00 PM	0.28	1.4	5065.9
7/25/06 3:00 PM	0.29	1.4	4999.7
7/25/06 4:00 PM	0.28	1.4	4801.4
7/25/06 5:00 PM	0.27	1.3	4670.7
7/25/06 6:00 PM	0.27	1.3	5304.9
7/25/06 7:00 PM	0.32	1.7	5969.7
7/25/06 8:00 PM	0.32	1.7	5864.4
7/25/06 9:00 PM	0.31	1.6	5759.4
7/25/06 10:00 PM	0.31	1.6	5701.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/25/06 11:00 PM	0.31	1.6	5609.2
7/26/06 12:00 AM	0.30	1.5	5505.9
7/26/06 1:00 AM	0.30	1.5	5403.3
7/26/06 2:00 AM	0.30	1.5	5312.6
7/26/06 3:00 AM	0.29	1.5	5233.7
7/26/06 4:00 AM	0.29	1.4	5166.3
7/26/06 5:00 AM	0.29	1.4	5077.1
7/26/06 6:00 AM	0.28	1.4	4966.1
7/26/06 7:00 AM	0.28	1.4	4877.9
7/26/06 8:00 AM	0.28	1.3	4801.2
7/26/06 9:00 AM	0.27	1.3	4757.5
7/26/06 10:00 AM	0.27	1.3	4692.4
7/26/06 11:00 AM	0.27	1.3	4605.8
7/26/06 12:00 PM	0.27	1.3	4552.0
7/26/06 1:00 PM	0.26	1.3	4466.6
7/26/06 2:00 PM	0.26	1.2	4455.8
7/26/06 3:00 PM	0.26	1.3	4434.6
7/26/06 4:00 PM	0.26	1.2	4328.5
7/26/06 5:00 PM	0.26	1.2	4182.0
7/26/06 6:00 PM	0.25	1.1	4077.6
7/26/06 7:00 PM	0.25	1.1	4026.1
7/26/06 8:00 PM	0.24	1.1	3943.8
7/26/06 9:00 PM	0.24	1.1	3902.9
7/26/06 10:00 PM	0.24	1.1	3841.9
7/26/06 11:00 PM	0.24	1.1	3771.1
7/27/06 12:00 AM	0.23	1.0	3700.8
7/27/06 1:00 AM	0.23	1.0	3640.8
7/27/06 2:00 AM	0.23	1.0	3581.2
7/27/06 3:00 AM	0.22	1.0	3512.0
7/27/06 4:00 AM	0.22	1.0	3462.9
7/27/06 5:00 AM	0.22	1.0	3414.0
7/27/06 6:00 AM	0.22	0.9	3346.0
7/27/06 7:00 AM	0.21	0.9	3268.8
7/27/06 8:00 AM	0.21	0.9	3220.7
7/27/06 9:00 AM	0.21	0.9	3163.6
7/27/06 10:00 AM	0.21	0.9	3106.6
7/27/06 11:00 AM	0.21	0.9	3106.6
7/27/06 12:00 PM	0.21	0.9	3069.0
7/27/06 1:00 PM	0.20	0.8	3012.6
7/27/06 2:00 PM	0.20	0.8	2947.5
7/27/06 3:00 PM	0.20	0.8	2891.8
7/27/06 4:00 PM	0.20	0.8	2891.8
7/27/06 5:00 PM	0.20	0.8	2827.7
7/27/06 6:00 PM	0.19	0.8	2763.5
7/27/06 7:00 PM	0.19	0.8	2727.3
7/27/06 8:00 PM	0.19	0.7	2673.2
7/27/06 9:00 PM	0.19	0.7	2637.3
7/27/06 10:00 PM	0.18	0.7	2592.7
7/27/06 11:00 PM	0.18	0.7	2539.5
7/28/06 12:00 AM	0.18	0.7	2486.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/28/06 1:00 AM	0.18	0.7	2460.3
7/28/06 2:00 AM	0.18	0.7	2425.5
7/28/06 3:00 AM	0.17	0.7	2373.4
7/28/06 4:00 AM	0.17	0.7	2338.9
7/28/06 5:00 AM	0.17	0.6	2304.6
7/28/06 6:00 AM	0.17	0.6	2262.0
7/28/06 7:00 AM	0.17	0.6	2211.1
7/28/06 8:00 AM	0.16	0.6	2185.8
7/28/06 9:00 AM	0.16	0.6	2152.4
7/28/06 10:00 AM	0.16	0.6	2094.1
7/28/06 11:00 AM	0.16	0.6	2077.5
7/28/06 12:00 PM	0.16	0.6	2069.2
7/28/06 1:00 PM	0.16	0.6	2052.7
7/28/06 2:00 PM	0.16	0.6	2052.7
7/28/06 3:00 PM	0.16	0.6	1995.6
7/28/06 4:00 PM	0.15	0.5	1898.4
7/28/06 5:00 PM	0.15	0.5	1922.8
7/28/06 6:00 PM	0.15	0.6	1962.9
7/28/06 7:00 PM	0.15	0.5	1930.5
7/28/06 8:00 PM	0.15	0.5	1906.3
7/28/06 9:00 PM	0.15	0.5	1866.3
7/28/06 10:00 PM	0.15	0.5	1842.4
7/28/06 11:00 PM	0.15	0.5	1826.6
7/29/06 12:00 AM	0.14	0.5	1802.9
7/29/06 1:00 AM	0.14	0.5	1763.7
7/29/06 2:00 AM	0.14	0.5	1724.6
7/29/06 3:00 AM	0.14	0.5	1709.1
7/29/06 4:00 AM	0.14	0.5	1678.2
7/29/06 5:00 AM	0.14	0.5	1639.9
7/29/06 6:00 AM	0.13	0.5	1617.0
7/29/06 7:00 AM	0.13	0.4	1601.8
7/29/06 8:00 AM	0.13	0.4	1579.1
7/29/06 9:00 AM	0.13	0.4	1594.3
7/29/06 10:00 AM	0.13	0.5	1579.3
7/29/06 11:00 AM	0.13	0.4	1526.6
7/29/06 12:00 PM	0.13	0.4	1587.1
7/29/06 1:00 PM	0.14	0.5	1594.6
7/29/06 2:00 PM	0.13	0.4	1511.8
7/29/06 3:00 PM	0.13	0.4	1496.9
7/29/06 4:00 PM	0.13	0.4	1467.5
7/29/06 5:00 PM	0.12	0.4	1430.7
7/29/06 6:00 PM	0.12	0.4	1423.4
7/29/06 7:00 PM	0.12	0.4	1408.8
7/29/06 8:00 PM	0.12	0.4	1387.1
7/29/06 9:00 PM	0.12	0.4	1365.5
7/29/06 10:00 PM	0.12	0.4	1358.3
7/29/06 11:00 PM	0.12	0.4	1344.0
7/30/06 12:00 AM	0.12	0.4	1329.7
7/30/06 1:00 AM	0.12	0.4	1322.6
7/30/06 2:00 AM	0.12	0.4	1315.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/30/06 3:00 AM	0.12	0.4	1308.4
7/30/06 4:00 AM	0.12	0.4	1287.2
7/30/06 5:00 AM	0.11	0.4	1266.1
7/30/06 6:00 AM	0.11	0.3	1245.2
7/30/06 7:00 AM	0.11	0.3	1231.2
7/30/06 8:00 AM	0.11	0.3	1238.2
7/30/06 9:00 AM	0.11	0.3	1231.3
7/30/06 10:00 AM	0.11	0.3	1217.4
7/30/06 11:00 AM	0.11	0.3	1203.6
7/30/06 12:00 PM	0.11	0.3	1196.7
7/30/06 1:00 PM	0.11	0.3	1176.2
7/30/06 2:00 PM	0.11	0.3	1142.1
7/30/06 3:00 PM	0.11	0.3	1121.9
7/30/06 4:00 PM	0.10	0.3	1115.1
7/30/06 5:00 PM	0.10	0.3	1101.8
7/30/06 6:00 PM	0.10	0.3	1081.7
7/30/06 7:00 PM	0.10	0.3	1068.4
7/30/06 8:00 PM	0.10	0.3	1042.1
7/30/06 9:00 PM	0.10	0.3	1028.9
7/30/06 10:00 PM	0.10	0.3	1022.4
7/30/06 11:00 PM	0.10	0.3	1002.9
7/31/06 12:00 AM	0.10	0.3	1022.6
7/31/06 1:00 AM	0.10	0.3	1042.1
7/31/06 2:00 AM	0.10	0.3	1028.9
7/31/06 3:00 AM	0.10	0.3	1015.9
7/31/06 4:00 AM	0.10	0.3	996.4
7/31/06 5:00 AM	0.10	0.3	983.5
7/31/06 6:00 AM	0.09	0.3	964.3
7/31/06 7:00 AM	0.09	0.3	945.1
7/31/06 8:00 AM	0.09	0.3	938.7
7/31/06 9:00 AM	0.09	0.3	919.8
7/31/06 10:00 AM	0.09	0.3	913.5
7/31/06 11:00 AM	0.09	0.3	913.5
7/31/06 12:00 PM	0.09	0.3	913.5
7/31/06 1:00 PM	0.09	0.3	907.3
7/31/06 2:00 PM	0.09	0.2	882.2
7/31/06 3:00 PM	0.09	0.2	882.2
7/31/06 4:00 PM	0.09	0.2	839.6
7/31/06 5:00 PM	0.08	0.2	796.7
7/31/06 6:00 PM	0.08	0.2	778.9
7/31/06 7:00 PM	0.08	0.2	743.3
7/31/06 8:00 PM	0.08	0.2	1318.9
7/31/06 9:00 PM	0.15	0.5	1996.0
7/31/06 10:00 PM	0.16	0.6	2085.7
7/31/06 11:00 PM	0.16	0.6	2094.0
8/1/06 12:00 AM	0.16	0.6	2077.5
8/1/06 1:00 AM	0.16	0.6	2052.7
8/1/06 2:00 AM	0.16	0.6	2036.3
8/1/06 3:00 AM	0.15	0.6	2019.9
8/1/06 4:00 AM	0.15	0.6	1995.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/1/06 5:00 AM	0.15	0.5	1970.9
8/1/06 6:00 AM	0.15	0.5	1954.7
8/1/06 7:00 AM	0.15	0.5	1922.4
8/1/06 8:00 AM	0.15	0.5	1898.3
8/1/06 9:00 AM	0.15	0.5	1890.3
8/1/06 10:00 AM	0.15	0.5	1866.3
8/1/06 11:00 AM	0.15	0.5	1874.4
8/1/06 12:00 PM	0.15	0.5	1890.3
8/1/06 1:00 PM	0.15	0.5	1874.3
8/1/06 2:00 PM	0.15	0.5	1811.1
8/1/06 3:00 PM	0.14	0.5	1763.6
8/1/06 4:00 PM	0.14	0.5	1755.8
8/1/06 5:00 PM	0.14	0.5	1763.7
8/1/06 6:00 PM	0.14	0.5	1748.2
8/1/06 7:00 PM	0.14	0.5	1709.1
8/1/06 8:00 PM	0.14	0.5	1655.5
8/1/06 9:00 PM	0.13	0.4	1594.2
8/1/06 10:00 PM	0.13	0.4	1564.1
8/1/06 11:00 PM	0.13	0.4	1504.4
8/2/06 12:00 AM	0.13	0.4	1452.7
8/2/06 1:00 AM	0.12	0.4	1430.7
8/2/06 2:00 AM	0.12	0.4	1401.7
8/2/06 3:00 AM	0.12	0.4	1358.3
8/2/06 4:00 AM	0.12	0.4	1336.8
8/2/06 5:00 AM	0.12	0.4	1301.4
8/2/06 6:00 AM	0.11	0.4	1273.1
8/2/06 7:00 AM	0.11	0.4	1259.1
8/2/06 8:00 AM	0.11	0.3	1217.5
8/2/06 9:00 AM	0.11	0.3	1169.3
8/2/06 10:00 AM	0.11	0.3	1169.3
8/2/06 11:00 AM	0.11	0.3	1196.7
8/2/06 12:00 PM	0.11	0.3	1217.4
8/2/06 1:00 PM	0.11	0.3	1183.3
8/2/06 2:00 PM	0.11	0.3	1142.1
8/2/06 3:00 PM	0.11	0.3	1108.6
8/2/06 4:00 PM	0.10	0.3	1088.4
8/2/06 5:00 PM	0.10	0.3	1081.8
8/2/06 6:00 PM	0.10	0.3	1016.1
8/2/06 7:00 PM	0.09	0.3	957.9
8/2/06 8:00 PM	0.09	0.3	951.5
8/2/06 9:00 PM	0.09	0.3	945.2
8/2/06 10:00 PM	0.09	0.3	919.8
8/2/06 11:00 PM	0.09	0.3	901.0
8/3/06 12:00 AM	0.09	0.2	876.1
8/3/06 1:00 AM	0.09	0.2	857.5
8/3/06 2:00 AM	0.09	0.2	839.1
8/3/06 3:00 AM	0.08	0.2	820.9
8/3/06 4:00 AM	0.08	0.2	808.8
8/3/06 5:00 AM	0.08	0.2	790.7
8/3/06 6:00 AM	0.08	0.2	766.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/3/06 7:00 AM	0.08	0.2	743.3
8/3/06 8:00 AM	0.08	0.2	731.6
8/3/06 9:00 AM	0.08	0.2	720.0
8/3/06 10:00 AM	0.08	0.2	702.6
8/3/06 11:00 AM	0.08	0.2	685.4
8/3/06 12:00 PM	0.07	0.2	679.7
8/3/06 1:00 PM	0.07	0.2	651.7
8/3/06 2:00 PM	0.07	0.2	669.0
8/3/06 3:00 PM	0.08	0.2	691.3
8/3/06 4:00 PM	0.07	0.2	662.7
8/3/06 5:00 PM	0.07	0.2	651.4
8/3/06 6:00 PM	0.07	0.2	623.6
8/3/06 7:00 PM	0.07	0.2	596.1
8/3/06 8:00 PM	0.07	0.2	579.8
8/3/06 9:00 PM	0.07	0.2	569.0
8/3/06 10:00 PM	0.07	0.2	558.3
8/3/06 11:00 PM	0.06	0.2	547.7
8/4/06 12:00 AM	0.06	0.2	526.7
8/4/06 1:00 AM	0.06	0.1	505.8
8/4/06 2:00 AM	0.06	0.1	495.5
8/4/06 3:00 AM	0.06	0.1	485.3
8/4/06 4:00 AM	0.06	0.1	465.2
8/4/06 5:00 AM	0.06	0.1	445.2
8/4/06 6:00 AM	0.06	0.1	435.3
8/4/06 7:00 AM	0.05	0.1	425.5
8/4/06 8:00 AM	0.05	0.1	411.0
8/4/06 9:00 AM	0.05	0.1	401.4
8/4/06 10:00 AM	0.05	0.1	391.9
8/4/06 11:00 AM	0.05	0.1	368.5
8/4/06 12:00 PM	0.05	0.1	363.8
8/4/06 1:00 PM	0.05	0.1	368.4
8/4/06 2:00 PM	0.05	0.1	341.2
8/4/06 3:00 PM	0.04	0.1	318.5
8/4/06 4:00 PM	0.04	0.1	314.1
8/4/06 5:00 PM	0.04	0.1	305.4
8/4/06 6:00 PM	0.04	0.1	301.0
8/4/06 7:00 PM	0.04	0.1	288.2
8/4/06 8:00 PM	0.04	0.1	267.0
8/4/06 9:00 PM	0.04	0.1	250.5
8/4/06 10:00 PM	0.04	0.1	238.3
8/4/06 11:00 PM	0.04	0.1	226.4
8/5/06 12:00 AM	0.04	0.1	222.4
8/5/06 1:00 AM	0.04	0.1	214.7
8/5/06 2:00 AM	0.03	0.1	203.1
8/5/06 3:00 AM	0.03	0.1	195.6
8/5/06 4:00 AM	0.03	0.1	188.0
8/5/06 5:00 AM	0.03	0.1	180.7
8/5/06 6:00 AM	0.03	0.0	173.4
8/5/06 7:00 AM	0.03	0.0	166.3
8/5/06 8:00 AM	0.03	0.0	159.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/5/06 9:00 AM	0.03	0.0	159.1
8/5/06 10:00 AM	0.03	0.0	155.7
8/5/06 11:00 AM	0.03	0.0	148.7
8/5/06 12:00 PM	0.03	0.0	141.9
8/5/06 1:00 PM	0.03	0.0	152.4
8/5/06 2:00 PM	0.03	0.0	159.2
8/5/06 3:00 PM	0.03	0.0	135.6
8/5/06 4:00 PM	0.02	0.0	109.6
8/5/06 5:00 PM	0.02	0.0	91.6
8/5/06 6:00 PM	0.02	0.0	85.7
8/5/06 7:00 PM	0.02	0.0	74.9
8/5/06 8:00 PM	0.01	0.0	58.8
8/5/06 9:00 PM	0.01	0.0	56.3
8/5/06 10:00 PM	0.01	0.0	56.3
8/5/06 11:00 PM	0.01	0.0	53.8
8/6/06 12:00 AM	0.01	0.0	42.4
8/6/06 1:00 AM	0.01	0.0	33.4
8/6/06 2:00 AM	0.01	0.0	29.4
8/6/06 3:00 AM	0.01	0.0	21.8
8/6/06 4:00 AM	0.01	0.0	18.2
8/6/06 5:00 AM	0.01	0.0	13.6
8/6/06 6:00 AM	0.00	0.0	7.7
8/6/06 7:00 AM	0.00	0.0	3.6
8/6/06 8:00 AM	0.00	0.0	1.5
8/6/06 9:00 AM	0.00	0.0	1.5
8/6/06 10:00 AM	0.00	0.0	0.8
8/6/06 11:00 AM	0.00	0.0	0.4
8/6/06 12:00 PM	0.00	0.0	0.0
8/6/06 1:00 PM	-0.01	0.0	0.0
8/6/06 2:00 PM	0.00	0.0	0.0
8/6/06 3:00 PM	0.00	0.0	0.0
8/6/06 4:00 PM	0.00	0.0	0.0
8/6/06 5:00 PM	0.00	0.0	0.0
8/6/06 6:00 PM	0.00	0.0	0.0
8/6/06 7:00 PM	-0.01	0.0	0.0
8/6/06 8:00 PM	-0.01	0.0	0.0
8/6/06 9:00 PM	-0.01	0.0	0.0
8/6/06 10:00 PM	-0.01	0.0	0.0
8/6/06 11:00 PM	-0.02	0.0	0.0
8/7/06 12:00 AM	-0.02	0.0	0.0
8/7/06 1:00 AM	-0.02	0.0	0.0
8/7/06 2:00 AM	-0.02	0.0	0.0
8/7/06 3:00 AM	-0.02	0.0	0.0
8/7/06 4:00 AM	-0.02	0.0	0.0
8/7/06 5:00 AM	-0.02	0.0	0.0
8/7/06 6:00 AM	-0.02	0.0	0.0
8/7/06 7:00 AM	-0.02	0.0	0.0
8/7/06 8:00 AM	-0.03	0.0	0.0
8/7/06 9:00 AM	-0.03	0.0	0.0
8/7/06 10:00 AM	-0.03	0.0	0.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/7/06 11:00 AM	-0.03	0.0	0.0
8/7/06 12:00 PM	-0.03	0.0	0.0
8/7/06 1:00 PM	-0.03	0.0	0.0
8/7/06 2:00 PM	-0.03	0.0	0.0
8/7/06 3:00 PM	-0.04	0.0	469.4
8/7/06 4:00 PM	0.09	0.3	1050.6
8/7/06 5:00 PM	0.11	0.3	1162.5
8/7/06 6:00 PM	0.11	0.3	1128.7
8/7/06 7:00 PM	0.10	0.3	1101.7
8/7/06 8:00 PM	0.10	0.3	1088.4
8/7/06 9:00 PM	0.10	0.3	1068.4
8/7/06 10:00 PM	0.10	0.3	1055.2
8/7/06 11:00 PM	0.10	0.3	1035.5
8/8/06 12:00 AM	0.10	0.3	1015.9
8/8/06 1:00 AM	0.10	0.3	1002.9
8/8/06 2:00 AM	0.10	0.3	1015.9
8/8/06 3:00 AM	0.10	0.3	1003.0
8/8/06 4:00 AM	0.09	0.3	977.1
8/8/06 5:00 AM	0.09	0.3	970.6
8/8/06 6:00 AM	0.09	0.3	957.8
8/8/06 7:00 AM	0.09	0.3	945.1
8/8/06 8:00 AM	0.09	0.3	938.7
8/8/06 9:00 AM	0.09	0.3	926.1
8/8/06 10:00 AM	0.09	0.3	932.5
8/8/06 11:00 AM	0.09	0.3	889.2
8/8/06 12:00 PM	0.08	0.2	870.2
8/8/06 1:00 PM	0.09	0.3	901.0
8/8/06 2:00 PM	0.09	0.2	901.0
8/8/06 3:00 PM	0.09	0.3	882.4
8/8/06 4:00 PM	0.09	0.2	839.1
8/8/06 5:00 PM	0.08	0.2	808.8
8/8/06 6:00 PM	0.08	0.2	814.9
8/8/06 7:00 PM	0.09	0.2	814.9
8/8/06 8:00 PM	0.08	0.2	767.0
8/8/06 9:00 PM	0.08	0.2	725.8
8/8/06 10:00 PM	0.08	0.2	696.9
8/8/06 11:00 PM	0.07	0.2	674.0
8/9/06 12:00 AM	0.07	0.2	645.9
8/9/06 1:00 AM	0.07	0.2	629.1
8/9/06 2:00 AM	0.07	0.2	618.0
8/9/06 3:00 AM	0.07	0.2	585.3
8/9/06 4:00 AM	0.07	0.2	553.0
8/9/06 5:00 AM	0.06	0.2	542.4
8/9/06 6:00 AM	0.06	0.2	531.9
8/9/06 7:00 AM	0.06	0.1	511.0
8/9/06 8:00 AM	0.06	0.1	500.7
8/9/06 9:00 AM	0.06	0.1	475.4
8/9/06 10:00 AM	0.06	0.1	470.3
8/9/06 11:00 AM	0.06	0.1	480.3
8/9/06 12:00 PM	0.06	0.1	516.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/9/06 1:00 PM	0.07	0.2	516.9
8/9/06 2:00 PM	0.06	0.1	470.1
8/9/06 3:00 PM	0.06	0.1	465.1
8/9/06 4:00 PM	0.06	0.1	470.2
8/9/06 5:00 PM	0.06	0.1	475.2
8/9/06 6:00 PM	0.06	0.1	445.4
8/9/06 7:00 PM	0.05	0.1	396.9
8/9/06 8:00 PM	0.05	0.1	359.3
8/9/06 9:00 PM	0.05	0.1	336.4
8/9/06 10:00 PM	0.05	0.1	318.6
8/9/06 11:00 PM	0.04	0.1	305.4
8/10/06 12:00 AM	0.04	0.1	292.4
8/10/06 1:00 AM	0.04	0.1	271.2
8/10/06 2:00 AM	0.04	0.1	254.5
8/10/06 3:00 AM	0.04	0.1	250.4
8/10/06 4:00 AM	0.04	0.1	238.4
8/10/06 5:00 AM	0.04	0.1	222.4
8/10/06 6:00 AM	0.04	0.1	210.8
8/10/06 7:00 AM	0.03	0.1	203.1
8/10/06 8:00 AM	0.03	0.1	188.2
8/10/06 9:00 AM	0.03	0.0	173.4
8/10/06 10:00 AM	0.03	0.0	180.7
8/10/06 11:00 AM	0.03	0.1	184.3
8/10/06 12:00 PM	0.03	0.1	184.3
8/10/06 1:00 PM	0.03	0.1	188.0
8/10/06 2:00 PM	0.03	0.1	163.3
8/10/06 3:00 PM	0.03	0.0	141.9
8/10/06 4:00 PM	0.03	0.0	135.3
8/10/06 5:00 PM	0.02	0.0	112.9
8/10/06 6:00 PM	0.02	0.0	100.3
8/10/06 7:00 PM	0.02	0.0	103.4
8/10/06 8:00 PM	0.02	0.0	100.4
8/10/06 9:00 PM	0.02	0.0	85.8
8/10/06 10:00 PM	0.02	0.0	71.9
8/10/06 11:00 PM	0.02	0.0	63.9
8/11/06 12:00 AM	0.01	0.0	58.8
8/11/06 1:00 AM	0.01	0.0	56.3
8/11/06 2:00 AM	0.01	0.0	51.4
8/11/06 3:00 AM	0.01	0.0	46.6
8/11/06 4:00 AM	0.01	0.0	42.1
8/11/06 5:00 AM	0.01	0.0	35.5
8/11/06 6:00 AM	0.01	0.0	29.4
8/11/06 7:00 AM	0.01	0.0	23.5
8/11/06 8:00 AM	0.01	0.0	19.9
8/11/06 9:00 AM	0.01	0.0	18.2
8/11/06 10:00 AM	0.01	0.0	12.3
8/11/06 11:00 AM	0.00	0.0	6.4
8/11/06 12:00 PM	0.00	0.0	7.7
8/11/06 1:00 PM	0.00	0.0	9.0
8/11/06 2:00 PM	0.00	0.0	6.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/11/06 3:00 PM	0.00	0.0	2.1
8/11/06 4:00 PM	-0.01	0.0	0.0
8/11/06 5:00 PM	0.00	0.0	0.0
8/11/06 6:00 PM	0.00	0.0	0.0
8/11/06 7:00 PM	0.00	0.0	0.0
8/11/06 8:00 PM	-0.01	0.0	0.0
8/11/06 9:00 PM	-0.01	0.0	0.0
8/11/06 10:00 PM	-0.01	0.0	0.0
8/11/06 11:00 PM	-0.01	0.0	0.0
8/12/06 12:00 AM	-0.01	0.0	0.0
8/12/06 1:00 AM	-0.01	0.0	0.0
8/12/06 2:00 AM	-0.01	0.0	0.0
8/12/06 3:00 AM	-0.01	0.0	0.0
8/12/06 4:00 AM	-0.02	0.0	0.0
8/12/06 5:00 AM	-0.02	0.0	0.0
8/12/06 6:00 AM	-0.02	0.0	0.0
8/12/06 7:00 AM	-0.02	0.0	0.0
8/12/06 8:00 AM	-0.02	0.0	0.0
8/12/06 9:00 AM	-0.02	0.0	0.0
8/12/06 10:00 AM	-0.02	0.0	0.0
8/12/06 11:00 AM	-0.02	0.0	0.0
8/12/06 12:00 PM	-0.02	0.0	0.0
8/12/06 1:00 PM	-0.02	0.0	0.0
8/12/06 2:00 PM	-0.03	0.0	0.0
8/12/06 3:00 PM	-0.03	0.0	0.0
8/12/06 4:00 PM	-0.02	0.0	0.0
8/12/06 5:00 PM	-0.03	0.0	0.0
8/12/06 6:00 PM	-0.04	0.0	0.0
8/12/06 7:00 PM	-0.04	0.0	0.0
8/12/06 8:00 PM	-0.04	0.0	0.0
8/12/06 9:00 PM	-0.04	0.0	0.0
8/12/06 10:00 PM	-0.04	0.0	0.0
8/12/06 11:00 PM	-0.04	0.0	0.0
8/13/06 12:00 AM	-0.04	0.0	0.0
8/13/06 1:00 AM	-0.04	0.0	0.0
8/13/06 2:00 AM	-0.04	0.0	0.0
8/13/06 3:00 AM	-0.05	0.0	0.0
8/13/06 4:00 AM	-0.05	0.0	0.0
8/13/06 5:00 AM	-0.05	0.0	0.0
8/13/06 6:00 AM	-0.05	0.0	0.0
8/13/06 7:00 AM	-0.05	0.0	0.0
8/13/06 8:00 AM	-0.06	0.0	0.0
8/13/06 9:00 AM	-0.06	0.0	0.0
8/13/06 10:00 AM	-0.06	0.0	0.0
8/13/06 11:00 AM	-0.06	0.0	0.0
8/13/06 12:00 PM	-0.05	0.0	0.0
8/13/06 1:00 PM	-0.06	0.0	0.0
8/13/06 2:00 PM	-0.06	0.0	0.0
8/13/06 3:00 PM	-0.06	0.0	0.0
8/13/06 4:00 PM	-0.06	0.0	0.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/13/06 5:00 PM	-0.06	0.0	0.0
8/13/06 6:00 PM	-0.06	0.0	0.0
8/13/06 7:00 PM	-0.07	0.0	0.0
8/13/06 8:00 PM	-0.07	0.0	0.0
8/13/06 9:00 PM	-0.07	0.0	0.0
8/13/06 10:00 PM	-0.07	0.0	0.0
8/13/06 11:00 PM	-0.07	0.0	0.0
8/14/06 12:00 AM	-0.07	0.0	0.0
8/14/06 1:00 AM	-0.07	0.0	0.0
8/14/06 2:00 AM	-0.08	0.0	0.0
8/14/06 3:00 AM	-0.08	0.0	0.0
8/14/06 4:00 AM	-0.08	0.0	0.0
8/14/06 5:00 AM	-0.08	0.0	0.0
8/14/06 6:00 AM	-0.08	0.0	0.0
8/14/06 7:00 AM	-0.08	0.0	0.0
8/14/06 8:00 AM	-0.08	0.0	0.0
8/14/06 9:00 AM	-0.08	0.0	0.0
8/14/06 10:00 AM	-0.09	0.0	0.0
8/14/06 11:00 AM	-0.09	0.0	0.0
8/14/06 12:00 PM	-0.09	0.0	0.0
8/14/06 1:00 PM	-0.08	0.0	0.0
8/14/06 2:00 PM	-0.08	0.0	0.0
8/14/06 3:00 PM	-0.09	0.0	0.0
8/14/06 4:00 PM	-0.09	0.0	889.6
8/14/06 5:00 PM	0.14	0.5	2611.3
8/14/06 6:00 PM	0.22	1.0	3502.3
8/14/06 7:00 PM	0.23	1.0	3541.6
8/14/06 8:00 PM	0.22	1.0	3492.3
8/14/06 9:00 PM	0.22	1.0	3453.0
8/14/06 10:00 PM	0.22	1.0	3414.0
8/14/06 11:00 PM	0.22	0.9	3365.3
8/15/06 12:00 AM	0.22	0.9	3316.9
8/15/06 1:00 AM	0.21	0.9	3259.1
8/15/06 2:00 AM	0.21	0.9	3211.2
8/15/06 3:00 AM	0.21	0.9	3154.1
8/15/06 4:00 AM	0.21	0.9	3106.6
8/15/06 5:00 AM	0.21	0.9	3068.9
8/15/06 6:00 AM	0.20	0.8	3012.6
8/15/06 7:00 AM	0.20	0.8	2965.9
8/15/06 8:00 AM	0.20	0.8	2910.3
8/15/06 9:00 AM	0.19	0.8	2836.7
8/15/06 10:00 AM	0.19	0.8	2827.5
8/15/06 11:00 AM	0.19	0.8	2827.5
8/15/06 12:00 PM	0.19	0.8	2772.7
8/15/06 1:00 PM	0.19	0.8	2745.4
8/15/06 2:00 PM	0.19	0.8	2809.4
8/15/06 3:00 PM	0.19	0.8	2845.8
8/15/06 4:00 PM	0.19	0.8	2754.7
8/15/06 5:00 PM	0.19	0.7	2673.2
8/15/06 6:00 PM	0.19	0.7	2655.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/15/06 7:00 PM	0.19	0.7	2628.4
8/15/06 8:00 PM	0.18	0.7	2887.3
8/15/06 9:00 PM	0.21	0.9	3497.3
8/15/06 10:00 PM	0.24	1.1	3852.0
8/15/06 11:00 PM	0.24	1.1	3862.2
8/16/06 12:00 AM	0.24	1.1	3821.6
8/16/06 1:00 AM	0.24	1.1	3771.1
8/16/06 2:00 AM	0.23	1.0	3730.8
8/16/06 3:00 AM	0.23	1.0	3680.7
8/16/06 4:00 AM	0.23	1.0	3620.8
8/16/06 5:00 AM	0.23	1.0	3571.2
8/16/06 6:00 AM	0.22	1.0	3521.8
8/16/06 7:00 AM	0.22	1.0	3482.5
8/16/06 8:00 AM	0.22	1.0	3404.4
8/16/06 9:00 AM	0.22	0.9	3336.2
8/16/06 10:00 AM	0.22	0.9	3297.6
8/16/06 11:00 AM	0.21	0.9	3220.9
8/16/06 12:00 PM	0.21	0.9	3182.6
8/16/06 1:00 PM	0.21	0.9	3278.7
8/16/06 2:00 PM	0.22	0.9	3443.6
8/16/06 3:00 PM	0.22	1.0	3641.4
8/16/06 4:00 PM	0.23	1.0	3781.2
8/16/06 5:00 PM	0.24	1.1	3761.0
8/16/06 6:00 PM	0.23	1.0	3670.8
8/16/06 7:00 PM	0.23	1.0	3571.3
8/16/06 8:00 PM	0.22	1.0	3492.3
8/16/06 9:00 PM	0.22	1.0	3423.8
8/16/06 10:00 PM	0.22	0.9	3346.0
8/16/06 11:00 PM	0.21	0.9	3268.8
8/17/06 12:00 AM	0.21	0.9	3220.7
8/17/06 1:00 AM	0.21	0.9	3173.1
8/17/06 2:00 AM	0.21	0.9	3106.7
8/17/06 3:00 AM	0.20	0.9	3050.1
8/17/06 4:00 AM	0.20	0.8	3012.6
8/17/06 5:00 AM	0.20	0.8	2984.6
8/17/06 6:00 AM	0.20	0.8	2928.9
8/17/06 7:00 AM	0.20	0.8	2855.0
8/17/06 8:00 AM	0.19	0.8	2800.0
8/17/06 9:00 AM	0.19	0.8	2754.5
8/17/06 10:00 AM	0.19	0.8	2718.2
8/17/06 11:00 AM	0.19	0.8	2691.2
8/17/06 12:00 PM	0.19	0.7	2655.2
8/17/06 1:00 PM	0.18	0.7	2601.6
8/17/06 2:00 PM	0.18	0.7	2521.9
8/17/06 3:00 PM	0.18	0.7	2469.1
8/17/06 4:00 PM	0.18	0.7	2460.3
8/17/06 5:00 PM	0.18	0.7	2416.8
8/17/06 6:00 PM	0.17	0.7	2364.7
8/17/06 7:00 PM	0.17	0.7	2347.5
8/17/06 8:00 PM	0.17	0.6	2296.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/17/06 9:00 PM	0.17	0.6	2228.0
8/17/06 10:00 PM	0.16	0.6	2160.8
8/17/06 11:00 PM	0.16	0.6	2110.6
8/18/06 12:00 AM	0.16	0.6	2069.3
8/18/06 1:00 AM	0.16	0.6	2019.9
8/18/06 2:00 AM	0.15	0.6	1971.0
8/18/06 3:00 AM	0.15	0.5	1930.5
8/18/06 4:00 AM	0.15	0.5	1898.3
8/18/06 5:00 AM	0.15	0.5	1842.5
8/18/06 6:00 AM	0.14	0.5	1795.0
8/18/06 7:00 AM	0.14	0.5	1755.8
8/18/06 8:00 AM	0.14	0.5	1716.8
8/18/06 9:00 AM	0.14	0.5	1663.0
8/18/06 10:00 AM	0.13	0.5	1586.8
8/18/06 11:00 AM	0.13	0.4	1571.6
8/18/06 12:00 PM	0.13	0.4	1617.0
8/18/06 1:00 PM	0.13	0.5	1609.5
8/18/06 2:00 PM	0.13	0.4	1526.9
8/18/06 3:00 PM	0.13	0.4	1489.5
8/18/06 4:00 PM	0.13	0.4	1452.9
8/18/06 5:00 PM	0.12	0.4	1598.3
8/18/06 6:00 PM	0.14	0.5	1907.4
8/18/06 7:00 PM	0.15	0.6	2003.5
8/18/06 8:00 PM	0.15	0.6	1946.8
8/18/06 9:00 PM	0.15	0.5	1898.3
8/18/06 10:00 PM	0.15	0.5	1866.3
8/18/06 11:00 PM	0.15	0.5	1826.6
8/19/06 12:00 AM	0.14	0.5	1795.0
8/19/06 1:00 AM	0.14	0.5	1755.8
8/19/06 2:00 AM	0.14	0.5	1716.8
8/19/06 3:00 AM	0.14	0.5	1693.6
8/19/06 4:00 AM	0.14	0.5	1662.9
8/19/06 5:00 AM	0.13	0.5	1624.6
8/19/06 6:00 AM	0.13	0.4	1594.2
8/19/06 7:00 AM	0.13	0.4	1571.6
8/19/06 8:00 AM	0.13	0.4	1541.6
8/19/06 9:00 AM	0.13	0.4	1496.9
8/19/06 10:00 AM	0.13	0.4	1474.7
8/19/06 11:00 AM	0.13	0.4	1460.0
8/19/06 12:00 PM	0.12	0.4	1438.0
8/19/06 1:00 PM	0.12	0.4	1416.1
8/19/06 2:00 PM	0.12	0.4	1379.9
8/19/06 3:00 PM	0.12	0.4	1322.7
8/19/06 4:00 PM	0.11	0.4	3182.1
8/19/06 5:00 PM	0.29	1.4	5406.6
8/19/06 6:00 PM	0.31	1.6	5736.2
8/19/06 7:00 PM	0.31	1.6	5736.2
8/19/06 8:00 PM	0.31	1.6	5713.0
8/19/06 9:00 PM	0.31	1.6	5643.7
8/19/06 10:00 PM	0.30	1.6	5551.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/19/06 11:00 PM	0.30	1.5	5494.4
8/20/06 12:00 AM	0.30	1.5	5448.8
8/20/06 1:00 AM	0.30	1.5	5357.9
8/20/06 2:00 AM	0.29	1.5	5278.7
8/20/06 3:00 AM	0.29	1.5	5211.2
8/20/06 4:00 AM	0.29	1.4	5110.5
8/20/06 5:00 AM	0.28	1.4	5032.5
8/20/06 6:00 AM	0.28	1.4	4966.1
8/20/06 7:00 AM	0.28	1.4	4877.9
8/20/06 8:00 AM	0.28	1.3	4779.4
8/20/06 9:00 AM	0.27	1.3	4703.2
8/20/06 10:00 AM	0.27	1.3	4659.8
8/20/06 11:00 AM	0.27	1.3	4563.0
8/20/06 12:00 PM	0.26	1.2	4487.8
8/20/06 1:00 PM	0.26	1.2	4455.8
8/20/06 2:00 PM	0.26	1.2	6068.8
8/20/06 3:00 PM	0.38	2.1	8237.0
8/20/06 4:00 PM	0.41	2.4	8746.8
8/20/06 5:00 PM	0.41	2.4	8680.2
8/20/06 6:00 PM	0.41	2.4	8547.5
8/20/06 7:00 PM	0.40	2.4	8415.3
8/20/06 8:00 PM	0.40	2.3	8297.0
8/20/06 9:00 PM	0.39	2.3	8153.2
8/20/06 10:00 PM	0.39	2.2	7971.5
8/20/06 11:00 PM	0.38	2.2	7816.5
8/21/06 12:00 AM	0.38	2.2	7688.4
8/21/06 1:00 AM	0.37	2.1	7535.5
8/21/06 2:00 AM	0.37	2.1	7383.6
8/21/06 3:00 AM	0.36	2.0	7282.8
8/21/06 4:00 AM	0.36	2.0	7170.2
8/21/06 5:00 AM	0.36	2.0	6996.1
8/21/06 6:00 AM	0.35	1.9	6872.4
8/21/06 7:00 AM	0.35	1.9	6786.4
8/21/06 8:00 AM	0.34	1.9	6664.2
8/21/06 9:00 AM	0.34	1.8	6542.6
8/21/06 10:00 AM	0.34	1.8	6433.9
8/21/06 11:00 AM	0.33	1.8	6325.7
8/21/06 12:00 PM	0.33	1.7	6218.2
8/21/06 1:00 PM	0.32	1.7	6087.7
8/21/06 2:00 PM	0.32	1.7	5969.7
8/21/06 3:00 PM	0.32	1.6	5852.7
8/21/06 4:00 PM	0.31	1.6	5771.0
8/21/06 5:00 PM	0.31	1.6	5759.4
8/21/06 6:00 PM	0.31	1.6	5759.4
8/21/06 7:00 PM	0.31	1.6	5632.6
8/21/06 8:00 PM	0.30	1.5	5460.2
8/21/06 9:00 PM	0.30	1.5	5380.5
8/21/06 10:00 PM	0.30	1.5	5290.0
8/21/06 11:00 PM	0.29	1.5	5177.6
8/22/06 12:00 AM	0.29	1.4	5065.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/22/06 1:00 AM	0.28	1.4	4955.1
8/22/06 2:00 AM	0.28	1.4	4866.9
8/22/06 3:00 AM	0.28	1.3	4779.4
8/22/06 4:00 AM	0.27	1.3	4670.7
8/22/06 5:00 AM	0.27	1.3	4573.6
8/22/06 6:00 AM	0.26	1.3	4509.2
8/22/06 7:00 AM	0.26	1.2	4413.4
8/22/06 8:00 AM	0.26	1.2	4317.9
8/22/06 9:00 AM	0.26	1.2	4244.4
8/22/06 10:00 AM	0.25	1.2	4181.5
8/22/06 11:00 AM	0.25	1.2	4150.2
8/22/06 12:00 PM	0.25	1.1	4036.6
8/22/06 1:00 PM	0.24	1.1	3913.1
8/22/06 2:00 PM	0.24	1.1	3852.0
8/22/06 3:00 PM	0.24	1.1	3791.3
8/22/06 4:00 PM	0.23	1.0	3791.3
8/22/06 5:00 PM	0.24	1.1	3761.1
8/22/06 6:00 PM	0.23	1.0	3660.8
8/22/06 7:00 PM	0.23	1.0	3581.2
8/22/06 8:00 PM	0.22	1.0	3512.0
8/22/06 9:00 PM	0.22	1.0	3462.9
8/22/06 10:00 PM	0.22	1.0	3394.6
8/22/06 11:00 PM	0.22	0.9	3297.7
8/23/06 12:00 AM	0.21	0.9	3220.8
8/23/06 1:00 AM	0.21	0.9	3163.6
8/23/06 2:00 AM	0.21	0.9	3116.1
8/23/06 3:00 AM	0.21	0.9	3059.6
8/23/06 4:00 AM	0.20	0.8	2993.9
8/23/06 5:00 AM	0.20	0.8	2956.6
8/23/06 6:00 AM	0.20	0.8	2919.6
8/23/06 7:00 AM	0.20	0.8	2864.2
8/23/06 8:00 AM	0.19	0.8	2800.1
8/23/06 9:00 AM	0.19	0.8	2754.5
8/23/06 10:00 AM	0.19	0.8	2727.3
8/23/06 11:00 AM	0.19	0.8	2700.2
8/23/06 12:00 PM	0.19	0.7	2637.4
8/23/06 1:00 PM	0.18	0.7	2583.7
8/23/06 2:00 PM	0.18	0.7	2548.3
8/23/06 3:00 PM	0.18	0.7	2504.2
8/23/06 4:00 PM	0.18	0.7	2443.0
8/23/06 5:00 PM	0.17	0.7	2399.3
8/23/06 6:00 PM	0.17	0.7	2399.3
8/23/06 7:00 PM	0.17	0.7	2339.1
8/23/06 8:00 PM	0.17	0.6	2279.0
8/23/06 9:00 PM	0.17	0.6	2219.7
8/23/06 10:00 PM	0.16	0.6	2202.7
8/23/06 11:00 PM	0.17	0.6	2228.0
8/24/06 12:00 AM	0.16	0.6	2185.9
8/24/06 1:00 AM	0.16	0.6	2135.6
8/24/06 2:00 AM	0.16	0.6	2102.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/24/06 3:00 AM	0.16	0.6	2077.5
8/24/06 4:00 AM	0.16	0.6	2044.5
8/24/06 5:00 AM	0.15	0.6	2003.5
8/24/06 6:00 AM	0.15	0.6	1970.9
8/24/06 7:00 AM	0.15	0.5	1938.6
8/24/06 8:00 AM	0.15	0.5	1914.4
8/24/06 9:00 AM	0.15	0.5	1874.4
8/24/06 10:00 AM	0.15	0.5	1842.4
8/24/06 11:00 AM	0.15	0.5	1787.4
8/24/06 12:00 PM	0.14	0.5	1771.6
8/24/06 1:00 PM	0.14	0.5	1756.0
8/24/06 2:00 PM	0.14	0.5	1716.8
8/24/06 3:00 PM	0.14	0.5	1693.8
8/24/06 4:00 PM	0.14	0.5	1647.5
8/24/06 5:00 PM	0.13	0.5	1639.8
8/24/06 6:00 PM	0.13	0.5	1624.6
8/24/06 7:00 PM	0.13	0.4	1594.2
8/24/06 8:00 PM	0.13	0.4	1549.1
8/24/06 9:00 PM	0.13	0.4	1504.3
8/24/06 10:00 PM	0.13	0.4	1482.1
8/24/06 11:00 PM	0.13	0.4	1445.4
8/25/06 12:00 AM	0.12	0.4	1408.8
8/25/06 1:00 AM	0.12	0.4	1379.9
8/25/06 2:00 AM	0.12	0.4	1336.9
8/25/06 3:00 AM	0.12	0.4	1301.3
8/25/06 4:00 AM	0.11	0.4	1266.2
8/25/06 5:00 AM	0.11	0.3	1245.1
8/25/06 6:00 AM	0.11	0.3	1210.6
8/25/06 7:00 AM	0.11	0.3	1183.0
8/25/06 8:00 AM	0.11	0.3	1162.6
8/25/06 9:00 AM	0.11	0.3	1142.1
8/25/06 10:00 AM	0.11	0.3	1135.3
8/25/06 11:00 AM	0.10	0.3	1115.1
8/25/06 12:00 PM	0.10	0.3	1081.8
8/25/06 1:00 PM	0.10	0.3	1055.2
8/25/06 2:00 PM	0.10	0.3	1029.0
8/25/06 3:00 PM	0.10	0.3	1009.4
8/25/06 4:00 PM	0.10	0.3	1022.4
8/25/06 5:00 PM	0.10	0.3	1003.0
8/25/06 6:00 PM	0.09	0.3	977.1
8/25/06 7:00 PM	0.09	0.3	939.0
8/25/06 8:00 PM	0.09	0.3	907.2
8/25/06 9:00 PM	0.09	0.3	913.5
8/25/06 10:00 PM	0.09	0.3	901.0
8/25/06 11:00 PM	0.09	0.2	876.1
8/26/06 12:00 AM	0.09	0.2	851.4
8/26/06 1:00 AM	0.09	0.2	833.0
8/26/06 2:00 AM	0.08	0.2	802.8
8/26/06 3:00 AM	0.08	0.2	778.8
8/26/06 4:00 AM	0.08	0.2	772.8

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/26/06 5:00 AM	0.08	0.2	749.2
8/26/06 6:00 AM	0.08	0.2	731.6
8/26/06 7:00 AM	0.08	0.2	725.7
8/26/06 8:00 AM	0.08	0.2	702.6
8/26/06 9:00 AM	0.07	0.2	691.1
8/26/06 10:00 AM	0.08	0.2	696.8
8/26/06 11:00 AM	0.08	0.2	702.6
8/26/06 12:00 PM	0.08	0.2	714.1
8/26/06 1:00 PM	0.08	0.2	697.0
8/26/06 2:00 PM	0.07	0.2	651.5
8/26/06 3:00 PM	0.07	0.2	889.0
8/26/06 4:00 PM	0.11	0.3	1211.0
8/26/06 5:00 PM	0.11	0.4	1273.1
8/26/06 6:00 PM	0.11	0.4	1259.1
8/26/06 7:00 PM	0.11	0.3	1224.4
8/26/06 8:00 PM	0.11	0.3	1196.7
8/26/06 9:00 PM	0.11	0.3	1169.3
8/26/06 10:00 PM	0.11	0.3	1135.3
8/26/06 11:00 PM	0.10	0.3	1108.4
8/27/06 12:00 AM	0.10	0.3	1075.1
8/27/06 1:00 AM	0.10	0.3	1055.2
8/27/06 2:00 AM	0.10	0.3	1048.6
8/27/06 3:00 AM	0.10	0.3	1029.0
8/27/06 4:00 AM	0.10	0.3	1002.9
8/27/06 5:00 AM	0.10	0.3	983.5
8/27/06 6:00 AM	0.09	0.3	970.6
8/27/06 7:00 AM	0.09	0.3	951.5
8/27/06 8:00 AM	0.09	0.3	932.4
8/27/06 9:00 AM	0.09	0.3	913.5
8/27/06 10:00 AM	0.09	0.3	900.9
8/27/06 11:00 AM	0.09	0.3	894.7
8/27/06 12:00 PM	0.09	0.2	882.2
8/27/06 1:00 PM	0.09	0.2	857.6
8/27/06 2:00 PM	0.09	0.2	833.0
8/27/06 3:00 PM	0.08	0.2	814.8
8/27/06 4:00 PM	0.08	0.2	814.8
8/27/06 5:00 PM	0.08	0.2	785.1
8/27/06 6:00 PM	0.08	0.2	725.8
8/27/06 7:00 PM	0.08	0.2	714.1
8/27/06 8:00 PM	0.08	0.2	725.7
8/27/06 9:00 PM	0.08	0.2	714.2
8/27/06 10:00 PM	0.08	0.2	691.1
8/27/06 11:00 PM	0.07	0.2	674.0
8/28/06 12:00 AM	0.07	0.2	651.4
8/28/06 1:00 AM	0.07	0.2	634.6
8/28/06 2:00 AM	0.07	0.2	623.5
8/28/06 3:00 AM	0.07	0.2	607.0
8/28/06 4:00 AM	0.07	0.2	585.2
8/28/06 5:00 AM	0.07	0.2	563.7
8/28/06 6:00 AM	0.06	0.2	542.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/28/06 7:00 AM	0.06	0.1	526.6
8/28/06 8:00 AM	0.06	0.1	526.6
8/28/06 9:00 AM	0.06	0.1	521.4
8/28/06 10:00 AM	0.06	0.1	511.0
8/28/06 11:00 AM	0.06	0.1	490.6
8/28/06 12:00 PM	0.06	0.1	475.2
8/28/06 1:00 PM	0.06	0.1	475.2
8/28/06 2:00 PM	0.06	0.1	480.3
8/28/06 3:00 PM	0.06	0.1	475.2
8/28/06 4:00 PM	0.06	0.1	445.2
8/28/06 5:00 PM	0.05	0.1	415.9
8/28/06 6:00 PM	0.05	0.1	391.9
8/28/06 7:00 PM	0.05	0.1	396.7
8/28/06 8:00 PM	0.05	0.1	498.1
8/28/06 9:00 PM	0.07	0.2	569.1
8/28/06 10:00 PM	0.06	0.2	547.7
8/28/06 11:00 PM	0.06	0.2	547.7
8/29/06 12:00 AM	0.06	0.2	547.7
8/29/06 1:00 AM	0.06	0.2	537.1
8/29/06 2:00 AM	0.06	0.1	526.6
8/29/06 3:00 AM	0.06	0.1	516.2
8/29/06 4:00 AM	0.06	0.1	511.0
8/29/06 5:00 AM	0.06	0.1	505.8
8/29/06 6:00 AM	0.06	0.1	500.7
8/29/06 7:00 AM	0.06	0.1	490.4
8/29/06 8:00 AM	0.06	0.1	470.2
8/29/06 9:00 AM	0.06	0.1	470.2
8/29/06 10:00 AM	0.06	0.1	475.2
8/29/06 11:00 AM	0.06	0.1	460.1
8/29/06 12:00 PM	0.06	0.1	450.1
8/29/06 1:00 PM	0.06	0.1	465.2
8/29/06 2:00 PM	0.06	0.1	465.2
8/29/06 3:00 PM	0.06	0.1	440.3
8/29/06 4:00 PM	0.05	0.1	455.3
8/29/06 5:00 PM	0.06	0.1	480.2
8/29/06 6:00 PM	0.06	0.1	527.3
8/29/06 7:00 PM	0.07	0.2	553.1
8/29/06 8:00 PM	0.06	0.1	526.6
8/29/06 9:00 PM	0.06	0.1	505.9
8/29/06 10:00 PM	0.06	0.1	516.4
8/29/06 11:00 PM	0.06	0.2	553.0
8/30/06 12:00 AM	0.07	0.2	579.8
8/30/06 1:00 AM	0.07	0.2	629.4
8/30/06 2:00 AM	0.07	0.2	668.3
8/30/06 3:00 AM	0.07	0.2	685.4
8/30/06 4:00 AM	0.08	0.2	657.4
8/30/06 5:00 AM	0.07	0.2	601.6
8/30/06 6:00 AM	0.07	0.2	623.9
8/30/06 7:00 AM	0.07	0.2	623.9
8/30/06 8:00 AM	0.07	0.2	623.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/30/06 9:00 AM	0.07	0.2	819.9
8/30/06 10:00 AM	0.09	0.3	1225.9
8/30/06 11:00 AM	0.13	0.4	2391.0
8/30/06 12:00 PM	0.21	0.9	3918.9
8/30/06 1:00 PM	0.26	1.3	4562.8
8/30/06 2:00 PM	0.27	1.3	4595.0
8/30/06 3:00 PM	0.27	1.3	4869.5
8/30/06 4:00 PM	0.29	1.4	5928.4
8/30/06 5:00 PM	0.34	1.9	6885.4
8/30/06 6:00 PM	0.36	2.0	8776.7
8/30/06 7:00 PM	0.46	2.9	14159.7
8/30/06 8:00 PM	0.66	5.0	17840.9
8/30/06 9:00 PM	0.66	5.0	17773.3
8/30/06 10:00 PM	0.66	4.9	17960.2
8/30/06 11:00 PM	0.67	5.1	18180.5
8/31/06 12:00 AM	0.67	5.0	17959.8
8/31/06 1:00 AM	0.66	4.9	17604.8
8/31/06 2:00 AM	0.65	4.8	17285.4
8/31/06 3:00 AM	0.64	4.8	16918.6
8/31/06 4:00 AM	0.63	4.6	16586.6
8/31/06 5:00 AM	0.63	4.6	16339.6
8/31/06 6:00 AM	0.62	4.5	16240.9
8/31/06 7:00 AM	0.62	4.5	16208.1
8/31/06 8:00 AM	0.62	4.5	16028.1
8/31/06 9:00 AM	0.61	4.4	16225.3
8/31/06 10:00 AM	0.63	4.6	16438.2
8/31/06 11:00 AM	0.62	4.5	16224.6
8/31/06 12:00 PM	0.62	4.5	15995.5
8/31/06 1:00 PM	0.61	4.4	15622.3
8/31/06 2:00 PM	0.60	4.3	15282.7
8/31/06 3:00 PM	0.59	4.2	15042.5
8/31/06 4:00 PM	0.58	4.1	14755.3
8/31/06 5:00 PM	0.58	4.1	14707.6
8/31/06 6:00 PM	0.58	4.1	14628.5
8/31/06 7:00 PM	0.57	4.0	14344.3
8/31/06 8:00 PM	0.57	3.9	14046.3
8/31/06 9:00 PM	0.56	3.9	13750.3
8/31/06 10:00 PM	0.55	3.8	13487.3
8/31/06 11:00 PM	0.54	3.7	13241.3
9/1/06 12:00 AM	0.54	3.6	13012.1
9/1/06 1:00 AM	0.53	3.6	12814.5
9/1/06 2:00 AM	0.53	3.5	12602.9
9/1/06 3:00 AM	0.52	3.5	12347.6
9/1/06 4:00 AM	0.51	3.4	12108.7
9/1/06 5:00 AM	0.51	3.3	11915.8
9/1/06 6:00 AM	0.50	3.3	11738.7
9/1/06 7:00 AM	0.50	3.2	11547.9
9/1/06 8:00 AM	0.49	3.2	11343.5
9/1/06 9:00 AM	0.48	3.1	11125.9
9/1/06 10:00 AM	0.48	3.1	10938.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/1/06 11:00 AM	0.47	3.0	10766.3
9/1/06 12:00 PM	0.47	3.0	10566.6
9/1/06 1:00 PM	0.46	2.9	10481.3
9/1/06 2:00 PM	0.46	2.9	10298.2
9/1/06 3:00 PM	0.45	2.8	10003.2
9/1/06 4:00 PM	0.44	2.8	9863.8
9/1/06 5:00 PM	0.44	2.7	9752.9
9/1/06 6:00 PM	0.44	2.7	9573.7
9/1/06 7:00 PM	0.43	2.6	9368.0
9/1/06 8:00 PM	0.43	2.6	9191.0
9/1/06 9:00 PM	0.42	2.5	9028.7
9/1/06 10:00 PM	0.42	2.5	8880.7
9/1/06 11:00 PM	0.41	2.4	8733.6
9/2/06 12:00 AM	0.41	2.4	8574.0
9/2/06 1:00 AM	0.40	2.4	8389.1
9/2/06 2:00 AM	0.40	2.3	8218.5
9/2/06 3:00 AM	0.39	2.3	8101.1
9/2/06 4:00 AM	0.39	2.2	8010.1
9/2/06 5:00 AM	0.39	2.2	7893.9
9/2/06 6:00 AM	0.38	2.2	7765.2
9/2/06 7:00 AM	0.38	2.1	7662.8
9/2/06 8:00 AM	0.37	2.1	7560.8
9/2/06 9:00 AM	0.37	2.1	7446.7
9/2/06 10:00 AM	0.37	2.1	7345.7
9/2/06 11:00 AM	0.36	2.0	7232.7
9/2/06 12:00 PM	0.36	2.0	7095.3
9/2/06 1:00 PM	0.35	2.0	6971.2
9/2/06 2:00 PM	0.35	1.9	7969.0
9/2/06 3:00 PM	0.42	2.5	9055.6
9/2/06 4:00 PM	0.42	2.5	9096.1
9/2/06 5:00 PM	0.42	2.5	9055.6
9/2/06 6:00 PM	0.42	2.5	9015.1
9/2/06 7:00 PM	0.42	2.5	8974.7
9/2/06 8:00 PM	0.42	2.5	8907.4
9/2/06 9:00 PM	0.41	2.5	8853.8
9/2/06 10:00 PM	0.41	2.4	8813.6
9/2/06 11:00 PM	0.41	2.4	8786.9
9/3/06 12:00 AM	0.41	2.4	8746.8
9/3/06 1:00 AM	0.41	2.4	8733.4
9/3/06 2:00 AM	0.41	2.4	8720.1
9/3/06 3:00 AM	0.41	2.4	8693.5
9/3/06 4:00 AM	0.41	2.4	8653.5
9/3/06 5:00 AM	0.41	2.4	8600.4
9/3/06 6:00 AM	0.40	2.4	8560.6
9/3/06 7:00 AM	0.40	2.4	8534.1
9/3/06 8:00 AM	0.40	2.4	8494.4
9/3/06 9:00 AM	0.40	2.4	8428.5
9/3/06 10:00 AM	0.40	2.3	8349.5
9/3/06 11:00 AM	0.40	2.3	8296.9
9/3/06 12:00 PM	0.40	2.3	8218.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/3/06 1:00 PM	0.39	2.3	8192.3
9/3/06 2:00 PM	0.39	2.3	8244.5
9/3/06 3:00 PM	0.39	2.3	8153.3
9/3/06 4:00 PM	0.39	2.2	8192.7
9/3/06 5:00 PM	0.40	2.3	8548.2
9/3/06 6:00 PM	0.41	2.4	8746.8
9/3/06 7:00 PM	0.41	2.4	8666.9
9/3/06 8:00 PM	0.41	2.4	8600.4
9/3/06 9:00 PM	0.41	2.4	8573.9
9/3/06 10:00 PM	0.40	2.4	8507.7
9/3/06 11:00 PM	0.40	2.4	8428.5
9/4/06 12:00 AM	0.40	2.3	8362.6
9/4/06 1:00 AM	0.40	2.3	8310.1
9/4/06 2:00 AM	0.40	2.3	8244.6
9/4/06 3:00 AM	0.39	2.3	8179.2
9/4/06 4:00 AM	0.39	2.3	8114.0
9/4/06 5:00 AM	0.39	2.2	8049.0
9/4/06 6:00 AM	0.39	2.2	7984.2
9/4/06 7:00 AM	0.38	2.2	7880.9
9/4/06 8:00 AM	0.38	2.2	7790.8
9/4/06 9:00 AM	0.38	2.2	7752.3
9/4/06 10:00 AM	0.38	2.1	7662.8
9/4/06 11:00 AM	0.37	2.1	7560.8
9/4/06 12:00 PM	0.37	2.1	7434.2
9/4/06 1:00 PM	0.36	2.0	8563.7
9/4/06 2:00 PM	0.44	2.7	11198.6
9/4/06 3:00 PM	0.52	3.5	12708.6
9/4/06 4:00 PM	0.53	3.6	12905.5
9/4/06 5:00 PM	0.53	3.6	13042.5
9/4/06 6:00 PM	0.54	3.6	12996.8
9/4/06 7:00 PM	0.53	3.6	12784.3
9/4/06 8:00 PM	0.52	3.5	12572.7
9/4/06 9:00 PM	0.52	3.5	12392.4
9/4/06 10:00 PM	0.51	3.4	12198.1
9/4/06 11:00 PM	0.51	3.4	12004.7
9/5/06 12:00 AM	0.50	3.3	11841.9
9/5/06 1:00 AM	0.50	3.3	11650.5
9/5/06 2:00 AM	0.49	3.2	11474.6
9/5/06 3:00 AM	0.49	3.2	11314.4
9/5/06 4:00 AM	0.48	3.1	11125.8
9/5/06 5:00 AM	0.48	3.1	10967.1
9/5/06 6:00 AM	0.47	3.0	10809.2
9/5/06 7:00 AM	0.47	3.0	10623.6
9/5/06 8:00 AM	0.46	2.9	10481.3
9/5/06 9:00 AM	0.46	2.9	10340.0
9/5/06 10:00 AM	0.46	2.8	10143.1
9/5/06 11:00 AM	0.45	2.8	10031.0
9/5/06 12:00 PM	0.45	2.8	9891.8
9/5/06 1:00 PM	0.44	2.7	10402.9
9/5/06 2:00 PM	0.48	3.1	11053.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/5/06 3:00 PM	0.48	3.1	11010.3
9/5/06 4:00 PM	0.48	3.0	10938.2
9/5/06 5:00 PM	0.48	3.0	10837.8
9/5/06 6:00 PM	0.47	3.0	10709.0
9/5/06 7:00 PM	0.47	3.0	10580.8
9/5/06 8:00 PM	0.46	2.9	10424.7
9/5/06 9:00 PM	0.46	2.9	10283.6
9/5/06 10:00 PM	0.45	2.8	10340.1
9/5/06 11:00 PM	0.46	2.9	10396.5
9/6/06 12:00 AM	0.46	2.9	10255.4
9/6/06 1:00 AM	0.45	2.8	10129.0
9/6/06 2:00 AM	0.45	2.8	10017.0
9/6/06 3:00 AM	0.45	2.8	9891.6
9/6/06 4:00 AM	0.44	2.7	9739.1
9/6/06 5:00 AM	0.44	2.7	9587.3
9/6/06 6:00 AM	0.43	2.6	9463.7
9/6/06 7:00 AM	0.43	2.6	9367.9
9/6/06 8:00 AM	0.43	2.6	9258.9
9/6/06 9:00 AM	0.42	2.6	9096.3
9/6/06 10:00 AM	0.42	2.5	8947.8
9/6/06 11:00 AM	0.41	2.5	8800.4
9/6/06 12:00 PM	0.41	2.4	8680.2
9/6/06 1:00 PM	0.41	2.4	8560.8
9/6/06 2:00 PM	0.40	2.4	8349.7
9/6/06 3:00 PM	0.39	2.3	8257.6
9/6/06 4:00 PM	0.40	2.3	8179.4
9/6/06 5:00 PM	0.39	2.2	8088.0
9/6/06 6:00 PM	0.39	2.3	8153.2
9/6/06 7:00 PM	0.39	2.3	8166.2
9/6/06 8:00 PM	0.39	2.3	8023.3
9/6/06 9:00 PM	0.38	2.2	7906.6
9/6/06 10:00 PM	0.38	2.2	7816.6
9/6/06 11:00 PM	0.38	2.1	7650.1
9/7/06 12:00 AM	0.37	2.1	7510.0
9/7/06 1:00 AM	0.37	2.1	7408.8
9/7/06 2:00 AM	0.37	2.0	7308.0
9/7/06 3:00 AM	0.36	2.0	7220.1
9/7/06 4:00 AM	0.36	2.0	7107.8
9/7/06 5:00 AM	0.35	2.0	6995.9
9/7/06 6:00 AM	0.35	1.9	6897.1
9/7/06 7:00 AM	0.35	1.9	6786.4
9/7/06 8:00 AM	0.34	1.9	6676.4
9/7/06 9:00 AM	0.34	1.8	6554.7
9/7/06 10:00 AM	0.34	1.8	6445.9
9/7/06 11:00 AM	0.33	1.8	6385.7
9/7/06 12:00 PM	0.33	1.8	6289.9
9/7/06 1:00 PM	0.33	1.7	6182.5
9/7/06 2:00 PM	0.32	1.7	6075.9
9/7/06 3:00 PM	0.32	1.7	5958.0
9/7/06 4:00 PM	0.32	1.6	5934.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/7/06 5:00 PM	0.32	1.7	5841.2
9/7/06 6:00 PM	0.31	1.6	5759.4
9/7/06 7:00 PM	0.31	1.6	5713.2
9/7/06 8:00 PM	0.31	1.6	5620.6
9/7/06 9:00 PM	0.30	1.6	5551.7
9/7/06 10:00 PM	0.30	1.5	5437.5
9/7/06 11:00 PM	0.30	1.5	5335.2
9/8/06 12:00 AM	0.29	1.5	5256.2
9/8/06 1:00 AM	0.29	1.4	5177.5
9/8/06 2:00 AM	0.29	1.4	5110.4
9/8/06 3:00 AM	0.29	1.4	5032.5
9/8/06 4:00 AM	0.28	1.4	4955.0
9/8/06 5:00 AM	0.28	1.4	4877.9
9/8/06 6:00 AM	0.28	1.3	4801.2
9/8/06 7:00 AM	0.27	1.3	4735.8
9/8/06 8:00 AM	0.27	1.3	4659.9
9/8/06 9:00 AM	0.27	1.3	4584.3
9/8/06 10:00 AM	0.27	1.3	4519.9
9/8/06 11:00 AM	0.26	1.2	4477.1
9/8/06 12:00 PM	0.26	1.2	4402.7
9/8/06 1:00 PM	0.26	1.2	4328.4
9/8/06 2:00 PM	0.26	1.2	4286.3
9/8/06 3:00 PM	0.25	1.2	4212.9
9/8/06 4:00 PM	0.25	1.2	4160.6
9/8/06 5:00 PM	0.25	1.2	4129.4
9/8/06 6:00 PM	0.25	1.1	4046.7
9/8/06 7:00 PM	0.24	1.1	4257.7
9/8/06 8:00 PM	0.26	1.3	4509.2
9/8/06 9:00 PM	0.26	1.2	4455.8
9/8/06 10:00 PM	0.26	1.2	4402.6
9/8/06 11:00 PM	0.26	1.2	4381.3
9/9/06 12:00 AM	0.26	1.2	4370.7
9/9/06 1:00 AM	0.26	1.2	4360.1
9/9/06 2:00 AM	0.26	1.2	4339.0
9/9/06 3:00 AM	0.26	1.2	4317.9
9/9/06 4:00 AM	0.26	1.2	4307.3
9/9/06 5:00 AM	0.26	1.2	4286.3
9/9/06 6:00 AM	0.25	1.2	4275.8
9/9/06 7:00 AM	0.25	1.2	4254.8
9/9/06 8:00 AM	0.25	1.2	4244.3
9/9/06 9:00 AM	0.25	1.2	4244.3
9/9/06 10:00 AM	0.25	1.2	4254.8
9/9/06 11:00 AM	0.25	1.2	4244.3
9/9/06 12:00 PM	0.25	1.2	4212.8
9/9/06 1:00 PM	0.25	1.2	4244.3
9/9/06 2:00 PM	0.25	1.2	4275.8
9/9/06 3:00 PM	0.25	1.2	4233.8
9/9/06 4:00 PM	0.25	1.2	4223.3
9/9/06 5:00 PM	0.25	1.2	4181.7
9/9/06 6:00 PM	0.25	1.1	4129.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/9/06 7:00 PM	0.25	1.2	4150.2
9/9/06 8:00 PM	0.25	1.2	4129.4
9/9/06 9:00 PM	0.25	1.1	4067.3
9/9/06 10:00 PM	0.24	1.1	3995.1
9/9/06 11:00 PM	0.24	1.1	3943.8
9/10/06 12:00 AM	0.24	1.1	3902.9
9/10/06 1:00 AM	0.24	1.1	3862.2
9/10/06 2:00 AM	0.24	1.1	3821.6
9/10/06 3:00 AM	0.24	1.1	3781.2
9/10/06 4:00 AM	0.23	1.0	3750.9
9/10/06 5:00 AM	0.23	1.0	3720.8
9/10/06 6:00 AM	0.23	1.0	3670.7
9/10/06 7:00 AM	0.23	1.0	3630.8
9/10/06 8:00 AM	0.23	1.0	3601.0
9/10/06 9:00 AM	0.23	1.0	3581.1
9/10/06 10:00 AM	0.23	1.0	3541.6
9/10/06 11:00 AM	0.22	1.0	3541.6
9/10/06 12:00 PM	0.23	1.0	3541.6
9/10/06 1:00 PM	0.22	1.0	3492.3
9/10/06 2:00 PM	0.22	1.0	3443.3
9/10/06 3:00 PM	0.22	0.9	3404.2
9/10/06 4:00 PM	0.22	0.9	3355.7
9/10/06 5:00 PM	0.21	0.9	3307.2
9/10/06 6:00 PM	0.21	0.9	3259.2
9/10/06 7:00 PM	0.21	0.9	3239.9
9/10/06 8:00 PM	0.21	0.9	3211.3
9/10/06 9:00 PM	0.21	0.9	3154.0
9/10/06 10:00 PM	0.21	0.9	3135.0
9/10/06 11:00 PM	0.21	0.9	3069.0
9/11/06 12:00 AM	0.20	0.8	3003.3
9/11/06 1:00 AM	0.20	0.8	2947.4
9/11/06 2:00 AM	0.20	0.8	2901.0
9/11/06 3:00 AM	0.20	0.8	2864.2
9/11/06 4:00 AM	0.19	0.8	2818.3
9/11/06 5:00 AM	0.19	0.8	2772.7
9/11/06 6:00 AM	0.19	0.8	2727.3
9/11/06 7:00 AM	0.19	0.8	2682.2
9/11/06 8:00 AM	0.19	0.7	2646.2
9/11/06 9:00 AM	0.18	0.7	2637.3
9/11/06 10:00 AM	0.18	0.7	2628.3
9/11/06 11:00 AM	0.18	0.7	2601.6
9/11/06 12:00 PM	0.18	0.7	2557.2
9/11/06 1:00 PM	0.18	0.7	2539.4
9/11/06 2:00 PM	0.18	0.7	2495.5
9/11/06 3:00 PM	0.18	0.7	2460.3
9/11/06 4:00 PM	0.18	0.7	2521.9
9/11/06 5:00 PM	0.18	0.7	3234.4
9/11/06 6:00 PM	0.24	1.1	3882.5
9/11/06 7:00 PM	0.24	1.1	3862.2
9/11/06 8:00 PM	0.24	1.1	3913.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/11/06 9:00 PM	0.24	1.1	4046.8
9/11/06 10:00 PM	0.25	1.1	4692.8
9/11/06 11:00 PM	0.29	1.5	5324.0
9/12/06 12:00 AM	0.30	1.5	5380.5
9/12/06 1:00 AM	0.30	1.5	5357.8
9/12/06 2:00 AM	0.30	1.5	5335.2
9/12/06 3:00 AM	0.29	1.5	5290.0
9/12/06 4:00 AM	0.29	1.5	5233.6
9/12/06 5:00 AM	0.29	1.4	5188.7
9/12/06 6:00 AM	0.29	1.4	5132.8
9/12/06 7:00 AM	0.29	1.4	5077.0
9/12/06 8:00 AM	0.28	1.4	5043.6
9/12/06 9:00 AM	0.28	1.4	5021.4
9/12/06 10:00 AM	0.28	1.4	4944.1
9/12/06 11:00 AM	0.28	1.4	4910.9
9/12/06 12:00 PM	0.28	1.4	4921.9
9/12/06 1:00 PM	0.28	1.4	4845.0
9/12/06 2:00 PM	0.27	1.3	4823.1
9/12/06 3:00 PM	0.28	1.3	4790.4
9/12/06 4:00 PM	0.27	1.3	4703.2
9/12/06 5:00 PM	0.27	1.3	4768.7
9/12/06 6:00 PM	0.28	1.3	4704.0
9/12/06 7:00 PM	0.27	1.3	4541.3
9/12/06 8:00 PM	0.26	1.3	4434.8
9/12/06 9:00 PM	0.26	1.2	4296.9
9/12/06 10:00 PM	0.25	1.2	4233.8
9/12/06 11:00 PM	0.25	1.2	4191.9
9/13/06 12:00 AM	0.25	1.2	4139.8
9/13/06 1:00 AM	0.25	1.1	4077.6
9/13/06 2:00 AM	0.25	1.1	4025.9
9/13/06 3:00 AM	0.24	1.1	3964.3
9/13/06 4:00 AM	0.24	1.1	3923.3
9/13/06 5:00 AM	0.24	1.1	3892.7
9/13/06 6:00 AM	0.24	1.1	3841.9
9/13/06 7:00 AM	0.24	1.1	3791.3
9/13/06 8:00 AM	0.23	1.0	3750.9
9/13/06 9:00 AM	0.23	1.0	3730.8
9/13/06 10:00 AM	0.23	1.0	3690.7
9/13/06 11:00 AM	0.23	1.0	3630.8
9/13/06 12:00 PM	0.23	1.0	3551.5
9/13/06 1:00 PM	0.22	1.0	3443.4
9/13/06 2:00 PM	0.22	0.9	3414.0
9/13/06 3:00 PM	0.22	1.0	3414.0
9/13/06 4:00 PM	0.22	0.9	3355.6
9/13/06 5:00 PM	0.22	0.9	3326.5
9/13/06 6:00 PM	0.22	0.9	3278.4
9/13/06 7:00 PM	0.21	0.9	3220.7
9/13/06 8:00 PM	0.21	0.9	3173.1
9/13/06 9:00 PM	0.21	0.9	3135.0
9/13/06 10:00 PM	0.21	0.9	3106.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/13/06 11:00 PM	0.20	0.9	3135.2
9/14/06 12:00 AM	0.21	0.9	3230.4
9/14/06 1:00 AM	0.21	0.9	3249.5
9/14/06 2:00 AM	0.21	0.9	3220.7
9/14/06 3:00 AM	0.21	0.9	3192.1
9/14/06 4:00 AM	0.21	0.9	3163.5
9/14/06 5:00 AM	0.21	0.9	3116.2
9/14/06 6:00 AM	0.20	0.9	3078.3
9/14/06 7:00 AM	0.20	0.9	3050.1
9/14/06 8:00 AM	0.20	0.8	3003.3
9/14/06 9:00 AM	0.20	0.8	2975.2
9/14/06 10:00 AM	0.20	0.8	2947.4
9/14/06 11:00 AM	0.20	0.8	2891.9
9/14/06 12:00 PM	0.19	0.8	2901.1
9/14/06 1:00 PM	0.20	0.8	2956.6
9/14/06 2:00 PM	0.20	0.8	2965.9
9/14/06 3:00 PM	0.20	0.8	2938.1
9/14/06 4:00 PM	0.20	0.8	2891.8
9/14/06 5:00 PM	0.19	0.8	2864.1
9/14/06 6:00 PM	0.19	0.8	2800.2
9/14/06 7:00 PM	0.19	0.8	2745.4
9/14/06 8:00 PM	0.19	0.8	2727.3
9/14/06 9:00 PM	0.19	0.8	2691.2
9/14/06 10:00 PM	0.19	0.7	2637.3
9/14/06 11:00 PM	0.18	0.7	2601.5
9/15/06 12:00 AM	0.18	0.7	2566.1
9/15/06 1:00 AM	0.18	0.7	2521.8
9/15/06 2:00 AM	0.18	0.7	2495.4
9/15/06 3:00 AM	0.18	0.7	2477.8
9/15/06 4:00 AM	0.18	0.7	2460.3
9/15/06 5:00 AM	0.18	0.7	2425.4
9/15/06 6:00 AM	0.17	0.7	2390.7
9/15/06 7:00 AM	0.17	0.7	2364.7
9/15/06 8:00 AM	0.17	0.7	2321.8
9/15/06 9:00 AM	0.17	0.6	2287.5
9/15/06 10:00 AM	0.17	0.6	2279.0
9/15/06 11:00 AM	0.17	0.6	2261.9
9/15/06 12:00 PM	0.17	0.6	2236.5
9/15/06 1:00 PM	0.16	0.6	2169.2
9/15/06 2:00 PM	0.16	0.6	2127.2
9/15/06 3:00 PM	0.16	0.6	2152.3
9/15/06 4:00 PM	0.16	0.6	2102.6
9/15/06 5:00 PM	0.16	0.6	2094.3
9/15/06 6:00 PM	0.16	0.6	2102.5
9/15/06 7:00 PM	0.16	0.6	2019.9
9/15/06 8:00 PM	0.15	0.6	1970.9
9/15/06 9:00 PM	0.15	0.5	1946.6
9/15/06 10:00 PM	0.15	0.5	1922.4
9/15/06 11:00 PM	0.15	0.5	1898.3
9/16/06 12:00 AM	0.15	0.5	1890.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/16/06 1:00 AM	0.15	0.5	1858.4
9/16/06 2:00 AM	0.14	0.5	1826.6
9/16/06 3:00 AM	0.14	0.5	1810.8
9/16/06 4:00 AM	0.14	0.5	1771.5
9/16/06 5:00 AM	0.14	0.5	1747.9
9/16/06 6:00 AM	0.14	0.5	1732.4
9/16/06 7:00 AM	0.14	0.5	1709.1
9/16/06 8:00 AM	0.14	0.5	1685.9
9/16/06 9:00 AM	0.14	0.5	1647.5
9/16/06 10:00 AM	0.13	0.5	1632.2
9/16/06 11:00 AM	0.13	0.5	1662.9
9/16/06 12:00 PM	0.14	0.5	1662.9
9/16/06 1:00 PM	0.13	0.5	1632.2
9/16/06 2:00 PM	0.13	0.5	1655.2
9/16/06 3:00 PM	0.14	0.5	1724.7
9/16/06 4:00 PM	0.14	0.5	1740.2
9/16/06 5:00 PM	0.14	0.5	1732.4
9/16/06 6:00 PM	0.14	0.5	1732.4
9/16/06 7:00 PM	0.14	0.5	1724.6
9/16/06 8:00 PM	0.14	0.5	1701.4
9/16/06 9:00 PM	0.14	0.5	1662.8
9/16/06 10:00 PM	0.14	0.5	1639.9
9/16/06 11:00 PM	0.13	0.5	1601.9
9/17/06 12:00 AM	0.13	0.4	1556.6
9/17/06 1:00 AM	0.13	0.4	1519.2
9/17/06 2:00 AM	0.13	0.4	1496.9
9/17/06 3:00 AM	0.13	0.4	1482.1
9/17/06 4:00 AM	0.13	0.4	1474.7
9/17/06 5:00 AM	0.13	0.4	1460.0
9/17/06 6:00 AM	0.12	0.4	1438.0
9/17/06 7:00 AM	0.12	0.4	1423.4
9/17/06 8:00 AM	0.12	0.4	1401.6
9/17/06 9:00 AM	0.12	0.4	1379.9
9/17/06 10:00 AM	0.12	0.4	1351.2
9/17/06 11:00 AM	0.12	0.4	1344.0
9/17/06 12:00 PM	0.12	0.4	1358.3
9/17/06 1:00 PM	0.12	0.4	1344.0
9/17/06 2:00 PM	0.12	0.4	1336.8
9/17/06 3:00 PM	0.12	0.4	1358.3
9/17/06 4:00 PM	0.12	0.4	1322.9
9/17/06 5:00 PM	0.11	0.4	1287.2
9/17/06 6:00 PM	0.12	0.4	1322.6
9/17/06 7:00 PM	0.12	0.4	1365.5
9/17/06 8:00 PM	0.12	0.4	1372.7
9/17/06 9:00 PM	0.12	0.4	1351.1
9/17/06 10:00 PM	0.12	0.4	1336.8
9/17/06 11:00 PM	0.12	0.4	1301.4
9/18/06 12:00 AM	0.11	0.4	1280.2
9/18/06 1:00 AM	0.11	0.4	1273.2
9/18/06 2:00 AM	0.11	0.3	1252.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/18/06 3:00 AM	0.11	0.3	1231.3
9/18/06 4:00 AM	0.11	0.3	1203.6
9/18/06 5:00 AM	0.11	0.3	1189.8
9/18/06 6:00 AM	0.11	0.3	1176.1
9/18/06 7:00 AM	0.11	0.3	1148.9
9/18/06 8:00 AM	0.11	0.3	1128.6
9/18/06 9:00 AM	0.10	0.3	1121.8
9/18/06 10:00 AM	0.10	0.3	1108.4
9/18/06 11:00 AM	0.10	0.3	1108.4
9/18/06 12:00 PM	0.10	0.3	1095.1
9/18/06 1:00 PM	0.10	0.3	1519.7
9/18/06 2:00 PM	0.15	0.5	3512.8
9/18/06 3:00 PM	0.28	1.4	6358.7
9/18/06 4:00 PM	0.38	2.1	7765.3
9/18/06 5:00 PM	0.38	2.2	7855.1
9/18/06 6:00 PM	0.38	2.2	7803.7
9/18/06 7:00 PM	0.38	2.2	7713.9
9/18/06 8:00 PM	0.38	2.1	7586.3
9/18/06 9:00 PM	0.37	2.1	7472.0
9/18/06 10:00 PM	0.37	2.1	7383.5
9/18/06 11:00 PM	0.36	2.0	7257.8
9/19/06 12:00 AM	0.36	2.0	7145.1
9/19/06 1:00 AM	0.36	2.0	7070.4
9/19/06 2:00 AM	0.35	2.0	6983.6
9/19/06 3:00 AM	0.35	1.9	6872.5
9/19/06 4:00 AM	0.35	1.9	6786.4
9/19/06 5:00 AM	0.35	1.9	6688.6
9/19/06 6:00 AM	0.34	1.8	6566.8
9/19/06 7:00 AM	0.34	1.8	6482.1
9/19/06 8:00 AM	0.33	1.8	6397.7
9/19/06 9:00 AM	0.33	1.8	6313.7
9/19/06 10:00 AM	0.33	1.7	6289.8
9/19/06 11:00 AM	0.33	1.8	6171.0
9/19/06 12:00 PM	0.32	1.7	5981.5
9/19/06 1:00 PM	0.32	1.6	5958.0
9/19/06 2:00 PM	0.32	1.7	5946.3
9/19/06 3:00 PM	0.32	1.6	5922.8
9/19/06 4:00 PM	0.32	1.7	5864.4
9/19/06 5:00 PM	0.31	1.6	5724.7
9/19/06 6:00 PM	0.31	1.6	5689.9
9/19/06 7:00 PM	0.31	1.6	6649.6
9/19/06 8:00 PM	0.37	2.1	7548.1
9/19/06 9:00 PM	0.37	2.1	7434.1
9/19/06 10:00 PM	0.37	2.0	7308.0
9/19/06 11:00 PM	0.36	2.0	7333.2
9/20/06 12:00 AM	0.37	2.1	7383.5
9/20/06 1:00 AM	0.37	2.0	7320.5
9/20/06 2:00 AM	0.36	2.0	7245.2
9/20/06 3:00 AM	0.36	2.0	7170.1
9/20/06 4:00 AM	0.36	2.0	7107.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/20/06 5:00 AM	0.36	2.0	7045.5
9/20/06 6:00 AM	0.35	1.9	6971.2
9/20/06 7:00 AM	0.35	1.9	6872.5
9/20/06 8:00 AM	0.35	1.9	6786.4
9/20/06 9:00 AM	0.35	1.9	6737.4
9/20/06 10:00 AM	0.34	1.9	6664.1
9/20/06 11:00 AM	0.34	1.8	6639.7
9/20/06 12:00 PM	0.34	1.9	6591.2
9/20/06 1:00 PM	0.34	1.8	6494.1
9/20/06 2:00 PM	0.34	1.8	6457.9
9/20/06 3:00 PM	0.33	1.8	6326.0
9/20/06 4:00 PM	0.33	1.7	6230.1
9/20/06 5:00 PM	0.33	1.7	6194.4
9/20/06 6:00 PM	0.32	1.7	6075.8
9/20/06 7:00 PM	0.32	1.7	5969.7
9/20/06 8:00 PM	0.32	1.6	5887.6
9/20/06 9:00 PM	0.31	1.6	5806.0
9/20/06 10:00 PM	0.31	1.6	5713.1
9/20/06 11:00 PM	0.31	1.6	5620.7
9/21/06 12:00 AM	0.30	1.5	5540.2
9/21/06 1:00 AM	0.30	1.5	5460.2
9/21/06 2:00 AM	0.30	1.5	5391.9
9/21/06 3:00 AM	0.30	1.5	5323.9
9/21/06 4:00 AM	0.29	1.5	5244.9
9/21/06 5:00 AM	0.29	1.4	5166.3
9/21/06 6:00 AM	0.29	1.4	5088.1
9/21/06 7:00 AM	0.28	1.4	5032.5
9/21/06 8:00 AM	0.28	1.4	4933.1
9/21/06 9:00 AM	0.28	1.3	4834.0
9/21/06 10:00 AM	0.27	1.3	4768.5
9/21/06 11:00 AM	0.27	1.3	4714.0
9/21/06 12:00 PM	0.27	1.3	4670.7
9/21/06 1:00 PM	0.27	1.3	4595.1
9/21/06 2:00 PM	0.27	1.3	4541.3
9/21/06 3:00 PM	0.26	1.3	4530.6
9/21/06 4:00 PM	0.26	1.3	4455.9
9/21/06 5:00 PM	0.26	1.2	4391.9
9/21/06 6:00 PM	0.26	1.2	4328.6
9/21/06 7:00 PM	0.25	1.2	4244.3
9/21/06 8:00 PM	0.25	1.2	4202.4
9/21/06 9:00 PM	0.25	1.2	4150.2
9/21/06 10:00 PM	0.25	1.1	4108.7
9/21/06 11:00 PM	0.25	1.1	4046.6
9/22/06 12:00 AM	0.24	1.1	3995.0
9/22/06 1:00 AM	0.24	1.1	3964.3
9/22/06 2:00 AM	0.24	1.1	3913.1
9/22/06 3:00 AM	0.24	1.1	3862.2
9/22/06 4:00 AM	0.24	1.1	3811.5
9/22/06 5:00 AM	0.23	1.1	3740.9
9/22/06 6:00 AM	0.23	1.0	3680.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/22/06 7:00 AM	0.23	1.0	3611.0
9/22/06 8:00 AM	0.23	1.0	3541.6
9/22/06 9:00 AM	0.22	1.0	3492.3
9/22/06 10:00 AM	0.22	1.0	3443.3
9/22/06 11:00 AM	0.22	1.0	3453.1
9/22/06 12:00 PM	0.22	1.0	3423.9
9/22/06 1:00 PM	0.22	0.9	3326.6
9/22/06 2:00 PM	0.21	0.9	3278.3
9/22/06 3:00 PM	0.21	0.9	3239.9
9/22/06 4:00 PM	0.21	0.9	3182.6
9/22/06 5:00 PM	0.21	0.9	3250.0
9/22/06 6:00 PM	0.22	0.9	4111.9
9/22/06 7:00 PM	0.28	1.4	7559.6
9/22/06 8:00 PM	0.46	2.8	12778.0
9/22/06 9:00 PM	0.60	4.3	15427.7
9/22/06 10:00 PM	0.60	4.3	15476.0
9/22/06 11:00 PM	0.60	4.3	15250.8
9/23/06 12:00 AM	0.59	4.2	14978.3
9/23/06 1:00 AM	0.58	4.1	14755.3
9/23/06 2:00 AM	0.58	4.1	14517.7
9/23/06 3:00 AM	0.57	4.0	14281.3
9/23/06 4:00 AM	0.57	3.9	14015.1
9/23/06 5:00 AM	0.56	3.8	13781.2
9/23/06 6:00 AM	0.55	3.8	13579.9
9/23/06 7:00 AM	0.55	3.7	13348.7
9/23/06 8:00 AM	0.54	3.7	13134.2
9/23/06 9:00 AM	0.53	3.6	12966.3
9/23/06 10:00 AM	0.53	3.6	12754.1
9/23/06 11:00 AM	0.52	3.5	12557.6
9/23/06 12:00 PM	0.52	3.5	12362.6
9/23/06 1:00 PM	0.51	3.4	12197.9
9/23/06 2:00 PM	0.51	3.4	12049.3
9/23/06 3:00 PM	0.50	3.3	11827.1
9/23/06 4:00 PM	0.50	3.3	11665.1
9/23/06 5:00 PM	0.49	3.2	11460.2
9/23/06 6:00 PM	0.49	3.1	11241.7
9/23/06 7:00 PM	0.48	3.1	11096.8
9/23/06 8:00 PM	0.48	3.1	10924.1
9/23/06 9:00 PM	0.47	3.0	10694.9
9/23/06 10:00 PM	0.47	2.9	10523.9
9/23/06 11:00 PM	0.46	2.9	10410.6
9/24/06 12:00 AM	0.46	2.9	10241.4
9/24/06 1:00 AM	0.45	2.8	10045.0
9/24/06 2:00 AM	0.45	2.8	9877.8
9/24/06 3:00 AM	0.44	2.7	9725.3
9/24/06 4:00 AM	0.44	2.7	9559.9
9/24/06 5:00 AM	0.43	2.6	9408.9
9/24/06 6:00 AM	0.43	2.6	9259.0
9/24/06 7:00 AM	0.42	2.5	9096.2
9/24/06 8:00 AM	0.42	2.5	8961.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/24/06 9:00 AM	0.41	2.5	8800.4
9/24/06 10:00 AM	0.41	2.4	8666.9
9/24/06 11:00 AM	0.41	2.4	8560.7
9/24/06 12:00 PM	0.40	2.4	8415.4
9/24/06 1:00 PM	0.40	2.3	8297.0
9/24/06 2:00 PM	0.39	2.3	8166.3
9/24/06 3:00 PM	0.39	2.2	7971.5
9/24/06 4:00 PM	0.38	2.2	7816.5
9/24/06 5:00 PM	0.38	2.2	7713.9
9/24/06 6:00 PM	0.38	2.1	7586.3
9/24/06 7:00 PM	0.37	2.1	7446.7
9/24/06 8:00 PM	0.37	2.1	7345.7
9/24/06 9:00 PM	0.36	2.0	7245.2
9/24/06 10:00 PM	0.36	2.0	7095.4
9/24/06 11:00 PM	0.35	1.9	6971.2
9/25/06 12:00 AM	0.35	1.9	6860.2
9/25/06 1:00 AM	0.35	1.9	6737.4
9/25/06 2:00 AM	0.34	1.9	6615.5
9/25/06 3:00 AM	0.34	1.8	6506.3
9/25/06 4:00 AM	0.34	1.8	6397.8
9/25/06 5:00 AM	0.33	1.8	6277.9
9/25/06 6:00 AM	0.33	1.7	6182.5
9/25/06 7:00 AM	0.32	1.7	6075.8
9/25/06 8:00 AM	0.32	1.7	5958.0
9/25/06 9:00 AM	0.32	1.6	5875.9
9/25/06 10:00 AM	0.31	1.6	5806.0
9/25/06 11:00 AM	0.31	1.6	5713.1
9/25/06 12:00 PM	0.31	1.6	5632.2
9/25/06 1:00 PM	0.30	1.6	5563.2
9/25/06 2:00 PM	0.30	1.5	5437.6
9/25/06 3:00 PM	0.30	1.5	5335.2
9/25/06 4:00 PM	0.29	1.5	5301.3
9/25/06 5:00 PM	0.29	1.5	5200.1
9/25/06 6:00 PM	0.29	1.4	5054.8
9/25/06 7:00 PM	0.28	1.4	4955.0
9/25/06 8:00 PM	0.28	1.4	4899.9
9/25/06 9:00 PM	0.28	1.4	4823.1
9/25/06 10:00 PM	0.27	1.3	4735.8
9/25/06 11:00 PM	0.27	1.3	4670.7
9/26/06 12:00 AM	0.27	1.3	4605.8
9/26/06 1:00 AM	0.27	1.3	4530.6
9/26/06 2:00 AM	0.26	1.2	4445.2
9/26/06 3:00 AM	0.26	1.2	4370.8
9/26/06 4:00 AM	0.26	1.2	4307.4
9/26/06 5:00 AM	0.25	1.2	4244.3
9/26/06 6:00 AM	0.25	1.2	4171.1
9/26/06 7:00 AM	0.25	1.1	4098.3
9/26/06 8:00 AM	0.25	1.1	4036.3
9/26/06 9:00 AM	0.24	1.1	3964.3
9/26/06 10:00 AM	0.24	1.1	3902.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/26/06 11:00 AM	0.24	1.1	3852.0
9/26/06 12:00 PM	0.24	1.1	3811.5
9/26/06 1:00 PM	0.24	1.1	3761.0
9/26/06 2:00 PM	0.23	1.0	3680.7
9/26/06 3:00 PM	0.23	1.0	3610.9
9/26/06 4:00 PM	0.23	1.0	3531.8
9/26/06 5:00 PM	0.22	1.0	3482.5
9/26/06 6:00 PM	0.22	1.0	3433.6
9/26/06 7:00 PM	0.22	0.9	3355.6
9/26/06 8:00 PM	0.22	0.9	3297.6
9/26/06 9:00 PM	0.21	0.9	3249.5
9/26/06 10:00 PM	0.21	0.9	3201.7
9/26/06 11:00 PM	0.21	0.9	3144.6
9/27/06 12:00 AM	0.21	0.9	3087.8
9/27/06 1:00 AM	0.20	0.8	3050.1
9/27/06 2:00 AM	0.20	0.8	3012.6
9/27/06 3:00 AM	0.20	0.8	2975.2
9/27/06 4:00 AM	0.20	0.8	2947.4
9/27/06 5:00 AM	0.20	0.8	2901.1
9/27/06 6:00 AM	0.19	0.8	2836.7
9/27/06 7:00 AM	0.19	0.8	2772.7
9/27/06 8:00 AM	0.19	0.8	2772.7
9/27/06 9:00 AM	0.19	0.8	2790.9
9/27/06 10:00 AM	0.19	0.8	2754.5
9/27/06 11:00 AM	0.19	0.8	2791.1
9/27/06 12:00 PM	0.19	0.8	2827.5
9/27/06 1:00 PM	0.19	0.8	3496.0
9/27/06 2:00 PM	0.25	1.2	4556.9
9/27/06 3:00 PM	0.28	1.4	4899.9
9/27/06 4:00 PM	0.28	1.4	4823.1
9/27/06 5:00 PM	0.27	1.3	4768.4
9/27/06 6:00 PM	0.27	1.3	4724.9
9/27/06 7:00 PM	0.27	1.3	4627.5
9/27/06 8:00 PM	0.27	1.3	4541.3
9/27/06 9:00 PM	0.26	1.3	4487.8
9/27/06 10:00 PM	0.26	1.2	4423.9
9/27/06 11:00 PM	0.26	1.2	4349.6
9/28/06 12:00 AM	0.26	1.2	4286.3
9/28/06 1:00 AM	0.25	1.2	4223.3
9/28/06 2:00 AM	0.25	1.2	4160.7
9/28/06 3:00 AM	0.25	1.1	4098.3
9/28/06 4:00 AM	0.25	1.1	4026.0
9/28/06 5:00 AM	0.24	1.1	3964.3
9/28/06 6:00 AM	0.24	1.1	3892.8
9/28/06 7:00 AM	0.24	1.1	3811.5
9/28/06 8:00 AM	0.23	1.1	3750.9
9/28/06 9:00 AM	0.23	1.0	3690.7
9/28/06 10:00 AM	0.23	1.0	3640.8
9/28/06 11:00 AM	0.23	1.0	3601.0
9/28/06 12:00 PM	0.23	1.0	3512.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/28/06 1:00 PM	0.22	1.0	3472.7
9/28/06 2:00 PM	0.22	1.0	3462.9
9/28/06 3:00 PM	0.22	1.0	3414.0
9/28/06 4:00 PM	0.22	0.9	3375.1
9/28/06 5:00 PM	0.22	0.9	3288.1
9/28/06 6:00 PM	0.21	0.9	3201.7
9/28/06 7:00 PM	0.21	0.9	3154.0
9/28/06 8:00 PM	0.21	0.9	3097.3
9/28/06 9:00 PM	0.20	0.8	3031.4
9/28/06 10:00 PM	0.20	0.8	2984.6
9/28/06 11:00 PM	0.20	0.8	2919.6
9/29/06 12:00 AM	0.19	0.8	2845.8
9/29/06 1:00 AM	0.19	0.8	2809.1
9/29/06 2:00 AM	0.19	0.8	2763.6
9/29/06 3:00 AM	0.19	0.8	2700.2
9/29/06 4:00 AM	0.19	0.7	2664.2
9/29/06 5:00 AM	0.19	0.7	2619.5
9/29/06 6:00 AM	0.18	0.7	2566.0
9/29/06 7:00 AM	0.18	0.7	2513.0
9/29/06 8:00 AM	0.18	0.7	2451.6
9/29/06 9:00 AM	0.17	0.7	2408.0
9/29/06 10:00 AM	0.17	0.7	2364.8
9/29/06 11:00 AM	0.17	0.6	2321.7
9/29/06 12:00 PM	0.17	0.6	2253.6
9/29/06 1:00 PM	0.16	0.6	2236.5
9/29/06 2:00 PM	0.17	0.6	2245.0
9/29/06 3:00 PM	0.16	0.6	2194.3
9/29/06 4:00 PM	0.16	0.6	2185.8
9/29/06 5:00 PM	0.16	0.6	2160.8
9/29/06 6:00 PM	0.16	0.6	2094.1
9/29/06 7:00 PM	0.16	0.6	2036.3
9/29/06 8:00 PM	0.15	0.6	1979.1
9/29/06 9:00 PM	0.15	0.5	1938.6
9/29/06 10:00 PM	0.15	0.5	1898.3
9/29/06 11:00 PM	0.15	0.5	1858.3
9/30/06 12:00 AM	0.15	0.5	1826.6
9/30/06 1:00 AM	0.14	0.5	1787.2
9/30/06 2:00 AM	0.14	0.5	1748.0
9/30/06 3:00 AM	0.14	0.5	1732.4
9/30/06 4:00 AM	0.14	0.5	1709.1
9/30/06 5:00 AM	0.14	0.5	1670.5
9/30/06 6:00 AM	0.14	0.5	1647.5
9/30/06 7:00 AM	0.13	0.5	1617.0
9/30/06 8:00 AM	0.13	0.4	1579.1
9/30/06 9:00 AM	0.13	0.4	1534.2
9/30/06 10:00 AM	0.13	0.4	1504.3
9/30/06 11:00 AM	0.13	0.4	1496.9
9/30/06 12:00 PM	0.13	0.4	1489.5
9/30/06 1:00 PM	0.13	0.4	1504.3
9/30/06 2:00 PM	0.13	0.4	1504.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/30/06 3:00 PM	0.13	0.4	1496.9
9/30/06 4:00 PM	0.13	0.4	1467.5
9/30/06 5:00 PM	0.12	0.4	1430.7
9/30/06 6:00 PM	0.12	0.4	1401.7
9/30/06 7:00 PM	0.12	0.4	1329.9
9/30/06 8:00 PM	0.11	0.4	1273.2
9/30/06 9:00 PM	0.11	0.3	1252.1
9/30/06 10:00 PM	0.11	0.3	1238.2
9/30/06 11:00 PM	0.11	0.3	1224.3
10/1/06 12:00 AM	0.11	0.3	1196.7
10/1/06 1:00 AM	0.11	0.3	1169.3
10/1/06 2:00 AM	0.11	0.3	1162.5
10/1/06 3:00 AM	0.11	0.3	1135.4
10/1/06 4:00 AM	0.10	0.3	1108.4
10/1/06 5:00 AM	0.10	0.3	1095.0
10/1/06 6:00 AM	0.10	0.3	1068.4
10/1/06 7:00 AM	0.10	0.3	1042.1
10/1/06 8:00 AM	0.10	0.3	1009.4
10/1/06 9:00 AM	0.10	0.3	1002.9
10/1/06 10:00 AM	0.10	0.3	996.5
10/1/06 11:00 AM	0.09	0.3	957.9
10/1/06 12:00 PM	0.09	0.3	938.7
10/1/06 1:00 PM	0.09	0.3	951.5
10/1/06 2:00 PM	0.09	0.3	970.6
10/1/06 3:00 PM	0.09	0.3	983.5
10/1/06 4:00 PM	0.10	0.3	958.0
10/1/06 5:00 PM	0.09	0.3	926.1
10/1/06 6:00 PM	0.09	0.3	888.7
10/1/06 7:00 PM	0.09	0.2	827.0
10/1/06 8:00 PM	0.08	0.2	790.7
10/1/06 9:00 PM	0.08	0.2	755.2
10/1/06 10:00 PM	0.08	0.2	708.5
10/1/06 11:00 PM	0.07	0.2	679.7
10/2/06 12:00 AM	0.07	0.2	662.7
10/2/06 1:00 AM	0.07	0.2	657.0
10/2/06 2:00 AM	0.07	0.2	651.4
10/2/06 3:00 AM	0.07	0.2	623.6
10/2/06 4:00 AM	0.07	0.2	596.1
10/2/06 5:00 AM	0.07	0.2	574.4
10/2/06 6:00 AM	0.07	0.2	558.3
10/2/06 7:00 AM	0.06	0.2	542.4
10/2/06 8:00 AM	0.06	0.1	531.8
10/2/06 9:00 AM	0.06	0.1	531.8
10/2/06 10:00 AM	0.06	0.1	496.0
10/2/06 11:00 AM	0.06	0.1	485.5
10/2/06 12:00 PM	0.06	0.1	480.6
10/2/06 1:00 PM	0.06	0.1	445.2
10/2/06 2:00 PM	0.06	0.1	455.2
10/2/06 3:00 PM	0.06	0.1	465.1
10/2/06 4:00 PM	0.06	0.1	445.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/2/06 5:00 PM	0.05	0.1	445.2
10/2/06 6:00 PM	0.06	0.1	435.5
10/2/06 7:00 PM	0.05	0.1	396.7
10/2/06 8:00 PM	0.05	0.1	382.4
10/2/06 9:00 PM	0.05	0.1	346.1
10/2/06 10:00 PM	0.04	0.1	301.0
10/2/06 11:00 PM	0.04	0.1	296.7
10/3/06 12:00 AM	0.04	0.1	296.7
10/3/06 1:00 AM	0.04	0.1	288.1
10/3/06 2:00 AM	0.04	0.1	283.8
10/3/06 3:00 AM	0.04	0.1	275.4
10/3/06 4:00 AM	0.04	0.1	266.9
10/3/06 5:00 AM	0.04	0.1	262.8
10/3/06 6:00 AM	0.04	0.1	250.5
10/3/06 7:00 AM	0.04	0.1	238.3
10/3/06 8:00 AM	0.04	0.1	222.5
10/3/06 9:00 AM	0.03	0.1	203.1
10/3/06 10:00 AM	0.03	0.1	184.4
10/3/06 11:00 AM	0.03	0.0	199.9
10/3/06 12:00 PM	0.04	0.1	203.5
10/3/06 1:00 PM	0.03	0.1	188.1
10/3/06 2:00 PM	0.03	0.1	180.9
10/3/06 3:00 PM	0.03	0.0	159.2
10/3/06 4:00 PM	0.03	0.0	162.8
10/3/06 5:00 PM	0.03	0.0	159.3
10/3/06 6:00 PM	0.03	0.0	135.3
10/3/06 7:00 PM	0.02	0.0	122.1
10/3/06 8:00 PM	0.02	0.0	115.8
10/3/06 9:00 PM	0.02	0.0	103.5
10/3/06 10:00 PM	0.02	0.0	91.5
10/3/06 11:00 PM	0.02	0.0	110.2
10/4/06 12:00 AM	0.02	0.0	131.9
10/4/06 1:00 AM	0.02	0.0	116.1
10/4/06 2:00 AM	0.02	0.0	109.6
10/4/06 3:00 AM	0.02	0.0	112.7
10/4/06 4:00 AM	0.02	0.0	106.4
10/4/06 5:00 AM	0.02	0.0	103.4
10/4/06 6:00 AM	0.02	0.0	91.6
10/4/06 7:00 AM	0.02	0.0	77.3
10/4/06 8:00 AM	0.02	0.0	74.5
10/4/06 9:00 AM	0.02	0.0	74.5
10/4/06 10:00 AM	0.02	0.0	61.6
10/4/06 11:00 AM	0.01	0.0	56.3
10/4/06 12:00 PM	0.01	0.0	49.5
10/4/06 1:00 PM	0.01	0.0	49.5
10/4/06 2:00 PM	0.01	0.0	38.1
10/4/06 3:00 PM	0.01	0.0	40.7
10/4/06 4:00 PM	0.02	0.0	49.9
10/4/06 5:00 PM	0.01	0.0	35.5
10/4/06 6:00 PM	0.01	0.0	26.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/4/06 7:00 PM	0.01	0.0	14.9
10/4/06 8:00 PM	0.01	0.0	10.6
10/4/06 9:00 PM	0.00	0.0	3.2
10/4/06 10:00 PM	0.00	0.0	0.4
10/4/06 11:00 PM	0.00	0.0	0.8
10/5/06 12:00 AM	0.00	0.0	0.4
10/5/06 1:00 AM	0.00	0.0	0.0
10/5/06 2:00 AM	0.00	0.0	0.0
10/5/06 3:00 AM	0.00	0.0	0.0
10/5/06 4:00 AM	-0.01	0.0	0.0
10/5/06 5:00 AM	0.00	0.0	0.0
10/5/06 6:00 AM	-0.01	0.0	0.0
Data range not printed - WSEL below invert for entire range			
9/24/07 4:00 PM	-0.01	0.0	0.0
9/24/07 5:00 PM	0.00	0.0	0.4
9/24/07 6:00 PM	0.00	0.0	7.8
9/24/07 7:00 PM	0.01	0.0	28.5
9/24/07 8:00 PM	0.01	0.0	42.0
9/24/07 9:00 PM	0.01	0.0	39.8
9/24/07 10:00 PM	0.01	0.0	39.8
9/24/07 11:00 PM	0.01	0.0	44.3
9/25/07 12:00 AM	0.01	0.0	46.6
9/25/07 1:00 AM	0.01	0.0	99.4
9/25/07 2:00 AM	0.03	0.0	159.2
9/25/07 3:00 AM	0.03	0.0	127.4
9/25/07 4:00 AM	0.02	0.0	113.5
9/25/07 5:00 AM	0.03	0.0	186.4
9/25/07 6:00 AM	0.04	0.1	276.4
9/25/07 7:00 AM	0.04	0.1	323.0
9/25/07 8:00 AM	0.05	0.1	327.4
9/25/07 9:00 AM	0.05	0.1	318.6
9/25/07 10:00 AM	0.04	0.1	309.7
9/25/07 11:00 AM	0.04	0.1	276.0
9/25/07 12:00 PM	0.04	0.1	123.2
9/25/07 1:00 PM	0.00	0.0	6.6
9/25/07 2:00 PM	0.00	0.0	7.7
9/25/07 3:00 PM	0.00	0.0	3.6
9/25/07 4:00 PM	0.00	0.0	73.1
9/25/07 5:00 PM	0.03	0.0	148.7
9/25/07 6:00 PM	0.03	0.0	166.4
9/25/07 7:00 PM	0.03	0.1	166.4
9/25/07 8:00 PM	0.03	0.0	148.7
9/25/07 9:00 PM	0.03	0.0	138.6
9/25/07 10:00 PM	0.02	0.0	122.3
9/25/07 11:00 PM	0.02	0.0	115.8
9/26/07 12:00 AM	0.02	0.0	109.6
9/26/07 1:00 AM	0.02	0.0	100.3
9/26/07 2:00 AM	0.02	0.0	100.3
9/26/07 3:00 AM	0.02	0.0	97.4
9/26/07 4:00 AM	0.02	0.0	91.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/26/07 5:00 AM	0.02	0.0	88.5
9/26/07 6:00 AM	0.02	0.0	88.5
9/26/07 7:00 AM	0.02	0.0	85.7
9/26/07 8:00 AM	0.02	0.0	82.8
9/26/07 9:00 AM	0.02	0.0	80.0
9/26/07 10:00 AM	0.02	0.0	82.9
9/26/07 11:00 AM	0.02	0.0	91.5
9/26/07 12:00 PM	0.02	0.0	85.8
9/26/07 1:00 PM	0.02	0.0	55.3
9/26/07 2:00 PM	0.01	0.0	16.7
9/26/07 3:00 PM	-0.01	0.0	0.0
9/26/07 4:00 PM	0.00	0.0	59.5
9/26/07 5:00 PM	0.02	0.0	100.9
9/26/07 6:00 PM	0.02	0.0	80.0
9/26/07 7:00 PM	0.02	0.0	80.0
9/26/07 8:00 PM	0.02	0.0	74.7
9/26/07 9:00 PM	0.02	0.0	63.9
9/26/07 10:00 PM	0.01	0.0	58.8
9/26/07 11:00 PM	0.01	0.0	51.4
9/27/07 12:00 AM	0.01	0.0	44.3
9/27/07 1:00 AM	0.01	0.0	37.7
9/27/07 2:00 AM	0.01	0.0	33.4
9/27/07 3:00 AM	0.01	0.0	33.4
9/27/07 4:00 AM	0.01	0.0	29.4
9/27/07 5:00 AM	0.01	0.0	29.4
9/27/07 6:00 AM	0.01	0.0	82.6
9/27/07 7:00 AM	0.02	0.0	216.5
9/27/07 8:00 AM	0.04	0.1	337.0
9/27/07 9:00 AM	0.05	0.1	332.7
9/27/07 10:00 AM	0.04	0.1	222.3
9/27/07 11:00 AM	0.03	0.0	76.1
9/27/07 12:00 PM	-0.02	0.0	0.0
9/27/07 1:00 PM	-0.02	0.0	18.8
9/27/07 2:00 PM	0.01	0.0	37.6
9/27/07 3:00 PM	0.01	0.0	22.0
9/27/07 4:00 PM	0.00	0.0	3.6
9/27/07 5:00 PM	0.00	0.0	3.6
9/27/07 6:00 PM	0.00	0.0	9.1
9/27/07 7:00 PM	0.00	0.0	9.1
9/27/07 8:00 PM	0.00	0.0	4.3
9/27/07 9:00 PM	0.00	0.0	1.5
9/27/07 10:00 PM	0.00	0.0	0.4
9/27/07 11:00 PM	0.00	0.0	0.4
9/28/07 12:00 AM	0.00	0.0	0.4
9/28/07 1:00 AM	-0.01	0.0	0.0
9/28/07 2:00 AM	0.00	0.0	7.4
9/28/07 3:00 AM	0.01	0.0	24.1
9/28/07 4:00 AM	0.01	0.0	35.5
9/28/07 5:00 AM	0.01	0.0	35.5
9/28/07 6:00 AM	0.01	0.0	33.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/28/07 7:00 AM	0.01	0.0	29.4
9/28/07 8:00 AM	0.01	0.0	23.5
9/28/07 9:00 AM	0.01	0.0	15.3
9/28/07 10:00 AM	0.00	0.0	4.5
9/28/07 11:00 AM	-0.02	0.0	0.0
9/28/07 12:00 PM	-0.04	0.0	0.0
9/28/07 1:00 PM	-0.03	0.0	0.0
Data range not printed - WSEL below invert for entire range			
7/8/08 5:00 PM	-0.01	0.0	0.0
7/8/08 6:00 PM	0.00	0.0	463.0
7/8/08 7:00 PM	0.09	0.3	1222.6
7/8/08 8:00 PM	0.13	0.4	1587.1
7/8/08 9:00 PM	0.14	0.5	1662.8
7/8/08 10:00 PM	0.14	0.5	1662.8
7/8/08 11:00 PM	0.14	0.5	1655.1
7/9/08 12:00 AM	0.14	0.5	1609.6
7/9/08 1:00 AM	0.13	0.4	1556.5
7/9/08 2:00 AM	0.13	0.4	1556.5
7/9/08 3:00 AM	0.13	0.4	1571.6
7/9/08 4:00 AM	0.13	0.4	1571.6
7/9/08 5:00 AM	0.13	0.4	1556.5
7/9/08 6:00 AM	0.13	0.4	1534.1
7/9/08 7:00 AM	0.13	0.4	1526.6
7/9/08 8:00 AM	0.13	0.4	1534.1
7/9/08 9:00 AM	0.13	0.4	1549.1
7/9/08 10:00 AM	0.13	0.4	1617.3
7/9/08 11:00 AM	0.14	0.5	1732.7
7/9/08 12:00 PM	0.14	0.5	1850.6
7/9/08 1:00 PM	0.15	0.5	1914.4
7/9/08 2:00 PM	0.15	0.5	1835.2
7/9/08 3:00 PM	0.14	0.5	1892.1
7/9/08 4:00 PM	0.16	0.6	1915.6
7/9/08 5:00 PM	0.14	0.5	1763.7
7/9/08 6:00 PM	0.14	0.5	3250.4
7/9/08 7:00 PM	0.27	1.3	4878.3
7/9/08 8:00 PM	0.28	1.4	5043.7
7/9/08 9:00 PM	0.29	1.4	4966.6
7/9/08 10:00 PM	0.28	1.3	4768.6
7/9/08 11:00 PM	0.27	1.3	4649.1
7/10/08 12:00 AM	0.27	1.3	4562.8
7/10/08 1:00 AM	0.26	1.3	4498.5
7/10/08 2:00 AM	0.26	1.2	4434.5
7/10/08 3:00 AM	0.26	1.2	4370.8
7/10/08 4:00 AM	0.26	1.2	4307.4
7/10/08 5:00 AM	0.25	1.2	4254.8
7/10/08 6:00 AM	0.25	1.2	4181.6
7/10/08 7:00 AM	0.25	1.1	4108.7
7/10/08 8:00 AM	0.25	1.1	4067.2
7/10/08 9:00 AM	0.25	1.1	4036.2
7/10/08 10:00 AM	0.24	1.1	4005.3

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/10/08 11:00 AM	0.24	1.1	4036.3
7/10/08 12:00 PM	0.25	1.1	4077.6
7/10/08 1:00 PM	0.25	1.1	4046.6
7/10/08 2:00 PM	0.24	1.1	4015.6
7/10/08 3:00 PM	0.24	1.1	3995.0
7/10/08 4:00 PM	0.24	1.1	3984.8
7/10/08 5:00 PM	0.24	1.1	3822.7
7/10/08 6:00 PM	0.23	1.0	3611.0
7/10/08 7:00 PM	0.23	1.0	4056.7
7/10/08 8:00 PM	0.27	1.3	4456.1
7/10/08 9:00 PM	0.26	1.2	4224.0
7/10/08 10:00 PM	0.25	1.1	4098.3
7/10/08 11:00 PM	0.25	1.1	4057.0
7/11/08 12:00 AM	0.24	1.1	3943.9
7/11/08 1:00 AM	0.24	1.1	3821.7
7/11/08 2:00 AM	0.23	1.0	3730.8
7/11/08 3:00 AM	0.23	1.0	3640.9
7/11/08 4:00 AM	0.23	1.0	3561.3
7/11/08 5:00 AM	0.22	1.0	3502.2
7/11/08 6:00 AM	0.22	1.0	3453.0
7/11/08 7:00 AM	0.22	1.0	3404.3
7/11/08 8:00 AM	0.22	0.9	3355.6
7/11/08 9:00 AM	0.22	0.9	3307.3
7/11/08 10:00 AM	0.21	0.9	3278.3
7/11/08 11:00 AM	0.21	0.9	3287.9
7/11/08 12:00 PM	0.21	0.9	3307.2
7/11/08 1:00 PM	0.22	0.9	3316.9
7/11/08 2:00 PM	0.21	0.9	3249.7
7/11/08 3:00 PM	0.21	0.9	3182.6
7/11/08 4:00 PM	0.21	0.9	3182.6
7/11/08 5:00 PM	0.21	0.9	3041.9
7/11/08 6:00 PM	0.20	0.8	2947.5
7/11/08 7:00 PM	0.20	0.8	2984.6
7/11/08 8:00 PM	0.20	0.8	2919.6
7/11/08 9:00 PM	0.19	0.8	2864.1
7/11/08 10:00 PM	0.19	0.8	2818.3
7/11/08 11:00 PM	0.19	0.8	2727.4
7/12/08 12:00 AM	0.19	0.7	2619.6
7/12/08 1:00 AM	0.18	0.7	2521.9
7/12/08 2:00 AM	0.18	0.7	2425.6
7/12/08 3:00 AM	0.17	0.7	2347.5
7/12/08 4:00 AM	0.17	0.6	2279.1
7/12/08 5:00 AM	0.17	0.6	2202.7
7/12/08 6:00 AM	0.16	0.6	2127.4
7/12/08 7:00 AM	0.16	0.6	2077.5
7/12/08 8:00 AM	0.16	0.6	2036.3
7/12/08 9:00 AM	0.15	0.6	2003.5
7/12/08 10:00 AM	0.15	0.6	1995.3
7/12/08 11:00 AM	0.15	0.6	1995.3
7/12/08 12:00 PM	0.15	0.6	2019.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/12/08 1:00 PM	0.16	0.6	1995.5
7/12/08 2:00 PM	0.15	0.5	1930.5
7/12/08 3:00 PM	0.15	0.5	1971.3
7/12/08 4:00 PM	0.16	0.6	2144.8
7/12/08 5:00 PM	0.17	0.6	2499.4
7/12/08 6:00 PM	0.19	0.8	2902.4
7/12/08 7:00 PM	0.20	0.8	3050.1
7/12/08 8:00 PM	0.20	0.8	3022.0
7/12/08 9:00 PM	0.20	0.8	2975.3
7/12/08 10:00 PM	0.20	0.8	2938.1
7/12/08 11:00 PM	0.20	0.8	2910.3
7/13/08 12:00 AM	0.20	0.8	2873.4
7/13/08 1:00 AM	0.19	0.8	2845.8
7/13/08 2:00 AM	0.19	0.8	2818.3
7/13/08 3:00 AM	0.19	0.8	2781.8
7/13/08 4:00 AM	0.19	0.8	2745.4
7/13/08 5:00 AM	0.19	0.8	2700.2
7/13/08 6:00 AM	0.19	0.7	2646.3
7/13/08 7:00 AM	0.18	0.7	2610.5
7/13/08 8:00 AM	0.18	0.7	2610.5
7/13/08 9:00 AM	0.18	0.7	2601.6
7/13/08 10:00 AM	0.18	0.7	2610.5
7/13/08 11:00 AM	0.18	0.7	2601.6
7/13/08 12:00 PM	0.18	0.7	3053.8
7/13/08 1:00 PM	0.22	1.0	4287.0
7/13/08 2:00 PM	0.28	1.4	5166.9
7/13/08 3:00 PM	0.29	1.5	5346.5
7/13/08 4:00 PM	0.30	1.5	5357.9
7/13/08 5:00 PM	0.29	1.5	5392.0
7/13/08 6:00 PM	0.30	1.5	5414.7
7/13/08 7:00 PM	0.30	1.5	5323.9
7/13/08 8:00 PM	0.29	1.5	5200.1
7/13/08 9:00 PM	0.29	1.4	5021.7
7/13/08 10:00 PM	0.28	1.4	4899.9
7/13/08 11:00 PM	0.28	1.4	5307.0
7/14/08 12:00 AM	0.31	1.6	6384.7
7/14/08 1:00 AM	0.35	2.0	7058.0
7/14/08 2:00 AM	0.36	2.0	7082.8
7/14/08 3:00 AM	0.36	2.0	7020.8
7/14/08 4:00 AM	0.35	1.9	6909.4
7/14/08 5:00 AM	0.35	1.9	6823.2
7/14/08 6:00 AM	0.35	1.9	6725.2
7/14/08 7:00 AM	0.34	1.9	6712.9
7/14/08 8:00 AM	0.35	1.9	6737.4
7/14/08 9:00 AM	0.34	1.9	6700.7
7/14/08 10:00 AM	0.34	1.9	6664.1
7/14/08 11:00 AM	0.34	1.8	6923.6
7/14/08 12:00 PM	0.36	2.0	7282.9
7/14/08 1:00 PM	0.37	2.0	7270.4
7/14/08 2:00 PM	0.36	2.0	7320.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/14/08 3:00 PM	0.37	2.1	7396.2
7/14/08 4:00 PM	0.36	2.0	7345.7
7/14/08 5:00 PM	0.37	2.0	7295.4
7/14/08 6:00 PM	0.36	2.0	7220.1
7/14/08 7:00 PM	0.36	2.0	7145.2
7/14/08 8:00 PM	0.36	2.0	6983.7
7/14/08 9:00 PM	0.35	1.9	6701.5
7/14/08 10:00 PM	0.34	1.8	6410.0
7/14/08 11:00 PM	0.33	1.8	6218.3
7/15/08 12:00 AM	0.32	1.7	6052.3
7/15/08 1:00 AM	0.32	1.7	6016.8
7/15/08 2:00 AM	0.32	1.7	6099.4
7/15/08 3:00 AM	0.32	1.7	6099.4
7/15/08 4:00 AM	0.32	1.7	6016.8
7/15/08 5:00 AM	0.32	1.7	5911.1
7/15/08 6:00 AM	0.31	1.6	5794.4
7/15/08 7:00 AM	0.31	1.6	5689.9
7/15/08 8:00 AM	0.31	1.6	6276.5
7/15/08 9:00 AM	0.35	1.9	7260.5
7/15/08 10:00 AM	0.37	2.1	8661.5
7/15/08 11:00 AM	0.44	2.7	11661.0
7/15/08 12:00 PM	0.55	3.8	16160.9
7/15/08 1:00 PM	0.68	5.2	20066.1
7/15/08 2:00 PM	0.74	6.0	21910.5
7/15/08 3:00 PM	0.77	6.2	22345.1
7/15/08 4:00 PM	0.76	6.2	22108.6
7/15/08 5:00 PM	0.76	6.1	21782.0
7/15/08 6:00 PM	0.75	6.0	21385.6
7/15/08 7:00 PM	0.74	5.9	20884.1
7/15/08 8:00 PM	0.73	5.7	20333.8
7/15/08 9:00 PM	0.71	5.6	19735.6
7/15/08 10:00 PM	0.70	5.4	19212.5
7/15/08 11:00 PM	0.69	5.3	18711.7
7/16/08 12:00 AM	0.67	5.1	18300.0
7/16/08 1:00 AM	0.67	5.0	17993.7
7/16/08 2:00 AM	0.66	5.0	17638.5
7/16/08 3:00 AM	0.65	4.8	17268.8
7/16/08 4:00 AM	0.64	4.7	16918.3
7/16/08 5:00 AM	0.63	4.7	16603.3
7/16/08 6:00 AM	0.62	4.6	20843.3
7/16/08 7:00 AM	0.83	7.0	26057.8
7/16/08 8:00 AM	0.87	7.5	27489.6
7/16/08 9:00 AM	0.89	7.8	28830.6
7/16/08 10:00 AM	0.92	8.2	31847.8
7/16/08 11:00 AM	0.96	9.5	32513.7
7/16/08 12:00 PM	0.95	8.6	32380.8
7/16/08 1:00 PM	0.95	9.4	34011.9
7/16/08 2:00 PM	0.96	9.5	34494.4
7/16/08 3:00 PM	0.98	9.7	34727.9
7/16/08 4:00 PM	0.97	9.6	34407.8

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/16/08 5:00 PM	0.96	9.5	32482.2
7/16/08 6:00 PM	0.95	8.5	30371.2
7/16/08 7:00 PM	0.93	8.3	29586.3
7/16/08 8:00 PM	0.92	8.1	28828.3
7/16/08 9:00 PM	0.90	7.9	27998.5
7/16/08 10:00 PM	0.88	7.7	27137.3
7/16/08 11:00 PM	0.86	7.4	26381.4
7/17/08 12:00 AM	0.85	7.2	25728.3
7/17/08 1:00 AM	0.83	7.1	25099.9
7/17/08 2:00 AM	0.82	6.9	24457.8
7/17/08 3:00 AM	0.81	6.7	23858.4
7/17/08 4:00 AM	0.79	6.5	23245.9
7/17/08 5:00 AM	0.78	6.4	22766.2
7/17/08 6:00 AM	0.77	6.3	22363.8
7/17/08 7:00 AM	0.76	6.1	21836.7
7/17/08 8:00 AM	0.75	6.0	21295.8
7/17/08 9:00 AM	0.74	5.8	20794.9
7/17/08 10:00 AM	0.72	5.7	20351.1
7/17/08 11:00 AM	0.71	5.6	19928.1
7/17/08 12:00 PM	0.70	5.5	19490.7
7/17/08 1:00 PM	0.69	5.4	19142.8
7/17/08 2:00 PM	0.69	5.3	18814.7
7/17/08 3:00 PM	0.68	5.2	18368.7
7/17/08 4:00 PM	0.67	5.0	17892.2
7/17/08 5:00 PM	0.65	4.9	17537.2
7/17/08 6:00 PM	0.65	4.8	17185.4
7/17/08 7:00 PM	0.64	4.7	16686.5
7/17/08 8:00 PM	0.62	4.6	16306.6
7/17/08 9:00 PM	0.62	4.5	16044.6
7/17/08 10:00 PM	0.61	4.4	15590.1
7/17/08 11:00 PM	0.59	4.2	15058.7
7/18/08 12:00 AM	0.58	4.1	14723.6
7/18/08 1:00 AM	0.58	4.1	14360.5
7/18/08 2:00 AM	0.56	3.9	13952.6
7/18/08 3:00 AM	0.56	3.8	13688.2
7/18/08 4:00 AM	0.55	3.8	13456.5
7/18/08 5:00 AM	0.54	3.7	13195.4
7/18/08 6:00 AM	0.54	3.6	12875.5
7/18/08 7:00 AM	0.52	3.5	12542.8
7/18/08 8:00 AM	0.52	3.4	12243.0
7/18/08 9:00 AM	0.51	3.4	11945.6
7/18/08 10:00 AM	0.50	3.3	11665.3
7/18/08 11:00 AM	0.49	3.2	11445.5
7/18/08 12:00 PM	0.49	3.2	11198.5
7/18/08 1:00 PM	0.48	3.1	11082.4
7/18/08 2:00 PM	0.48	3.1	11053.5
7/18/08 3:00 PM	0.48	3.1	10823.8
7/18/08 4:00 PM	0.47	3.0	10496.0
7/18/08 5:00 PM	0.46	2.9	10227.3
7/18/08 6:00 PM	0.45	2.8	9961.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/18/08 7:00 PM	0.44	2.7	9766.7
7/18/08 8:00 PM	0.44	2.7	9519.3
7/18/08 9:00 PM	0.43	2.6	9231.7
7/18/08 10:00 PM	0.42	2.5	9082.7
7/18/08 11:00 PM	0.42	2.5	8827.6
7/19/08 12:00 AM	0.41	2.4	8587.2
7/19/08 1:00 AM	0.40	2.4	8441.7
7/19/08 2:00 AM	0.40	2.3	8231.8
7/19/08 3:00 AM	0.39	2.3	8075.0
7/19/08 4:00 AM	0.39	2.2	8010.1
7/19/08 5:00 AM	0.39	2.2	7906.7
7/19/08 6:00 AM	0.38	2.2	7714.2
7/19/08 7:00 AM	0.37	2.1	7497.5
7/19/08 8:00 AM	0.37	2.1	7358.3
7/19/08 9:00 AM	0.36	2.0	7270.3
7/19/08 10:00 AM	0.36	2.0	7170.2
7/19/08 11:00 AM	0.36	2.0	7045.6
7/19/08 12:00 PM	0.35	1.9	6884.9
7/19/08 1:00 PM	0.35	1.9	6737.4
7/19/08 2:00 PM	0.34	1.9	6651.9
7/19/08 3:00 PM	0.34	1.8	6518.6
7/19/08 4:00 PM	0.33	1.8	6361.7
7/19/08 5:00 PM	0.33	1.8	6301.7
7/19/08 6:00 PM	0.33	1.8	6289.8
7/19/08 7:00 PM	0.33	1.7	6088.6
7/19/08 8:00 PM	0.32	1.6	5841.0
7/19/08 9:00 PM	0.31	1.6	5713.2
7/19/08 10:00 PM	0.31	1.6	5529.1
7/19/08 11:00 PM	0.30	1.5	5380.5
7/20/08 12:00 AM	0.30	1.5	5290.0
7/20/08 1:00 AM	0.29	1.5	5199.9
7/20/08 2:00 AM	0.29	1.4	5121.6
7/20/08 3:00 AM	0.29	1.4	5021.5
7/20/08 4:00 AM	0.28	1.4	4911.0
7/20/08 5:00 AM	0.28	1.3	4823.1
7/20/08 6:00 AM	0.27	1.3	4725.0
7/20/08 7:00 AM	0.27	1.3	4616.7
7/20/08 8:00 AM	0.27	1.3	4530.6
7/20/08 9:00 AM	0.26	1.2	4487.8
7/20/08 10:00 AM	0.26	1.2	4445.2
7/20/08 11:00 AM	0.26	1.2	4434.5
7/20/08 12:00 PM	0.26	1.2	4434.5
7/20/08 1:00 PM	0.26	1.2	4391.9
7/20/08 2:00 PM	0.26	1.2	4318.0
7/20/08 3:00 PM	0.25	1.2	4171.3
7/20/08 4:00 PM	0.25	1.1	4087.9
7/20/08 5:00 PM	0.25	1.1	3975.0
7/20/08 6:00 PM	0.24	1.1	3811.6
7/20/08 7:00 PM	0.23	1.0	3720.8
7/20/08 8:00 PM	0.23	1.0	3700.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/20/08 9:00 PM	0.23	1.0	3720.8
7/20/08 10:00 PM	0.23	1.0	3631.1
7/20/08 11:00 PM	0.22	1.0	3591.1
7/21/08 12:00 AM	0.23	1.0	3601.0
7/21/08 1:00 AM	0.23	1.0	3463.3
7/21/08 2:00 AM	0.22	0.9	3336.3
7/21/08 3:00 AM	0.21	0.9	3278.4
7/21/08 4:00 AM	0.21	0.9	3201.7
7/21/08 5:00 AM	0.21	0.9	3106.7
7/21/08 6:00 AM	0.20	0.8	3040.7
7/21/08 7:00 AM	0.20	0.8	2984.6
7/21/08 8:00 AM	0.20	0.8	2928.8
7/21/08 9:00 AM	0.20	0.8	2891.8
7/21/08 10:00 AM	0.19	0.8	2882.6
7/21/08 11:00 AM	0.20	0.8	2882.6
7/21/08 12:00 PM	0.19	0.8	2864.1
7/21/08 1:00 PM	0.19	0.8	2836.6
7/21/08 2:00 PM	0.19	0.8	2800.0
7/21/08 3:00 PM	0.19	0.8	2745.5
7/21/08 4:00 PM	0.19	0.8	2673.2
7/21/08 5:00 PM	0.18	0.7	2619.4
7/21/08 6:00 PM	0.18	0.7	2655.4
7/21/08 7:00 PM	0.19	0.8	2655.4
7/21/08 8:00 PM	0.18	0.7	2574.9
7/21/08 9:00 PM	0.18	0.7	2539.4
7/21/08 10:00 PM	0.18	0.7	2513.0
7/21/08 11:00 PM	0.18	0.7	2469.1
7/22/08 12:00 AM	0.18	0.7	2390.9
7/22/08 1:00 AM	0.17	0.6	2313.2
7/22/08 2:00 AM	0.17	0.6	2236.7
7/22/08 3:00 AM	0.16	0.6	2152.4
7/22/08 4:00 AM	0.16	0.6	2085.8
7/22/08 5:00 AM	0.16	0.6	2044.5
7/22/08 6:00 AM	0.16	0.6	2003.6
7/22/08 7:00 AM	0.15	0.5	1938.6
7/22/08 8:00 AM	0.15	0.5	1890.3
7/22/08 9:00 AM	0.15	0.5	1874.3
7/22/08 10:00 AM	0.15	0.5	1866.3
7/22/08 11:00 AM	0.15	0.5	1866.3
7/22/08 12:00 PM	0.15	0.5	1874.3
7/22/08 1:00 PM	0.15	0.5	1866.3
7/22/08 2:00 PM	0.15	0.5	1850.4
7/22/08 3:00 PM	0.15	0.5	1842.4
7/22/08 4:00 PM	0.15	0.5	1795.2
7/22/08 5:00 PM	0.14	0.5	1787.2
7/22/08 6:00 PM	0.14	0.5	1795.1
7/22/08 7:00 PM	0.14	0.5	1748.0
7/22/08 8:00 PM	0.14	0.5	1701.4
7/22/08 9:00 PM	0.14	0.5	1632.4
7/22/08 10:00 PM	0.13	0.4	1579.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/22/08 11:00 PM	0.13	0.4	1534.2
7/23/08 12:00 AM	0.13	0.4	1489.5
7/23/08 1:00 AM	0.13	0.4	1460.0
7/23/08 2:00 AM	0.12	0.4	1423.4
7/23/08 3:00 AM	0.12	0.4	1394.3
7/23/08 4:00 AM	0.12	0.4	1365.5
7/23/08 5:00 AM	0.12	0.4	1329.7
7/23/08 6:00 AM	0.12	0.4	1315.5
7/23/08 7:00 AM	0.12	0.4	1287.3
7/23/08 8:00 AM	0.11	0.3	1252.1
7/23/08 9:00 AM	0.11	0.3	1245.1
7/23/08 10:00 AM	0.11	0.3	1238.2
7/23/08 11:00 AM	0.11	0.3	1231.2
7/23/08 12:00 PM	0.11	0.3	1259.2
7/23/08 1:00 PM	0.11	0.4	1280.2
7/23/08 2:00 PM	0.11	0.4	1252.2
7/23/08 3:00 PM	0.11	0.3	1196.8
7/23/08 4:00 PM	0.11	0.3	1203.8
7/23/08 5:00 PM	0.11	0.3	1190.2
7/23/08 6:00 PM	0.11	0.3	1121.9
7/23/08 7:00 PM	0.10	0.3	1108.4
7/23/08 8:00 PM	0.10	0.3	1115.1
7/23/08 9:00 PM	0.10	0.3	1088.5
7/23/08 10:00 PM	0.10	0.3	1016.1
7/23/08 11:00 PM	0.09	0.3	964.3
7/24/08 12:00 AM	0.09	0.3	945.1
7/24/08 1:00 AM	0.09	0.3	919.8
7/24/08 2:00 AM	0.09	0.3	882.3
7/24/08 3:00 AM	0.09	0.2	857.5
7/24/08 4:00 AM	0.09	0.2	833.1
7/24/08 5:00 AM	0.08	0.2	808.8
7/24/08 6:00 AM	0.08	0.2	790.7
7/24/08 7:00 AM	0.08	0.2	755.2
7/24/08 8:00 AM	0.08	0.2	720.0
7/24/08 9:00 AM	0.08	0.2	708.3
7/24/08 10:00 AM	0.08	0.2	696.9
7/24/08 11:00 AM	0.07	0.2	708.5
7/24/08 12:00 PM	0.08	0.2	743.3
7/24/08 1:00 PM	0.08	0.2	755.0
7/24/08 2:00 PM	0.08	0.2	749.2
7/24/08 3:00 PM	0.08	0.2	761.0
7/24/08 4:00 PM	0.08	0.2	784.7
7/24/08 5:00 PM	0.08	0.2	726.7
7/24/08 6:00 PM	0.07	0.2	645.9
7/24/08 7:00 PM	0.07	0.2	629.1
7/24/08 8:00 PM	0.07	0.2	601.7
7/24/08 9:00 PM	0.07	0.2	542.7
7/24/08 10:00 PM	0.06	0.1	511.0
7/24/08 11:00 PM	0.06	0.1	490.6
7/25/08 12:00 AM	0.06	0.1	460.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/25/08 1:00 AM	0.06	0.1	450.1
7/25/08 2:00 AM	0.06	0.1	445.2
7/25/08 3:00 AM	0.06	0.1	420.8
7/25/08 4:00 AM	0.05	0.1	396.6
7/25/08 5:00 AM	0.05	0.1	377.8
7/25/08 6:00 AM	0.05	0.1	354.6
7/25/08 7:00 AM	0.05	0.1	340.9
7/25/08 8:00 AM	0.05	0.1	331.9
7/25/08 9:00 AM	0.05	0.1	318.6
7/25/08 10:00 AM	0.04	0.1	346.1
7/25/08 11:00 AM	0.05	0.1	401.5
7/25/08 12:00 PM	0.05	0.1	445.4
7/25/08 1:00 PM	0.06	0.1	470.1
7/25/08 2:00 PM	0.06	0.1	465.1
7/25/08 3:00 PM	0.06	0.1	460.1
7/25/08 4:00 PM	0.06	0.1	430.7
7/25/08 5:00 PM	0.05	0.1	368.9
7/25/08 6:00 PM	0.05	0.1	656.7
7/25/08 7:00 PM	0.09	0.3	1022.7
7/25/08 8:00 PM	0.10	0.3	1081.7
7/25/08 9:00 PM	0.10	0.3	1081.7
7/25/08 10:00 PM	0.10	0.3	1055.2
7/25/08 11:00 PM	0.10	0.3	1022.5
7/26/08 12:00 AM	0.10	0.3	977.2
7/26/08 1:00 AM	0.09	0.3	951.5
7/26/08 2:00 AM	0.09	0.3	938.8
7/26/08 3:00 AM	0.09	0.3	907.3
7/26/08 4:00 AM	0.09	0.2	882.2
7/26/08 5:00 AM	0.09	0.2	863.7
7/26/08 6:00 AM	0.09	0.2	839.1
7/26/08 7:00 AM	0.08	0.2	814.8
7/26/08 8:00 AM	0.08	0.2	778.9
7/26/08 9:00 AM	0.08	0.2	772.9
7/26/08 10:00 AM	0.08	0.2	796.7
7/26/08 11:00 AM	0.08	0.2	814.8
7/26/08 12:00 PM	0.08	0.2	845.3
7/26/08 1:00 PM	0.09	0.2	869.9
7/26/08 2:00 PM	0.09	0.2	882.2
7/26/08 3:00 PM	0.09	0.2	888.5
7/26/08 4:00 PM	0.09	0.2	845.6
7/26/08 5:00 PM	0.08	0.2	1477.5
7/26/08 6:00 PM	0.16	0.6	2219.9
7/26/08 7:00 PM	0.17	0.6	2203.2
7/26/08 8:00 PM	0.16	0.6	2118.9
7/26/08 9:00 PM	0.16	0.6	2110.6
7/26/08 10:00 PM	0.16	0.6	2069.3
7/26/08 11:00 PM	0.16	0.6	2011.7
7/27/08 12:00 AM	0.15	0.6	1979.1
7/27/08 1:00 AM	0.15	0.5	1954.7
7/27/08 2:00 AM	0.15	0.5	1922.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/27/08 3:00 AM	0.15	0.5	1898.3
7/27/08 4:00 AM	0.15	0.5	1858.4
7/27/08 5:00 AM	0.14	0.5	1802.9
7/27/08 6:00 AM	0.14	0.5	1748.0
7/27/08 7:00 AM	0.14	0.5	1686.0
7/27/08 8:00 AM	0.14	0.5	1639.9
7/27/08 9:00 AM	0.13	0.5	1617.0
7/27/08 10:00 AM	0.13	0.4	1624.6
7/27/08 11:00 AM	0.13	0.5	1647.5
7/27/08 12:00 PM	0.14	0.5	1670.5
7/27/08 1:00 PM	0.14	0.5	2603.8
7/27/08 2:00 PM	0.22	1.0	3571.3
7/27/08 3:00 PM	0.23	1.0	3680.8
7/27/08 4:00 PM	0.23	1.0	3761.0
7/27/08 5:00 PM	0.23	1.1	3761.0
7/27/08 6:00 PM	0.23	1.0	3680.8
7/27/08 7:00 PM	0.23	1.0	3591.1
7/27/08 8:00 PM	0.23	1.0	3531.7
7/27/08 9:00 PM	0.22	1.0	3453.2
7/27/08 10:00 PM	0.22	0.9	3336.4
7/27/08 11:00 PM	0.21	0.9	3211.3
7/28/08 12:00 AM	0.21	0.9	3125.6
7/28/08 1:00 AM	0.21	0.9	3068.9
7/28/08 2:00 AM	0.20	0.8	3031.3
7/28/08 3:00 AM	0.20	0.8	3003.3
7/28/08 4:00 AM	0.20	0.8	2956.7
7/28/08 5:00 AM	0.20	0.8	2901.1
7/28/08 6:00 AM	0.19	0.8	2864.1
7/28/08 7:00 AM	0.19	0.8	2809.2
7/28/08 8:00 AM	0.19	0.8	2727.3
7/28/08 9:00 AM	0.19	0.7	2745.6
7/28/08 10:00 AM	0.19	0.8	2845.9
7/28/08 11:00 AM	0.20	0.8	3167.5
7/28/08 12:00 PM	0.22	1.0	3512.2
7/28/08 1:00 PM	0.23	1.0	3640.9
7/28/08 2:00 PM	0.23	1.0	3781.4
7/28/08 3:00 PM	0.24	1.1	3771.4
7/28/08 4:00 PM	0.23	1.0	3670.7
7/28/08 5:00 PM	0.23	1.0	3731.0
7/28/08 6:00 PM	0.24	1.1	3751.0
7/28/08 7:00 PM	0.23	1.0	3611.3
7/28/08 8:00 PM	0.22	1.0	3502.1
7/28/08 9:00 PM	0.22	1.0	3414.2
7/28/08 10:00 PM	0.22	0.9	3269.0
7/28/08 11:00 PM	0.21	0.9	3144.6
7/29/08 12:00 AM	0.21	0.9	3059.6
7/29/08 1:00 AM	0.20	0.8	2966.1
7/29/08 2:00 AM	0.20	0.8	2882.6
7/29/08 3:00 AM	0.19	0.8	2827.5
7/29/08 4:00 AM	0.19	0.8	2754.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/29/08 5:00 AM	0.19	0.8	2664.3
7/29/08 6:00 AM	0.18	0.7	2830.0
7/29/08 7:00 AM	0.20	0.8	3040.7
7/29/08 8:00 AM	0.20	0.8	3040.7
7/29/08 9:00 AM	0.20	0.8	3022.0
7/29/08 10:00 AM	0.20	0.8	3012.6
7/29/08 11:00 AM	0.20	0.8	3031.3
7/29/08 12:00 PM	0.20	0.8	2966.2
7/29/08 1:00 PM	0.20	0.8	2855.0
7/29/08 2:00 PM	0.19	0.8	2845.8
7/29/08 3:00 PM	0.19	0.8	2791.3
7/29/08 4:00 PM	0.19	0.8	2718.2
7/29/08 5:00 PM	0.19	0.8	2718.2
7/29/08 6:00 PM	0.19	0.8	2655.4
7/29/08 7:00 PM	0.18	0.7	2539.7
7/29/08 8:00 PM	0.18	0.7	2425.6
7/29/08 9:00 PM	0.17	0.7	2313.4
7/29/08 10:00 PM	0.17	0.6	2244.9
7/29/08 11:00 PM	0.17	0.6	2202.7
7/30/08 12:00 AM	0.16	0.6	2135.7
7/30/08 1:00 AM	0.16	0.6	2094.0
7/30/08 2:00 AM	0.16	0.6	2061.0
7/30/08 3:00 AM	0.16	0.6	2011.7
7/30/08 4:00 AM	0.15	0.6	1979.1
7/30/08 5:00 AM	0.15	0.5	1946.7
7/30/08 6:00 AM	0.15	0.5	1914.4
7/30/08 7:00 AM	0.15	0.5	1890.3
7/30/08 8:00 AM	0.15	0.5	1842.5
7/30/08 9:00 AM	0.14	0.5	1834.5
7/30/08 10:00 AM	0.15	0.5	1834.5
7/30/08 11:00 AM	0.14	0.5	1826.6
7/30/08 12:00 PM	0.15	0.5	1834.5
7/30/08 1:00 PM	0.14	0.5	1826.6
7/30/08 2:00 PM	0.14	0.5	1810.8
7/30/08 3:00 PM	0.14	0.5	1740.4
7/30/08 4:00 PM	0.14	0.5	1716.9
7/30/08 5:00 PM	0.14	0.5	1740.2
7/30/08 6:00 PM	0.14	0.5	1709.1
7/30/08 7:00 PM	0.14	0.5	1655.2
7/30/08 8:00 PM	0.13	0.5	1571.9
7/30/08 9:00 PM	0.13	0.4	1482.2
7/30/08 10:00 PM	0.12	0.4	1401.8
7/30/08 11:00 PM	0.12	0.4	1336.9
7/31/08 12:00 AM	0.12	0.4	1287.3
7/31/08 1:00 AM	0.11	0.3	1245.2
7/31/08 2:00 AM	0.11	0.3	1210.5
7/31/08 3:00 AM	0.11	0.3	1169.3
7/31/08 4:00 AM	0.11	0.3	1142.1
7/31/08 5:00 AM	0.11	0.3	1115.2
7/31/08 6:00 AM	0.10	0.3	1062.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
7/31/08 7:00 AM	0.10	0.3	996.6
7/31/08 8:00 AM	0.09	0.3	945.2
7/31/08 9:00 AM	0.09	0.3	932.4
7/31/08 10:00 AM	0.09	0.3	951.5
7/31/08 11:00 AM	0.09	0.3	964.2
7/31/08 12:00 PM	0.09	0.3	945.2
7/31/08 1:00 PM	0.09	0.3	919.8
7/31/08 2:00 PM	0.09	0.3	964.7
7/31/08 3:00 PM	0.10	0.3	1002.9
7/31/08 4:00 PM	0.10	0.3	964.3
7/31/08 5:00 PM	0.09	0.3	957.9
7/31/08 6:00 PM	0.09	0.3	945.3
7/31/08 7:00 PM	0.09	0.3	919.8
7/31/08 8:00 PM	0.09	0.3	882.6
7/31/08 9:00 PM	0.09	0.2	808.9
7/31/08 10:00 PM	0.08	0.2	755.2
7/31/08 11:00 PM	0.08	0.2	720.0
8/1/08 12:00 AM	0.08	0.2	685.5
8/1/08 1:00 AM	0.07	0.2	640.3
8/1/08 2:00 AM	0.07	0.2	607.0
8/1/08 3:00 AM	0.07	0.2	579.8
8/1/08 4:00 AM	0.07	0.2	547.7
8/1/08 5:00 AM	0.06	0.1	516.3
8/1/08 6:00 AM	0.06	0.1	475.4
8/1/08 7:00 AM	0.06	0.1	435.4
8/1/08 8:00 AM	0.05	0.1	401.5
8/1/08 9:00 AM	0.05	0.1	391.9
8/1/08 10:00 AM	0.05	0.1	396.6
8/1/08 11:00 AM	0.05	0.1	396.6
8/1/08 12:00 PM	0.05	0.1	401.4
8/1/08 1:00 PM	0.05	0.1	411.0
8/1/08 2:00 PM	0.05	0.1	425.5
8/1/08 3:00 PM	0.05	0.1	455.3
8/1/08 4:00 PM	0.06	0.1	436.1
8/1/08 5:00 PM	0.05	0.1	406.3
8/1/08 6:00 PM	0.05	0.1	411.0
8/1/08 7:00 PM	0.05	0.1	401.4
8/1/08 8:00 PM	0.05	0.1	368.9
8/1/08 9:00 PM	0.05	0.1	314.4
8/1/08 10:00 PM	0.04	0.1	275.5
8/1/08 11:00 PM	0.04	0.1	242.5
8/2/08 12:00 AM	0.04	0.1	218.5
8/2/08 1:00 AM	0.03	0.1	206.9
8/2/08 2:00 AM	0.03	0.1	188.2
8/2/08 3:00 AM	0.03	0.0	162.8
8/2/08 4:00 AM	0.03	0.0	142.0
8/2/08 5:00 AM	0.02	0.0	131.9
8/2/08 6:00 AM	0.02	0.0	122.3
8/2/08 7:00 AM	0.02	0.0	106.5
8/2/08 8:00 AM	0.02	0.0	91.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/2/08 9:00 AM	0.02	0.0	80.0
8/2/08 10:00 AM	0.02	0.0	94.9
8/2/08 11:00 AM	0.02	0.0	119.0
8/2/08 12:00 PM	0.02	0.0	107.0
8/2/08 1:00 PM	0.02	0.0	77.5
8/2/08 2:00 PM	0.02	0.0	80.4
8/2/08 3:00 PM	0.02	0.0	91.5
8/2/08 4:00 PM	0.02	0.0	74.9
8/2/08 5:00 PM	0.01	0.0	63.9
8/2/08 6:00 PM	0.02	0.0	61.4
8/2/08 7:00 PM	0.01	0.0	51.4
8/2/08 8:00 PM	0.01	0.0	40.0
8/2/08 9:00 PM	0.01	0.0	24.1
8/2/08 10:00 PM	0.01	0.0	8.6
8/2/08 11:00 PM	0.00	0.0	1.1
8/3/08 12:00 AM	0.00	0.0	0.0
8/3/08 1:00 AM	0.00	0.0	0.0
8/3/08 2:00 AM	0.00	0.0	0.0
8/3/08 3:00 AM	0.00	0.0	0.0
8/3/08 4:00 AM	-0.01	0.0	0.0
8/3/08 5:00 AM	-0.01	0.0	0.0
Data range not printed - WSEL below invert for entire range			
8/19/08 12:00 AM	-0.15	0.0	0.0
8/19/08 1:00 AM	-0.03	0.0	33.2
8/19/08 2:00 AM	0.02	0.0	102.5
8/19/08 3:00 AM	0.03	0.0	603.5
8/19/08 4:00 AM	0.10	0.3	1264.2
8/19/08 5:00 AM	0.12	0.4	2630.7
8/19/08 6:00 AM	0.24	1.1	5343.0
8/19/08 7:00 AM	0.35	1.9	12168.8
8/19/08 8:00 AM	0.65	4.8	20036.2
8/19/08 9:00 AM	0.77	6.3	26515.0
8/19/08 10:00 AM	0.94	8.4	35791.1
8/19/08 11:00 AM	1.18	11.4	42310.6
8/19/08 12:00 PM	1.26	12.1	43656.9
8/19/08 1:00 PM	1.27	12.2	43966.7
8/19/08 2:00 PM	1.28	12.2	43828.9
8/19/08 3:00 PM	1.26	12.1	43263.3
8/19/08 4:00 PM	1.24	11.9	42608.4
8/19/08 5:00 PM	1.22	11.7	41955.4
8/19/08 6:00 PM	1.19	11.6	41365.2
8/19/08 7:00 PM	1.18	11.4	40703.4
8/19/08 8:00 PM	1.15	11.2	39893.3
8/19/08 9:00 PM	1.12	11.0	39118.6
8/19/08 10:00 PM	1.10	10.8	38393.1
8/19/08 11:00 PM	1.08	10.6	37680.4
8/20/08 12:00 AM	1.05	10.4	36967.2
8/20/08 1:00 AM	1.03	10.2	36198.3
8/20/08 2:00 AM	1.01	9.9	35413.2
8/20/08 3:00 AM	0.98	9.7	34682.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/20/08 4:00 AM	0.96	9.5	32535.2
8/20/08 5:00 AM	0.95	8.5	30613.3
8/20/08 6:00 AM	0.94	8.5	32974.7
8/20/08 7:00 AM	1.00	9.8	35358.4
8/20/08 8:00 AM	0.99	9.8	34884.8
8/20/08 9:00 AM	0.97	9.6	34217.1
8/20/08 10:00 AM	0.95	9.4	32207.6
8/20/08 11:00 AM	0.94	8.5	30068.7
8/20/08 12:00 PM	0.92	8.2	29226.6
8/20/08 1:00 PM	0.91	8.0	28098.6
8/20/08 2:00 PM	0.88	7.6	26712.0
8/20/08 3:00 PM	0.85	7.2	25595.2
8/20/08 4:00 PM	0.83	7.0	24684.6
8/20/08 5:00 PM	0.81	6.7	24044.8
8/20/08 6:00 PM	0.80	6.6	23468.5
8/20/08 7:00 PM	0.78	6.4	22785.0
8/20/08 8:00 PM	0.77	6.3	22109.5
8/20/08 9:00 PM	0.75	6.0	21421.7
8/20/08 10:00 PM	0.74	5.9	20830.8
8/20/08 11:00 PM	0.72	5.7	20122.6
8/21/08 12:00 AM	0.70	5.5	19456.0
8/21/08 1:00 AM	0.69	5.3	19021.7
8/21/08 2:00 AM	0.68	5.2	18711.2
8/21/08 3:00 AM	0.68	5.2	19338.6
8/21/08 4:00 AM	0.71	5.6	19945.5
8/21/08 5:00 AM	0.71	5.5	19577.9
8/21/08 6:00 AM	0.70	5.4	19160.4
8/21/08 7:00 AM	0.69	5.3	18763.0
8/21/08 8:00 AM	0.68	5.2	18694.0
8/21/08 9:00 AM	0.68	5.2	18797.1
8/21/08 10:00 AM	0.68	5.2	20172.5
8/21/08 11:00 AM	0.75	6.0	22870.3
8/21/08 12:00 PM	0.81	6.7	24970.7
8/21/08 1:00 PM	0.84	7.2	25575.1
8/21/08 2:00 PM	0.83	7.1	25460.4
8/21/08 3:00 PM	0.84	7.1	25270.5
8/21/08 4:00 PM	0.83	6.9	24796.6
8/21/08 5:00 PM	0.82	6.8	24513.5
8/21/08 6:00 PM	0.81	6.8	24232.1
8/21/08 7:00 PM	0.80	6.7	23802.3
8/21/08 8:00 PM	0.79	6.5	23411.9
8/21/08 9:00 PM	0.79	6.5	23097.5
8/21/08 10:00 PM	0.78	6.4	23005.2
8/21/08 11:00 PM	0.78	6.4	22968.4
8/22/08 12:00 AM	0.78	6.4	22711.2
8/22/08 1:00 AM	0.77	6.3	22272.7
8/22/08 2:00 AM	0.76	6.1	21710.2
8/22/08 3:00 AM	0.74	6.0	21349.2
8/22/08 4:00 AM	0.74	5.9	21116.1
8/22/08 5:00 AM	0.73	5.8	20883.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/22/08 6:00 AM	0.73	5.8	20830.1
8/22/08 7:00 AM	0.73	5.8	20830.1
8/22/08 8:00 AM	0.73	5.8	20670.1
8/22/08 9:00 AM	0.72	5.7	20351.0
8/22/08 10:00 AM	0.72	5.6	19980.8
8/22/08 11:00 AM	0.71	5.5	19717.4
8/22/08 12:00 PM	0.70	5.5	19334.4
8/22/08 1:00 PM	0.69	5.3	18729.0
8/22/08 2:00 PM	0.67	5.1	18079.6
8/22/08 3:00 PM	0.66	4.9	17554.2
8/22/08 4:00 PM	0.65	4.8	17268.6
8/22/08 5:00 PM	0.64	4.8	17051.4
8/22/08 6:00 PM	0.64	4.7	16785.5
8/22/08 7:00 PM	0.63	4.6	21059.1
8/22/08 8:00 PM	0.84	7.1	35379.8
8/22/08 9:00 PM	1.33	12.6	46163.8
8/22/08 10:00 PM	1.39	13.1	46884.5
8/22/08 11:00 PM	1.38	13.0	46529.8
8/23/08 12:00 AM	1.37	12.9	46128.5
8/23/08 1:00 AM	1.35	12.7	45591.6
8/23/08 2:00 AM	1.33	12.6	45049.2
8/23/08 3:00 AM	1.31	12.4	44589.9
8/23/08 4:00 AM	1.29	12.3	43965.0
8/23/08 5:00 AM	1.26	12.1	43391.7
8/23/08 6:00 AM	1.25	12.0	42925.7
8/23/08 7:00 AM	1.23	11.8	42467.7
8/23/08 8:00 AM	1.22	11.8	42075.5
8/23/08 9:00 AM	1.20	11.6	41728.4
8/23/08 10:00 AM	1.19	11.6	41181.4
8/23/08 11:00 AM	1.16	11.3	40406.7
8/23/08 12:00 PM	1.14	11.1	39933.0
8/23/08 1:00 PM	1.13	11.1	40342.5
8/23/08 2:00 PM	1.17	11.4	40139.6
8/23/08 3:00 PM	1.12	10.9	38394.7
8/23/08 4:00 PM	1.06	10.4	37667.6
8/23/08 5:00 PM	1.07	10.5	37907.8
8/23/08 6:00 PM	1.07	10.5	37398.2
8/23/08 7:00 PM	1.04	10.3	36736.9
8/23/08 8:00 PM	1.03	10.2	36170.8
8/23/08 9:00 PM	1.01	9.9	35626.9
8/23/08 10:00 PM	1.00	9.8	35157.9
8/23/08 11:00 PM	0.98	9.7	34684.3
8/24/08 12:00 AM	0.97	9.6	34276.2
8/24/08 1:00 AM	0.96	9.5	32327.5
8/24/08 2:00 AM	0.94	8.5	30270.0
8/24/08 3:00 AM	0.93	8.3	29686.1
8/24/08 4:00 AM	0.92	8.2	29126.5
8/24/08 5:00 AM	0.91	8.0	28569.9
8/24/08 6:00 AM	0.90	7.9	28076.4
8/24/08 7:00 AM	0.89	7.7	27429.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/24/08 8:00 AM	0.87	7.5	26402.4
8/24/08 9:00 AM	0.84	7.2	25765.9
8/24/08 10:00 AM	0.84	7.2	25613.2
8/24/08 11:00 AM	0.84	7.1	25213.5
8/24/08 12:00 PM	0.82	6.9	24947.6
8/24/08 1:00 PM	0.82	6.9	24966.5
8/24/08 2:00 PM	0.83	6.9	24740.1
8/24/08 3:00 PM	0.81	6.8	24607.8
8/24/08 4:00 PM	0.82	6.9	24420.2
8/24/08 5:00 PM	0.81	6.7	23122.7
8/24/08 6:00 PM	0.76	6.2	23122.7
8/24/08 7:00 PM	0.81	6.7	24100.7
8/24/08 8:00 PM	0.81	6.7	23654.4
8/24/08 9:00 PM	0.79	6.4	23097.4
8/24/08 10:00 PM	0.78	6.4	22675.0
8/24/08 11:00 PM	0.77	6.2	22235.8
8/25/08 12:00 AM	0.76	6.1	21872.8
8/25/08 1:00 AM	0.75	6.0	21457.3
8/25/08 2:00 AM	0.74	5.9	21116.1
8/25/08 3:00 AM	0.73	5.8	20848.0
8/25/08 4:00 AM	0.73	5.8	20563.6
8/25/08 5:00 AM	0.72	5.7	20244.9
8/25/08 6:00 AM	0.71	5.6	19980.6
8/25/08 7:00 AM	0.71	5.5	19682.6
8/25/08 8:00 AM	0.70	5.4	18818.6
8/25/08 9:00 AM	0.67	5.0	18283.0
8/25/08 10:00 AM	0.67	5.1	18317.1
8/25/08 11:00 AM	0.67	5.1	18299.9
8/25/08 12:00 PM	0.67	5.1	18045.6
8/25/08 1:00 PM	0.66	4.9	19002.1
8/25/08 2:00 PM	0.72	5.6	19154.4
8/25/08 3:00 PM	0.66	5.0	17059.8
8/25/08 4:00 PM	0.62	4.5	16077.1
8/25/08 5:00 PM	0.61	4.5	16589.7
8/25/08 6:00 PM	0.64	4.8	17218.3
8/25/08 7:00 PM	0.65	4.8	17843.8
8/25/08 8:00 PM	0.67	5.1	17961.3
8/25/08 9:00 PM	0.65	4.9	16938.0
8/25/08 10:00 PM	0.62	4.5	16126.7
8/25/08 11:00 PM	0.61	4.4	15783.8
8/26/08 12:00 AM	0.60	4.4	15686.3
8/26/08 1:00 AM	0.61	4.4	15540.8
8/26/08 2:00 AM	0.60	4.3	15282.7
8/26/08 3:00 AM	0.59	4.2	15122.2
8/26/08 4:00 AM	0.59	4.2	14978.3
8/26/08 5:00 AM	0.58	4.1	14818.9
8/26/08 6:00 AM	0.58	4.1	14675.9
8/26/08 7:00 AM	0.58	4.1	14407.5
8/26/08 8:00 AM	0.57	3.9	13752.6
8/26/08 9:00 AM	0.54	3.7	13441.1

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/26/08 10:00 AM	0.55	3.8	13688.2
8/26/08 11:00 AM	0.56	3.8	13999.6
8/26/08 12:00 PM	0.57	3.9	13691.3
8/26/08 1:00 PM	0.54	3.7	13271.9
8/26/08 2:00 PM	0.54	3.7	13165.1
8/26/08 3:00 PM	0.53	3.6	12875.2
8/26/08 4:00 PM	0.53	3.6	12114.7
8/26/08 5:00 PM	0.49	3.2	12175.4
8/26/08 6:00 PM	0.53	3.6	12890.2
8/26/08 7:00 PM	0.53	3.6	13398.1
8/26/08 8:00 PM	0.56	3.9	13504.7
8/26/08 9:00 PM	0.54	3.6	12875.6
8/26/08 10:00 PM	0.52	3.5	12452.9
8/26/08 11:00 PM	0.51	3.4	12287.5
8/27/08 12:00 AM	0.52	3.4	12138.8
8/27/08 1:00 AM	0.50	3.3	11841.9
8/27/08 2:00 AM	0.50	3.3	11621.2
8/27/08 3:00 AM	0.49	3.2	11387.2
8/27/08 4:00 AM	0.49	3.1	11241.6
8/27/08 5:00 AM	0.48	3.1	11169.1
8/27/08 6:00 AM	0.48	3.1	11039.2
8/27/08 7:00 AM	0.48	3.0	10752.4
8/27/08 8:00 AM	0.46	2.9	10035.4
8/27/08 9:00 AM	0.43	2.6	9712.0
8/27/08 10:00 AM	0.44	2.8	9822.2
8/27/08 11:00 AM	0.44	2.7	10288.4
8/27/08 12:00 PM	0.47	3.0	10191.8
8/27/08 1:00 PM	0.43	2.7	9684.0
8/27/08 2:00 PM	0.44	2.7	9697.8
8/27/08 3:00 PM	0.44	2.7	9601.0
8/27/08 4:00 PM	0.44	2.7	9355.6
8/27/08 5:00 PM	0.42	2.5	9259.4
8/27/08 6:00 PM	0.43	2.6	10208.8
8/27/08 7:00 PM	0.48	3.1	10710.1
8/27/08 8:00 PM	0.46	2.9	9855.6
8/27/08 9:00 PM	0.43	2.6	9409.2
8/27/08 10:00 PM	0.43	2.7	9246.9
8/27/08 11:00 PM	0.42	2.5	8827.3
8/28/08 12:00 AM	0.41	2.4	8653.6
8/28/08 1:00 AM	0.41	2.4	8363.7
8/28/08 2:00 AM	0.39	2.3	8114.0
8/28/08 3:00 AM	0.39	2.3	8049.1
8/28/08 4:00 AM	0.39	2.2	8010.1
8/28/08 5:00 AM	0.39	2.2	7958.4
8/28/08 6:00 AM	0.38	2.2	7765.5
8/28/08 7:00 AM	0.37	2.1	7422.4
8/28/08 8:00 AM	0.36	2.0	6659.4
8/28/08 9:00 AM	0.32	1.7	6572.2
8/28/08 10:00 AM	0.35	2.0	6958.9
8/28/08 11:00 AM	0.35	1.9	6593.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/28/08 12:00 PM	0.33	1.8	6301.7
8/28/08 1:00 PM	0.33	1.8	6337.7
8/28/08 2:00 PM	0.33	1.8	6266.2
8/28/08 3:00 PM	0.32	1.7	5959.0
8/28/08 4:00 PM	0.31	1.6	5621.2
8/28/08 5:00 PM	0.30	1.5	5773.5
8/28/08 6:00 PM	0.32	1.7	6425.1
8/28/08 7:00 PM	0.35	1.9	6847.8
8/28/08 8:00 PM	0.35	1.9	6569.7
8/28/08 9:00 PM	0.33	1.7	6053.0
8/28/08 10:00 PM	0.31	1.6	5829.3
8/28/08 11:00 PM	0.31	1.6	5782.6
8/29/08 12:00 AM	0.31	1.6	5655.7
8/29/08 1:00 AM	0.30	1.5	5505.9
8/29/08 2:00 AM	0.30	1.5	5426.1
8/29/08 3:00 AM	0.30	1.5	5301.4
8/29/08 4:00 AM	0.29	1.5	5099.8
8/29/08 5:00 AM	0.28	1.4	4955.0
8/29/08 6:00 AM	0.28	1.4	4867.1
8/29/08 7:00 AM	0.27	1.3	4714.2
8/29/08 8:00 AM	0.27	1.3	4240.0
8/29/08 9:00 AM	0.24	1.1	4006.5
8/29/08 10:00 AM	0.25	1.2	4191.9
8/29/08 11:00 AM	0.25	1.2	4171.1
8/29/08 12:00 PM	0.25	1.1	4160.7
8/29/08 1:00 PM	0.25	1.2	4067.8
8/29/08 2:00 PM	0.24	1.1	3762.4
8/29/08 3:00 PM	0.23	1.0	3581.1
8/29/08 4:00 PM	0.23	1.0	3824.2
8/29/08 5:00 PM	0.25	1.1	4752.3
8/29/08 6:00 PM	0.30	1.5	4951.9
8/29/08 7:00 PM	0.26	1.2	4277.2
8/29/08 8:00 PM	0.25	1.1	3954.7
8/29/08 9:00 PM	0.24	1.1	3691.4
8/29/08 10:00 PM	0.23	1.0	3531.7
8/29/08 11:00 PM	0.22	1.0	3462.9
8/30/08 12:00 AM	0.22	1.0	3336.6
8/30/08 1:00 AM	0.21	0.9	3220.8
8/30/08 2:00 AM	0.21	0.9	3163.6
8/30/08 3:00 AM	0.21	0.9	3097.3
8/30/08 4:00 AM	0.20	0.8	3040.7
8/30/08 5:00 AM	0.20	0.8	2892.7
8/30/08 6:00 AM	0.19	0.8	2827.7
8/30/08 7:00 AM	0.20	0.8	2791.5
8/30/08 8:00 AM	0.19	0.7	2298.7
8/30/08 9:00 AM	0.15	0.5	1963.1
8/30/08 10:00 AM	0.15	0.6	2248.8
8/30/08 11:00 AM	0.18	0.7	2434.2
8/30/08 12:00 PM	0.17	0.7	2632.0
8/30/08 1:00 PM	0.19	0.8	4098.6

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
8/30/08 2:00 PM	0.29	1.5	3615.1
8/30/08 3:00 PM	0.15	0.5	2253.9
8/30/08 4:00 PM	0.18	0.7	2557.2
8/30/08 5:00 PM	0.18	0.7	2460.5
8/30/08 6:00 PM	0.17	0.7	2460.5
8/30/08 7:00 PM	0.18	0.7	2693.1
8/30/08 8:00 PM	0.19	0.8	2864.1
8/30/08 9:00 PM	0.19	0.8	2675.2
8/30/08 10:00 PM	0.18	0.7	2566.3
8/30/08 11:00 PM	0.18	0.7	2566.3
8/31/08 12:00 AM	0.18	0.7	2521.8
8/31/08 1:00 AM	0.18	0.7	2539.4
8/31/08 2:00 AM	0.18	0.7	2417.6
8/31/08 3:00 AM	0.17	0.6	2321.7
8/31/08 4:00 AM	0.17	0.6	2434.7
8/31/08 5:00 AM	0.18	0.7	2521.8
8/31/08 6:00 AM	0.18	0.7	2357.8
8/31/08 7:00 AM	0.16	0.6	2659.4
8/31/08 8:00 AM	0.21	0.9	3087.8
8/31/08 9:00 AM	0.20	0.8	2474.9
8/31/08 10:00 AM	0.15	0.5	2372.6
8/31/08 11:00 AM	0.19	0.8	2809.2
8/31/08 12:00 PM	0.19	0.8	2603.2
8/31/08 1:00 PM	0.18	0.7	2416.7
8/31/08 2:00 PM	0.17	0.7	2706.3
8/31/08 3:00 PM	0.20	0.8	4344.4
8/31/08 4:00 PM	0.31	1.6	5783.0
8/31/08 5:00 PM	0.32	1.6	4921.5
8/31/08 6:00 PM	0.24	1.1	5550.7
8/31/08 7:00 PM	0.36	2.0	6286.1
8/31/08 8:00 PM	0.30	1.5	5483.1
8/31/08 9:00 PM	0.30	1.5	5471.8
8/31/08 10:00 PM	0.30	1.5	5448.9
8/31/08 11:00 PM	0.30	1.5	5426.2
9/1/08 12:00 AM	0.30	1.5	5256.4
9/1/08 1:00 AM	0.29	1.4	5143.9
9/1/08 2:00 AM	0.29	1.4	5110.4
9/1/08 3:00 AM	0.29	1.4	5099.2
9/1/08 4:00 AM	0.29	1.4	4999.5
9/1/08 5:00 AM	0.28	1.4	4910.9
9/1/08 6:00 AM	0.28	1.4	4899.9
9/1/08 7:00 AM	0.28	1.4	4758.0
9/1/08 8:00 AM	0.27	1.3	4109.6
9/1/08 9:00 AM	0.23	1.0	3897.0
9/1/08 10:00 AM	0.25	1.2	4191.9
9/1/08 11:00 AM	0.25	1.2	4016.6
9/1/08 12:00 PM	0.24	1.1	4143.0
9/1/08 1:00 PM	0.26	1.2	4092.4
9/1/08 2:00 PM	0.23	1.0	3457.5
9/1/08 3:00 PM	0.21	0.9	3725.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/1/08 4:00 PM	0.26	1.2	4110.1
9/1/08 5:00 PM	0.24	1.1	4477.9
9/1/08 6:00 PM	0.28	1.4	4706.9
9/1/08 7:00 PM	0.26	1.2	4651.6
9/1/08 8:00 PM	0.28	1.4	4619.9
9/1/08 9:00 PM	0.26	1.2	4254.9
9/1/08 10:00 PM	0.25	1.2	4006.8
9/1/08 11:00 PM	0.24	1.1	3781.2
9/2/08 12:00 AM	0.23	1.0	3680.8
9/2/08 1:00 AM	0.23	1.0	3571.3
9/2/08 2:00 AM	0.22	1.0	3433.9
9/2/08 3:00 AM	0.22	0.9	3297.7
9/2/08 4:00 AM	0.21	0.9	3182.8
9/2/08 5:00 AM	0.21	0.9	3116.1
9/2/08 6:00 AM	0.21	0.9	3097.2
9/2/08 7:00 AM	0.20	0.9	2994.3
9/2/08 8:00 AM	0.20	0.8	2489.7
9/2/08 9:00 AM	0.16	0.6	2169.8
9/2/08 10:00 AM	0.17	0.6	2444.9
9/2/08 11:00 AM	0.18	0.7	2427.9
9/2/08 12:00 PM	0.17	0.6	2365.9
9/2/08 1:00 PM	0.18	0.7	2443.0
9/2/08 2:00 PM	0.17	0.7	2246.5
9/2/08 3:00 PM	0.16	0.6	2255.2
9/2/08 4:00 PM	0.17	0.7	2594.9
9/2/08 5:00 PM	0.19	0.8	2665.0
9/2/08 6:00 PM	0.18	0.7	3005.6
9/2/08 7:00 PM	0.22	1.0	3298.9
9/2/08 8:00 PM	0.21	0.9	2832.8
9/2/08 9:00 PM	0.18	0.7	2392.0
9/2/08 10:00 PM	0.17	0.6	2287.6
9/2/08 11:00 PM	0.17	0.6	2279.1
9/3/08 12:00 AM	0.17	0.6	2161.1
9/3/08 1:00 AM	0.16	0.6	2069.2
9/3/08 2:00 AM	0.16	0.6	2077.5
9/3/08 3:00 AM	0.16	0.6	2028.5
9/3/08 4:00 AM	0.15	0.5	1930.5
9/3/08 5:00 AM	0.15	0.5	1930.5
9/3/08 6:00 AM	0.15	0.5	1922.5
9/3/08 7:00 AM	0.15	0.5	1803.5
9/3/08 8:00 AM	0.14	0.5	1432.8
9/3/08 9:00 AM	0.11	0.3	1348.9
9/3/08 10:00 AM	0.13	0.4	1376.3
9/3/08 11:00 AM	0.11	0.3	1231.3
9/3/08 12:00 PM	0.11	0.3	1259.1
9/3/08 1:00 PM	0.11	0.3	1217.6
9/3/08 2:00 PM	0.11	0.3	1142.3
9/3/08 3:00 PM	0.10	0.3	1467.5
9/3/08 4:00 PM	0.14	0.5	1480.9
9/3/08 5:00 PM	0.11	0.3	1868.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/3/08 6:00 PM	0.18	0.7	2436.0
9/3/08 7:00 PM	0.17	0.6	2153.3
9/3/08 8:00 PM	0.16	0.6	1853.4
9/3/08 9:00 PM	0.14	0.5	1557.9
9/3/08 10:00 PM	0.12	0.4	1416.2
9/3/08 11:00 PM	0.12	0.4	1401.6
9/4/08 12:00 AM	0.12	0.4	1394.4
9/4/08 1:00 AM	0.12	0.4	1315.9
9/4/08 2:00 AM	0.11	0.3	1210.8
9/4/08 3:00 AM	0.11	0.3	1183.0
9/4/08 4:00 AM	0.11	0.3	1183.0
9/4/08 5:00 AM	0.11	0.3	1183.0
9/4/08 6:00 AM	0.11	0.3	1162.7
9/4/08 7:00 AM	0.10	0.3	1298.3
9/4/08 8:00 AM	0.13	0.4	1008.5
9/4/08 9:00 AM	0.06	0.2	642.8
9/4/08 10:00 AM	0.08	0.2	680.6
9/4/08 11:00 AM	0.07	0.2	634.7
9/4/08 12:00 PM	0.07	0.2	662.7
9/4/08 1:00 PM	0.07	0.2	775.0
9/4/08 2:00 PM	0.09	0.2	803.8
9/4/08 3:00 PM	0.08	0.2	785.3
9/4/08 4:00 PM	0.09	0.2	1049.1
9/4/08 5:00 PM	0.11	0.3	1359.5
9/4/08 6:00 PM	0.12	0.4	1423.5
9/4/08 7:00 PM	0.12	0.4	1241.1
9/4/08 8:00 PM	0.10	0.3	1055.4
9/4/08 9:00 PM	0.10	0.3	983.7
9/4/08 10:00 PM	0.09	0.3	859.2
9/4/08 11:00 PM	0.08	0.2	809.1
9/5/08 12:00 AM	0.09	0.2	785.6
9/5/08 1:00 AM	0.08	0.2	691.3
9/5/08 2:00 AM	0.07	0.2	651.4
9/5/08 3:00 AM	0.07	0.2	651.4
9/5/08 4:00 AM	0.07	0.2	714.8
9/5/08 5:00 AM	0.08	0.2	665.3
9/5/08 6:00 AM	0.07	0.2	521.9
9/5/08 7:00 AM	0.06	0.1	500.8
9/5/08 8:00 AM	0.06	0.1	495.8
9/5/08 9:00 AM	0.06	0.1	381.2
9/5/08 10:00 AM	0.04	0.1	292.4
9/5/08 11:00 AM	0.04	0.1	251.5
9/5/08 12:00 PM	0.03	0.1	226.5
9/5/08 1:00 PM	0.04	0.1	303.0
9/5/08 2:00 PM	0.05	0.1	323.8
9/5/08 3:00 PM	0.04	0.1	531.3
9/5/08 4:00 PM	0.08	0.2	479.7
9/5/08 5:00 PM	0.03	0.1	184.3
9/5/08 6:00 PM	0.03	0.1	595.5
9/5/08 7:00 PM	0.10	0.3	1082.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/5/08 8:00 PM	0.11	0.3	791.6
9/5/08 9:00 PM	0.05	0.1	476.3
9/5/08 10:00 PM	0.06	0.1	511.1
9/5/08 11:00 PM	0.06	0.1	395.7
9/6/08 12:00 AM	0.04	0.1	267.6
9/6/08 1:00 AM	0.04	0.1	218.7
9/6/08 2:00 AM	0.03	0.1	191.9
9/6/08 3:00 AM	0.03	0.1	207.5
9/6/08 4:00 AM	0.04	0.1	189.8
9/6/08 5:00 AM	0.03	0.0	152.2
9/6/08 6:00 AM	0.03	0.0	155.7
9/6/08 7:00 AM	0.03	0.0	106.7
9/6/08 8:00 AM	0.01	0.0	30.7
9/6/08 9:00 AM	-0.06	0.0	0.0
9/6/08 10:00 AM	0.00	0.0	14.6
9/6/08 11:00 AM	0.01	0.0	71.0
9/6/08 12:00 PM	0.02	0.0	129.0
9/6/08 1:00 PM	0.03	0.0	98.3
9/6/08 2:00 PM	0.01	0.0	34.8
9/6/08 3:00 PM	0.01	0.0	15.0
9/6/08 4:00 PM	0.00	0.0	36.5
9/6/08 5:00 PM	0.01	0.0	77.8
9/6/08 6:00 PM	0.02	0.0	141.2
9/6/08 7:00 PM	0.03	0.1	846.2
9/6/08 8:00 PM	0.13	0.4	938.7
9/6/08 9:00 PM	0.05	0.1	249.2
9/6/08 10:00 PM	0.02	0.0	115.9
9/6/08 11:00 PM	0.02	0.0	125.9
9/7/08 12:00 AM	0.03	0.0	85.3
9/7/08 1:00 AM	0.01	0.0	40.8
9/7/08 2:00 AM	0.01	0.0	34.0
9/7/08 3:00 AM	0.00	0.0	22.6
9/7/08 4:00 AM	0.01	0.0	37.7
9/7/08 5:00 AM	0.01	0.0	39.8
9/7/08 6:00 AM	0.01	0.0	35.5
9/7/08 7:00 AM	0.01	0.0	16.7
9/7/08 8:00 AM	0.00	0.0	0.0
9/7/08 9:00 AM	-0.06	0.0	0.0
9/7/08 10:00 AM	-0.02	0.0	0.0
9/7/08 11:00 AM	-0.01	0.0	0.0
9/7/08 12:00 PM	-0.02	0.0	0.0
9/7/08 1:00 PM	-0.02	0.0	0.0
9/7/08 2:00 PM	-0.01	0.0	0.0
9/7/08 3:00 PM	-0.03	0.0	0.0
9/7/08 4:00 PM	-0.01	0.0	0.0
9/7/08 5:00 PM	-0.02	0.0	30.7
9/7/08 6:00 PM	0.01	0.0	106.7
9/7/08 7:00 PM	0.03	0.0	374.1
9/7/08 8:00 PM	0.07	0.2	326.2
9/7/08 9:00 PM	0.01	0.0	28.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/7/08 10:00 PM	0.00	0.0	0.4
9/7/08 11:00 PM	0.00	0.0	0.0
9/8/08 12:00 AM	0.00	0.0	0.0
9/8/08 1:00 AM	-0.01	0.0	0.0
9/8/08 2:00 AM	-0.01	0.0	0.0
9/8/08 3:00 AM	-0.01	0.0	0.0
9/8/08 4:00 AM	-0.01	0.0	0.0
9/8/08 5:00 AM	-0.02	0.0	0.0
9/8/08 6:00 AM	-0.02	0.0	0.0
9/8/08 7:00 AM	-0.02	0.0	0.0
9/8/08 8:00 AM	-0.03	0.0	0.0
9/8/08 9:00 AM	-0.07	0.0	0.0
9/8/08 10:00 AM	-0.06	0.0	0.0
9/8/08 11:00 AM	-0.08	0.0	0.0
9/8/08 12:00 PM	-0.03	0.0	0.0
9/8/08 1:00 PM	-0.04	0.0	0.0
9/8/08 2:00 PM	-0.04	0.0	0.0
9/8/08 3:00 PM	-0.04	0.0	325.7
9/8/08 4:00 PM	0.07	0.2	325.7
9/8/08 5:00 PM	-0.12	0.0	25.7
9/8/08 6:00 PM	0.01	0.0	1583.7
9/8/08 7:00 PM	0.21	0.9	1803.2
9/8/08 8:00 PM	0.06	0.1	245.2
9/8/08 9:00 PM	0.00	0.0	0.0
9/8/08 10:00 PM	-0.02	0.0	0.0
9/8/08 11:00 PM	-0.03	0.0	0.0
9/9/08 12:00 AM	-0.04	0.0	0.0
9/9/08 1:00 AM	-0.03	0.0	0.0
9/9/08 2:00 AM	-0.03	0.0	0.0
9/9/08 3:00 AM	-0.04	0.0	0.0
9/9/08 4:00 AM	-0.05	0.0	0.0
9/9/08 5:00 AM	-0.04	0.0	0.0
9/9/08 6:00 AM	-0.04	0.0	0.0
9/9/08 7:00 AM	-0.04	0.0	0.0
9/9/08 8:00 AM	-0.04	0.0	0.0
9/9/08 9:00 AM	-0.06	0.0	0.0
9/9/08 10:00 AM	-0.08	0.0	0.0
9/9/08 11:00 AM	-0.07	0.0	0.0
9/9/08 12:00 PM	-0.09	0.0	0.0
9/9/08 1:00 PM	-0.01	0.0	0.0
9/9/08 2:00 PM	-0.08	0.0	0.0
9/9/08 3:00 PM	-0.09	0.0	383.4
9/9/08 4:00 PM	0.08	0.2	383.4
9/9/08 5:00 PM	0.00	0.0	601.8
9/9/08 6:00 PM	0.11	0.3	601.8
9/9/08 7:00 PM	-0.01	0.0	0.0
9/9/08 8:00 PM	-0.04	0.0	0.0
9/9/08 9:00 PM	-0.05	0.0	47.2
9/9/08 10:00 PM	0.02	0.0	63.9
9/9/08 11:00 PM	0.01	0.0	19.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/10/08 12:00 AM	0.00	0.0	3.2
9/10/08 1:00 AM	-0.01	0.0	0.0
9/10/08 2:00 AM	-0.02	0.0	0.0
9/10/08 3:00 AM	-0.02	0.0	14.6
9/10/08 4:00 AM	0.01	0.0	1210.0
9/10/08 5:00 AM	0.17	0.7	2246.5
9/10/08 6:00 AM	0.16	0.6	4768.1
9/10/08 7:00 AM	0.37	2.1	10368.2
9/10/08 8:00 AM	0.54	3.7	13302.5
9/10/08 9:00 AM	0.54	3.7	12623.9
9/10/08 10:00 AM	0.50	3.3	12153.8
9/10/08 11:00 AM	0.52	3.4	12272.7
9/10/08 12:00 PM	0.51	3.4	12079.0
9/10/08 1:00 PM	0.51	3.3	12138.7
9/10/08 2:00 PM	0.51	3.4	12437.5
9/10/08 3:00 PM	0.52	3.5	12999.0
9/10/08 4:00 PM	0.55	3.7	13241.6
9/10/08 5:00 PM	0.54	3.6	13012.0
9/10/08 6:00 PM	0.53	3.6	12951.0
9/10/08 7:00 PM	0.53	3.6	12604.2
9/10/08 8:00 PM	0.51	3.4	12094.1
9/10/08 9:00 PM	0.50	3.3	11812.4
9/10/08 10:00 PM	0.50	3.3	11359.7
9/10/08 11:00 PM	0.48	3.1	10668.0
9/11/08 12:00 AM	0.46	2.9	10032.4
9/11/08 1:00 AM	0.44	2.7	9533.0
9/11/08 2:00 AM	0.43	2.6	9354.2
9/11/08 3:00 AM	0.43	2.6	9327.0
9/11/08 4:00 AM	0.43	2.6	9245.3
9/11/08 5:00 AM	0.42	2.6	9136.8
9/11/08 6:00 AM	0.42	2.5	9191.3
9/11/08 7:00 AM	0.43	2.6	8897.5
9/11/08 8:00 AM	0.40	2.4	8065.4
9/11/08 9:00 AM	0.38	2.1	7460.2
9/11/08 10:00 AM	0.36	2.0	6755.8
9/11/08 11:00 AM	0.33	1.7	6206.3
9/11/08 12:00 PM	0.32	1.7	6583.5
9/11/08 1:00 PM	0.35	1.9	6121.0
9/11/08 2:00 PM	0.29	1.5	5233.6
9/11/08 3:00 PM	0.29	1.5	6046.8
9/11/08 4:00 PM	0.35	1.9	6798.7
9/11/08 5:00 PM	0.34	1.9	7563.1
9/11/08 6:00 PM	0.40	2.3	9064.0
9/11/08 7:00 PM	0.44	2.7	9560.3
9/11/08 8:00 PM	0.43	2.6	8702.3
9/11/08 9:00 PM	0.39	2.2	7753.8
9/11/08 10:00 PM	0.37	2.1	7283.7
9/11/08 11:00 PM	0.36	2.0	6824.8
9/12/08 12:00 AM	0.34	1.8	6627.6
9/12/08 1:00 AM	0.34	1.9	6579.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/12/08 2:00 AM	0.34	1.8	6255.2
9/12/08 3:00 AM	0.32	1.7	5670.8
9/12/08 4:00 AM	0.29	1.5	5211.4
9/12/08 5:00 AM	0.29	1.4	5132.7
9/12/08 6:00 AM	0.29	1.4	5370.8
9/12/08 7:00 AM	0.30	1.6	5326.2
9/12/08 8:00 AM	0.28	1.4	3143.0
9/12/08 9:00 AM	0.11	0.3	1898.6
9/12/08 10:00 AM	0.18	0.7	3224.2
9/12/08 11:00 AM	0.24	1.1	3471.0
9/12/08 12:00 PM	0.20	0.8	2751.2
9/12/08 1:00 PM	0.18	0.7	2933.3
9/12/08 2:00 PM	0.22	1.0	2942.0
9/12/08 3:00 PM	0.18	0.7	3326.1
9/12/08 4:00 PM	0.25	1.2	6172.5
9/12/08 5:00 PM	0.39	2.3	7494.3
9/12/08 6:00 PM	0.35	1.9	6921.9
9/12/08 7:00 PM	0.35	1.9	6787.5
9/12/08 8:00 PM	0.34	1.8	5431.8
9/12/08 9:00 PM	0.26	1.2	4403.0
9/12/08 10:00 PM	0.26	1.3	4530.6
9/12/08 11:00 PM	0.27	1.3	4424.4
9/13/08 12:00 AM	0.26	1.2	4254.8
9/13/08 1:00 AM	0.25	1.2	4057.9
9/13/08 2:00 AM	0.24	1.1	3712.3
9/13/08 3:00 AM	0.22	1.0	3443.6
9/13/08 4:00 AM	0.22	0.9	3326.6
9/13/08 5:00 AM	0.21	0.9	3211.5
9/13/08 6:00 AM	0.21	0.9	3106.7
9/13/08 7:00 AM	0.20	0.9	2893.7
9/13/08 8:00 AM	0.19	0.8	1513.9
9/13/08 9:00 AM	0.04	0.1	956.4
9/13/08 10:00 AM	0.13	0.4	1497.9
9/13/08 11:00 AM	0.12	0.4	1323.4
9/13/08 12:00 PM	0.11	0.3	1323.4
9/13/08 1:00 PM	0.12	0.4	1445.5
9/13/08 2:00 PM	0.13	0.4	1128.2
9/13/08 3:00 PM	0.08	0.2	1352.7
9/13/08 4:00 PM	0.15	0.5	1272.8
9/13/08 5:00 PM	0.07	0.2	1685.3
9/13/08 6:00 PM	0.19	0.8	2483.1
9/13/08 7:00 PM	0.16	0.6	5061.1
9/13/08 8:00 PM	0.38	2.2	6376.8
9/13/08 9:00 PM	0.28	1.3	4168.1
9/13/08 10:00 PM	0.22	1.0	3262.0
9/13/08 11:00 PM	0.20	0.8	2794.0
9/14/08 12:00 AM	0.18	0.7	2367.5
9/14/08 1:00 AM	0.16	0.6	2005.7
9/14/08 2:00 AM	0.15	0.5	1818.7
9/14/08 3:00 AM	0.14	0.5	1672.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/14/08 4:00 AM	0.13	0.4	1549.0
9/14/08 5:00 AM	0.13	0.4	1602.1
9/14/08 6:00 AM	0.14	0.5	1602.1
9/14/08 7:00 AM	0.13	0.4	1468.1
9/14/08 8:00 AM	0.12	0.4	693.5
9/14/08 9:00 AM	-0.05	0.0	66.0
9/14/08 10:00 AM	0.02	0.0	207.9
9/14/08 11:00 AM	0.04	0.1	473.2
9/14/08 12:00 PM	0.07	0.2	651.4
9/14/08 1:00 PM	0.07	0.2	437.2
9/14/08 2:00 PM	0.04	0.1	140.5
9/14/08 3:00 PM	0.01	0.0	480.1
9/14/08 4:00 PM	0.09	0.3	1121.6
9/14/08 5:00 PM	0.12	0.4	1387.5
9/14/08 6:00 PM	0.12	0.4	6858.9
9/14/08 7:00 PM	0.51	3.4	8542.3
9/14/08 8:00 PM	0.27	1.3	4617.9
9/14/08 9:00 PM	0.26	1.2	3982.7
9/14/08 10:00 PM	0.22	1.0	3376.4
9/14/08 11:00 PM	0.21	0.9	3268.9
9/15/08 12:00 AM	0.22	0.9	3202.4
9/15/08 1:00 AM	0.20	0.9	3050.1
9/15/08 2:00 AM	0.20	0.8	2901.8
9/15/08 3:00 AM	0.19	0.8	2727.4
9/15/08 4:00 AM	0.19	0.7	2885.2
9/15/08 5:00 AM	0.21	0.9	3013.0
9/15/08 6:00 AM	0.20	0.8	2901.1
9/15/08 7:00 AM	0.19	0.8	2764.3
9/15/08 8:00 AM	0.19	0.7	1328.7
9/15/08 9:00 AM	0.00	0.0	187.7
9/15/08 10:00 AM	0.05	0.1	655.9
9/15/08 11:00 AM	0.09	0.3	1064.3
9/15/08 12:00 PM	0.11	0.3	1816.3
9/15/08 1:00 PM	0.18	0.7	3061.7
9/15/08 2:00 PM	0.23	1.0	2177.3
9/15/08 3:00 PM	0.07	0.2	994.7
9/15/08 4:00 PM	0.12	0.4	1793.0
9/15/08 5:00 PM	0.17	0.6	4014.9
9/15/08 6:00 PM	0.31	1.6	4485.3
9/15/08 7:00 PM	0.21	0.9	5604.2
9/15/08 8:00 PM	0.39	2.2	7137.5
9/15/08 9:00 PM	0.33	1.7	6755.2
9/15/08 10:00 PM	0.36	2.0	6648.3
9/15/08 11:00 PM	0.32	1.7	5107.1
9/16/08 12:00 AM	0.25	1.2	3945.5
9/16/08 1:00 AM	0.23	1.0	3225.0
9/16/08 2:00 AM	0.19	0.8	2532.6
9/16/08 3:00 AM	0.17	0.7	2155.4
9/16/08 4:00 AM	0.15	0.5	1954.7
9/16/08 5:00 AM	0.15	0.5	1663.7

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/16/08 6:00 AM	0.12	0.4	1468.4
9/16/08 7:00 AM	0.13	0.4	1849.8
9/16/08 8:00 AM	0.16	0.6	1469.1
9/16/08 9:00 AM	0.08	0.2	401.4
9/16/08 10:00 AM	-0.07	0.0	0.0
9/16/08 11:00 AM	-0.13	0.0	0.0
9/16/08 12:00 PM	-0.02	0.0	0.0
9/16/08 1:00 PM	0.00	0.0	0.0
9/16/08 2:00 PM	-0.07	0.0	0.0
9/16/08 3:00 PM	-0.18	0.0	0.0
9/16/08 4:00 PM	-0.11	0.0	0.0
9/16/08 5:00 PM	-0.01	0.0	2798.8
9/16/08 6:00 PM	0.30	1.6	3808.7
9/16/08 7:00 PM	0.15	0.6	8363.7
9/16/08 8:00 PM	0.58	4.1	8489.0
9/16/08 9:00 PM	0.17	0.6	2296.1
9/16/08 10:00 PM	0.17	0.6	1973.1
9/16/08 11:00 PM	0.13	0.5	1678.5
9/17/08 12:00 AM	0.14	0.5	1618.3
9/17/08 1:00 AM	0.13	0.4	1556.8
9/17/08 2:00 AM	0.13	0.4	1872.5
9/17/08 3:00 AM	0.16	0.6	2143.9
9/17/08 4:00 AM	0.16	0.6	2021.3
9/17/08 5:00 AM	0.15	0.5	1850.5
9/17/08 6:00 AM	0.14	0.5	1771.6
9/17/08 7:00 AM	0.14	0.5	1559.7
9/17/08 8:00 AM	0.12	0.4	1227.8
9/17/08 9:00 AM	0.10	0.3	1068.4
9/17/08 10:00 AM	0.10	0.3	1122.3
9/17/08 11:00 AM	0.11	0.3	1238.7
9/17/08 12:00 PM	0.12	0.4	1329.8
9/17/08 1:00 PM	0.12	0.4	1423.9
9/17/08 2:00 PM	0.13	0.4	1467.4
9/17/08 3:00 PM	0.12	0.4	1438.0
9/17/08 4:00 PM	0.12	0.4	1317.1
9/17/08 5:00 PM	0.11	0.3	1169.4
9/17/08 6:00 PM	0.11	0.3	1108.5
9/17/08 7:00 PM	0.10	0.3	1163.4
9/17/08 8:00 PM	0.11	0.3	1259.1
9/17/08 9:00 PM	0.11	0.4	1266.1
9/17/08 10:00 PM	0.11	0.3	1287.3
9/17/08 11:00 PM	0.12	0.4	1315.5
9/18/08 12:00 AM	0.12	0.4	1742.3
9/18/08 1:00 AM	0.16	0.6	2228.3
9/18/08 2:00 AM	0.17	0.6	2245.1
9/18/08 3:00 AM	0.16	0.6	2160.8
9/18/08 4:00 AM	0.16	0.6	2094.1
9/18/08 5:00 AM	0.16	0.6	2028.2
9/18/08 6:00 AM	0.15	0.6	1954.8
9/18/08 7:00 AM	0.15	0.5	1890.4

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/18/08 8:00 AM	0.15	0.5	1842.4
9/18/08 9:00 AM	0.14	0.5	1826.6
9/18/08 10:00 AM	0.14	0.5	1890.6
9/18/08 11:00 AM	0.15	0.5	2011.9
9/18/08 12:00 PM	0.16	0.6	2169.8
9/18/08 1:00 PM	0.17	0.6	2304.7
9/18/08 2:00 PM	0.17	0.6	2356.1
9/18/08 3:00 PM	0.17	0.7	2382.0
9/18/08 4:00 PM	0.17	0.7	2356.2
9/18/08 5:00 PM	0.17	0.6	2296.1
9/18/08 6:00 PM	0.17	0.6	2253.4
9/18/08 7:00 PM	0.17	0.6	2095.6
9/18/08 8:00 PM	0.15	0.5	1946.6
9/18/08 9:00 PM	0.15	0.5	1858.9
9/18/08 10:00 PM	0.14	0.5	1701.9
9/18/08 11:00 PM	0.13	0.5	1586.8
9/19/08 12:00 AM	0.13	0.4	1526.7
9/19/08 1:00 AM	0.13	0.4	1431.3
9/19/08 2:00 AM	0.12	0.4	1344.0
9/19/08 3:00 AM	0.12	0.4	1266.6
9/19/08 4:00 AM	0.11	0.3	1162.7
9/19/08 5:00 AM	0.10	0.3	1101.8
9/19/08 6:00 AM	0.10	0.3	1075.1
9/19/08 7:00 AM	0.10	0.3	1029.2
9/19/08 8:00 AM	0.10	0.3	1002.9
9/19/08 9:00 AM	0.10	0.3	1029.0
9/19/08 10:00 AM	0.10	0.3	1075.2
9/19/08 11:00 AM	0.10	0.3	1108.4
9/19/08 12:00 PM	0.10	0.3	1190.8
9/19/08 1:00 PM	0.11	0.4	1308.6
9/19/08 2:00 PM	0.12	0.4	1322.6
9/19/08 3:00 PM	0.12	0.4	1294.3
9/19/08 4:00 PM	0.11	0.4	1322.7
9/19/08 5:00 PM	0.12	0.4	1280.9
9/19/08 6:00 PM	0.11	0.3	1162.7
9/19/08 7:00 PM	0.10	0.3	1075.4
9/19/08 8:00 PM	0.10	0.3	990.2
9/19/08 9:00 PM	0.09	0.3	901.4
9/19/08 10:00 PM	0.09	0.2	809.1
9/19/08 11:00 PM	0.08	0.2	737.6
9/20/08 12:00 AM	0.08	0.2	685.5
9/20/08 1:00 AM	0.07	0.2	629.4
9/20/08 2:00 AM	0.07	0.2	569.2
9/20/08 3:00 AM	0.06	0.2	511.3
9/20/08 4:00 AM	0.06	0.1	455.3
9/20/08 5:00 AM	0.05	0.1	401.7
9/20/08 6:00 AM	0.05	0.1	345.8
9/20/08 7:00 AM	0.04	0.1	309.8
9/20/08 8:00 AM	0.04	0.1	292.4
9/20/08 9:00 AM	0.04	0.1	296.8

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/20/08 10:00 AM	0.04	0.1	360.4
9/20/08 11:00 AM	0.05	0.1	450.7
9/20/08 12:00 PM	0.06	0.1	500.7
9/20/08 1:00 PM	0.06	0.1	532.0
9/20/08 2:00 PM	0.06	0.2	569.1
9/20/08 3:00 PM	0.07	0.2	579.8
9/20/08 4:00 PM	0.07	0.2	590.7
9/20/08 5:00 PM	0.07	0.2	601.5
9/20/08 6:00 PM	0.07	0.2	503.5
9/20/08 7:00 PM	0.05	0.1	382.8
9/20/08 8:00 PM	0.05	0.1	341.0
9/20/08 9:00 PM	0.05	0.1	336.4
9/20/08 10:00 PM	0.05	0.1	327.6
9/20/08 11:00 PM	0.04	0.1	296.8
9/21/08 12:00 AM	0.04	0.1	288.1
9/21/08 1:00 AM	0.04	0.1	275.5
9/21/08 2:00 AM	0.04	0.1	242.5
9/21/08 3:00 AM	0.04	0.1	214.7
9/21/08 4:00 AM	0.03	0.1	184.6
9/21/08 5:00 AM	0.03	0.0	136.3
9/21/08 6:00 AM	0.02	0.0	94.6
9/21/08 7:00 AM	0.02	0.0	74.7
9/21/08 8:00 AM	0.02	0.0	56.6
9/21/08 9:00 AM	0.01	0.0	56.6
9/21/08 10:00 AM	0.02	0.0	77.5
9/21/08 11:00 AM	0.02	0.0	131.0
9/21/08 12:00 PM	0.03	0.0	199.9
9/21/08 1:00 PM	0.04	0.1	230.3
9/21/08 2:00 PM	0.04	0.1	263.3
9/21/08 3:00 PM	0.04	0.1	288.1
9/21/08 4:00 PM	0.04	0.1	259.0
9/21/08 5:00 PM	0.04	0.1	161.4
9/21/08 6:00 PM	0.02	0.0	120.4
9/21/08 7:00 PM	0.03	0.0	159.2
9/21/08 8:00 PM	0.03	0.0	166.2
9/21/08 9:00 PM	0.03	0.0	127.4
9/21/08 10:00 PM	0.02	0.0	77.5
9/21/08 11:00 PM	0.02	0.0	47.9
9/22/08 12:00 AM	0.01	0.0	16.7
9/22/08 1:00 AM	0.00	0.0	2.1
9/22/08 2:00 AM	0.00	0.0	0.0
9/22/08 3:00 AM	-0.01	0.0	0.0
9/22/08 4:00 AM	-0.01	0.0	0.0
9/22/08 5:00 AM	-0.01	0.0	0.0
9/22/08 6:00 AM	-0.01	0.0	0.0
9/22/08 7:00 AM	-0.02	0.0	0.0
9/22/08 8:00 AM	-0.02	0.0	0.0
9/22/08 9:00 AM	-0.02	0.0	0.0
9/22/08 10:00 AM	-0.02	0.0	0.0
9/22/08 11:00 AM	-0.01	0.0	0.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/22/08 12:00 PM	0.00	0.0	4.5
9/22/08 1:00 PM	0.00	0.0	23.3
9/22/08 2:00 PM	0.01	0.0	29.6
9/22/08 3:00 PM	0.01	0.0	49.5
9/22/08 4:00 PM	0.02	0.0	66.8
9/22/08 5:00 PM	0.01	0.0	28.1
9/22/08 6:00 PM	0.00	0.0	0.0
9/22/08 7:00 PM	-0.02	0.0	9.1
9/22/08 8:00 PM	0.01	0.0	9.1
9/22/08 9:00 PM	0.00	0.0	3.2
9/22/08 10:00 PM	0.00	0.0	301.2
9/22/08 11:00 PM	0.07	0.2	687.4
9/23/08 12:00 AM	0.08	0.2	852.4
9/23/08 1:00 AM	0.09	0.3	913.5
9/23/08 2:00 AM	0.09	0.3	913.5
9/23/08 3:00 AM	0.09	0.3	907.3
9/23/08 4:00 AM	0.09	0.2	882.2
9/23/08 5:00 AM	0.09	0.2	851.5
9/23/08 6:00 AM	0.08	0.2	814.8
9/23/08 7:00 AM	0.08	0.2	790.7
9/23/08 8:00 AM	0.08	0.2	778.8
9/23/08 9:00 AM	0.08	0.2	784.7
9/23/08 10:00 AM	0.08	0.2	802.7
9/23/08 11:00 AM	0.08	0.2	902.4
9/23/08 12:00 PM	0.10	0.3	1076.2
9/23/08 1:00 PM	0.11	0.3	1189.9
9/23/08 2:00 PM	0.11	0.3	1238.2
9/23/08 3:00 PM	0.11	0.3	1259.1
9/23/08 4:00 PM	0.11	0.3	1287.3
9/23/08 5:00 PM	0.12	0.4	1266.4
9/23/08 6:00 PM	0.11	0.3	1189.9
9/23/08 7:00 PM	0.11	0.3	1115.4
9/23/08 8:00 PM	0.10	0.3	1035.7
9/23/08 9:00 PM	0.10	0.3	939.5
9/23/08 10:00 PM	0.09	0.2	857.6
9/23/08 11:00 PM	0.09	0.2	768.0
9/24/08 12:00 AM	0.08	0.2	668.5
9/24/08 1:00 AM	0.07	0.2	612.7
9/24/08 2:00 AM	0.07	0.2	563.8
9/24/08 3:00 AM	0.06	0.2	521.5
9/24/08 4:00 AM	0.06	0.1	470.4
9/24/08 5:00 AM	0.06	0.1	406.6
9/24/08 6:00 AM	0.05	0.1	341.4
9/24/08 7:00 AM	0.04	0.1	305.4
9/24/08 8:00 AM	0.04	0.1	301.0
9/24/08 9:00 AM	0.04	0.1	292.4
9/24/08 10:00 AM	0.04	0.1	279.6
9/24/08 11:00 AM	0.04	0.1	315.0
9/24/08 12:00 PM	0.05	0.1	412.3
9/24/08 1:00 PM	0.06	0.1	506.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/24/08 2:00 PM	0.06	0.2	569.2
9/24/08 3:00 PM	0.07	0.2	629.4
9/24/08 4:00 PM	0.07	0.2	607.8
9/24/08 5:00 PM	0.06	0.2	569.1
9/24/08 6:00 PM	0.07	0.2	522.6
9/24/08 7:00 PM	0.06	0.1	416.6
9/24/08 8:00 PM	0.05	0.1	337.0
9/24/08 9:00 PM	0.04	0.1	267.6
9/24/08 10:00 PM	0.04	0.1	193.2
9/24/08 11:00 PM	0.03	0.0	132.4
9/25/08 12:00 AM	0.02	0.0	92.2
9/25/08 1:00 AM	0.02	0.0	61.6
9/25/08 2:00 AM	0.01	0.0	46.7
9/25/08 3:00 AM	0.01	0.0	33.7
9/25/08 4:00 AM	0.01	0.0	21.8
9/25/08 5:00 AM	0.01	0.0	11.2
9/25/08 6:00 AM	0.00	0.0	2.1
9/25/08 7:00 AM	0.00	0.0	0.0
9/25/08 8:00 AM	0.00	0.0	0.0
9/25/08 9:00 AM	-0.01	0.0	0.0
9/25/08 10:00 AM	0.00	0.0	0.4
9/25/08 11:00 AM	0.00	0.0	3.6
9/25/08 12:00 PM	0.00	0.0	28.9
9/25/08 1:00 PM	0.01	0.0	85.2
9/25/08 2:00 PM	0.02	0.0	125.4
9/25/08 3:00 PM	0.02	0.0	149.1
9/25/08 4:00 PM	0.03	0.0	169.8
9/25/08 5:00 PM	0.03	0.0	169.8
9/25/08 6:00 PM	0.03	0.0	162.7
9/25/08 7:00 PM	0.03	0.0	148.8
9/25/08 8:00 PM	0.03	0.0	92.6
9/25/08 9:00 PM	0.01	0.0	49.0
9/25/08 10:00 PM	0.01	0.0	31.6
9/25/08 11:00 PM	0.00	0.0	5.9
9/26/08 12:00 AM	0.00	0.0	0.0
9/26/08 1:00 AM	-0.01	0.0	0.0
9/26/08 2:00 AM	-0.01	0.0	0.0
9/26/08 3:00 AM	-0.02	0.0	0.0
9/26/08 4:00 AM	-0.02	0.0	0.0
9/26/08 5:00 AM	-0.02	0.0	0.0
9/26/08 6:00 AM	-0.03	0.0	0.0
9/26/08 7:00 AM	-0.03	0.0	0.0
9/26/08 8:00 AM	-0.03	0.0	0.0
9/26/08 9:00 AM	-0.04	0.0	0.0
9/26/08 10:00 AM	-0.03	0.0	0.0
9/26/08 11:00 AM	-0.03	0.0	0.0
9/26/08 12:00 PM	-0.03	0.0	0.0
9/26/08 1:00 PM	-0.02	0.0	0.0
9/26/08 2:00 PM	-0.01	0.0	0.0
9/26/08 3:00 PM	-0.01	0.0	0.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/26/08 4:00 PM	-0.02	0.0	0.0
9/26/08 5:00 PM	-0.02	0.0	0.0
9/26/08 6:00 PM	-0.02	0.0	0.0
9/26/08 7:00 PM	-0.02	0.0	0.0
9/26/08 8:00 PM	-0.01	0.0	0.0
9/26/08 9:00 PM	-0.01	0.0	0.0
9/26/08 10:00 PM	-0.01	0.0	0.0
9/26/08 11:00 PM	-0.01	0.0	0.0
9/27/08 12:00 AM	-0.01	0.0	0.0
9/27/08 1:00 AM	-0.01	0.0	0.0
9/27/08 2:00 AM	-0.02	0.0	0.0
9/27/08 3:00 AM	-0.02	0.0	0.0
9/27/08 4:00 AM	-0.02	0.0	0.0
9/27/08 5:00 AM	-0.02	0.0	0.0
9/27/08 6:00 AM	-0.02	0.0	0.0
9/27/08 7:00 AM	-0.03	0.0	0.0
9/27/08 8:00 AM	-0.03	0.0	0.0
9/27/08 9:00 AM	-0.03	0.0	0.0
9/27/08 10:00 AM	-0.03	0.0	0.0
9/27/08 11:00 AM	-0.07	0.0	0.0
9/27/08 12:00 PM	-0.06	0.0	0.0
9/27/08 1:00 PM	-0.06	0.0	0.0
9/27/08 2:00 PM	-0.05	0.0	0.0
9/27/08 3:00 PM	-0.04	0.0	0.0
9/27/08 4:00 PM	-0.04	0.0	0.0
9/27/08 5:00 PM	-0.05	0.0	0.0
9/27/08 6:00 PM	-0.06	0.0	0.0
9/27/08 7:00 PM	-0.02	0.0	0.0
9/27/08 8:00 PM	-0.01	0.0	0.0
9/27/08 9:00 PM	-0.01	0.0	0.0
9/27/08 10:00 PM	-0.01	0.0	0.0
9/27/08 11:00 PM	-0.02	0.0	0.0
9/28/08 12:00 AM	-0.02	0.0	0.0
9/28/08 1:00 AM	-0.03	0.0	0.0
9/28/08 2:00 AM	-0.03	0.0	0.0
9/28/08 3:00 AM	-0.03	0.0	0.0
9/28/08 4:00 AM	-0.03	0.0	0.0
9/28/08 5:00 AM	-0.03	0.0	0.0
9/28/08 6:00 AM	-0.03	0.0	0.0
9/28/08 7:00 AM	-0.03	0.0	0.0
9/28/08 8:00 AM	-0.03	0.0	0.0
9/28/08 9:00 AM	-0.03	0.0	0.0
9/28/08 10:00 AM	-0.03	0.0	0.0
9/28/08 11:00 AM	-0.03	0.0	0.0
9/28/08 12:00 PM	-0.03	0.0	0.0
9/28/08 1:00 PM	-0.02	0.0	0.0
9/28/08 2:00 PM	-0.01	0.0	0.0
9/28/08 3:00 PM	0.00	0.0	0.0
9/28/08 4:00 PM	0.00	0.0	0.4
9/28/08 5:00 PM	0.00	0.0	11.2

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/28/08 6:00 PM	0.01	0.0	25.5
9/28/08 7:00 PM	0.01	0.0	15.0
9/28/08 8:00 PM	0.00	0.0	0.4
9/28/08 9:00 PM	0.00	0.0	0.0
9/28/08 10:00 PM	-0.01	0.0	0.0
9/28/08 11:00 PM	-0.01	0.0	0.0
9/29/08 12:00 AM	-0.01	0.0	0.0
9/29/08 1:00 AM	-0.01	0.0	0.0
9/29/08 2:00 AM	-0.01	0.0	0.0
9/29/08 3:00 AM	-0.01	0.0	0.0
9/29/08 4:00 AM	-0.01	0.0	0.0
9/29/08 5:00 AM	-0.01	0.0	0.0
9/29/08 6:00 AM	-0.01	0.0	0.0
9/29/08 7:00 AM	-0.01	0.0	0.0
9/29/08 8:00 AM	-0.01	0.0	0.0
9/29/08 9:00 AM	-0.02	0.0	0.0
9/29/08 10:00 AM	-0.02	0.0	0.0
9/29/08 11:00 AM	-0.01	0.0	0.0
9/29/08 12:00 PM	-0.01	0.0	1.1
9/29/08 1:00 PM	0.00	0.0	13.8
9/29/08 2:00 PM	0.01	0.0	36.0
9/29/08 3:00 PM	0.01	0.0	32.4
9/29/08 4:00 PM	0.01	0.0	15.0
9/29/08 5:00 PM	0.00	0.0	16.7
9/29/08 6:00 PM	0.01	0.0	70.3
9/29/08 7:00 PM	0.02	0.0	1771.3
9/29/08 8:00 PM	0.22	1.0	3934.4
9/29/08 9:00 PM	0.26	1.2	4434.4
9/29/08 10:00 PM	0.26	1.2	4402.6
9/29/08 11:00 PM	0.26	1.2	4328.5
9/30/08 12:00 AM	0.25	1.2	4233.8
9/30/08 1:00 AM	0.25	1.2	4191.9
9/30/08 2:00 AM	0.25	1.2	4339.8
9/30/08 3:00 AM	0.26	1.2	4962.6
9/30/08 4:00 AM	0.30	1.5	5494.5
9/30/08 5:00 AM	0.30	1.5	5505.9
9/30/08 6:00 AM	0.30	1.5	5426.0
9/30/08 7:00 AM	0.30	1.5	5346.5
9/30/08 8:00 AM	0.29	1.5	5267.4
9/30/08 9:00 AM	0.29	1.5	5199.9
9/30/08 10:00 AM	0.29	1.4	5099.4
9/30/08 11:00 AM	0.28	1.4	5032.5
9/30/08 12:00 PM	0.28	1.4	5043.6
9/30/08 1:00 PM	0.28	1.4	5043.6
9/30/08 2:00 PM	0.28	1.4	5054.7
9/30/08 3:00 PM	0.29	1.4	5245.8
9/30/08 4:00 PM	0.30	1.5	5380.5
9/30/08 5:00 PM	0.30	1.5	5335.2
9/30/08 6:00 PM	0.29	1.5	5278.7
9/30/08 7:00 PM	0.29	1.5	5133.0

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
9/30/08 8:00 PM	0.28	1.4	4922.3
9/30/08 9:00 PM	0.27	1.3	4735.9
9/30/08 10:00 PM	0.27	1.3	4595.2
9/30/08 11:00 PM	0.26	1.3	4498.5
10/1/08 12:00 AM	0.26	1.2	4423.9
10/1/08 1:00 AM	0.26	1.2	4328.5
10/1/08 2:00 AM	0.25	1.2	4275.8
10/1/08 3:00 AM	0.25	1.2	4254.8
10/1/08 4:00 AM	0.25	1.2	4192.0
10/1/08 5:00 AM	0.25	1.2	4067.5
10/1/08 6:00 AM	0.24	1.1	3923.5
10/1/08 7:00 AM	0.24	1.1	3811.6
10/1/08 8:00 AM	0.23	1.0	3740.9
10/1/08 9:00 AM	0.23	1.0	3690.7
10/1/08 10:00 AM	0.23	1.0	3640.8
10/1/08 11:00 AM	0.23	1.0	3670.8
10/1/08 12:00 PM	0.23	1.0	3781.3
10/1/08 1:00 PM	0.24	1.1	3811.5
10/1/08 2:00 PM	0.23	1.1	3710.9
10/1/08 3:00 PM	0.23	1.0	3640.7
10/1/08 4:00 PM	0.23	1.0	3680.7
10/1/08 5:00 PM	0.23	1.0	3750.9
10/1/08 6:00 PM	0.23	1.1	3761.0
10/1/08 7:00 PM	0.23	1.0	3690.8
10/1/08 8:00 PM	0.23	1.0	3610.9
10/1/08 9:00 PM	0.23	1.0	3482.9
10/1/08 10:00 PM	0.22	0.9	3298.0
10/1/08 11:00 PM	0.21	0.9	3116.6
10/2/08 12:00 AM	0.20	0.8	2984.6
10/2/08 1:00 AM	0.20	0.8	2882.8
10/2/08 2:00 AM	0.19	0.8	2754.7
10/2/08 3:00 AM	0.19	0.7	2646.3
10/2/08 4:00 AM	0.18	0.7	2548.4
10/2/08 5:00 AM	0.18	0.7	2443.0
10/2/08 6:00 AM	0.17	0.7	2339.1
10/2/08 7:00 AM	0.17	0.6	2219.9
10/2/08 8:00 AM	0.16	0.6	2119.0
10/2/08 9:00 AM	0.16	0.6	2069.2
10/2/08 10:00 AM	0.16	0.6	2094.1
10/2/08 11:00 AM	0.16	0.6	2194.5
10/2/08 12:00 PM	0.17	0.6	2330.7
10/2/08 1:00 PM	0.17	0.7	2356.3
10/2/08 2:00 PM	0.17	0.6	2304.6
10/2/08 3:00 PM	0.17	0.6	2162.2
10/2/08 4:00 PM	0.15	0.6	1995.4
10/2/08 5:00 PM	0.15	0.5	2095.2
10/2/08 6:00 PM	0.16	0.6	2152.6
10/2/08 7:00 PM	0.16	0.6	1980.0
10/2/08 8:00 PM	0.15	0.5	1930.7
10/2/08 9:00 PM	0.15	0.6	1946.8

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/2/08 10:00 PM	0.15	0.5	1811.6
10/2/08 11:00 PM	0.14	0.5	1670.7
10/3/08 12:00 AM	0.13	0.5	1564.4
10/3/08 1:00 AM	0.13	0.4	1452.9
10/3/08 2:00 AM	0.12	0.4	1365.6
10/3/08 3:00 AM	0.12	0.4	1273.5
10/3/08 4:00 AM	0.11	0.3	1183.1
10/3/08 5:00 AM	0.11	0.3	1102.0
10/3/08 6:00 AM	0.10	0.3	1022.6
10/3/08 7:00 AM	0.10	0.3	1009.4
10/3/08 8:00 AM	0.10	0.3	1003.0
10/3/08 9:00 AM	0.09	0.3	977.1
10/3/08 10:00 AM	0.09	0.3	1009.5
10/3/08 11:00 AM	0.10	0.3	1143.6
10/3/08 12:00 PM	0.11	0.3	1273.2
10/3/08 1:00 PM	0.12	0.4	1238.7
10/3/08 2:00 PM	0.11	0.3	1089.5
10/3/08 3:00 PM	0.10	0.3	1015.9
10/3/08 4:00 PM	0.10	0.3	1137.0
10/3/08 5:00 PM	0.11	0.3	1183.5
10/3/08 6:00 PM	0.10	0.3	1017.7
10/3/08 7:00 PM	0.09	0.3	913.5
10/3/08 8:00 PM	0.09	0.3	864.1
10/3/08 9:00 PM	0.08	0.2	827.0
10/3/08 10:00 PM	0.09	0.2	863.8
10/3/08 11:00 PM	0.09	0.2	913.6
10/4/08 12:00 AM	0.09	0.3	846.9
10/4/08 1:00 AM	0.08	0.2	725.9
10/4/08 2:00 AM	0.08	0.2	725.9
10/4/08 3:00 AM	0.08	0.2	725.9
10/4/08 4:00 AM	0.08	0.2	662.9
10/4/08 5:00 AM	0.07	0.2	580.5
10/4/08 6:00 AM	0.06	0.1	486.0
10/4/08 7:00 AM	0.06	0.1	420.8
10/4/08 8:00 AM	0.05	0.1	387.2
10/4/08 9:00 AM	0.05	0.1	354.7
10/4/08 10:00 AM	0.05	0.1	350.1
10/4/08 11:00 AM	0.05	0.1	373.1
10/4/08 12:00 PM	0.05	0.1	416.3
10/4/08 1:00 PM	0.06	0.1	475.4
10/4/08 2:00 PM	0.06	0.1	500.7
10/4/08 3:00 PM	0.06	0.1	537.5
10/4/08 4:00 PM	0.07	0.2	601.7
10/4/08 5:00 PM	0.07	0.2	698.0
10/4/08 6:00 PM	0.08	0.2	784.8
10/4/08 7:00 PM	0.08	0.2	858.1
10/4/08 8:00 PM	0.09	0.3	894.8
10/4/08 9:00 PM	0.09	0.2	882.2
10/4/08 10:00 PM	0.09	0.2	882.2
10/4/08 11:00 PM	0.09	0.2	869.9

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/5/08 12:00 AM	0.09	0.2	839.2
10/5/08 1:00 AM	0.08	0.2	814.8
10/5/08 2:00 AM	0.08	0.2	802.7
10/5/08 3:00 AM	0.08	0.2	790.7
10/5/08 4:00 AM	0.08	0.2	796.7
10/5/08 5:00 AM	0.08	0.2	796.7
10/5/08 6:00 AM	0.08	0.2	772.9
10/5/08 7:00 AM	0.08	0.2	737.5
10/5/08 8:00 AM	0.08	0.2	714.1
10/5/08 9:00 AM	0.08	0.2	702.6
10/5/08 10:00 AM	0.08	0.2	725.9
10/5/08 11:00 AM	0.08	0.2	809.4
10/5/08 12:00 PM	0.09	0.2	851.4
10/5/08 1:00 PM	0.09	0.2	876.3
10/5/08 2:00 PM	0.09	0.3	913.5
10/5/08 3:00 PM	0.09	0.3	932.5
10/5/08 4:00 PM	0.09	0.3	964.3
10/5/08 5:00 PM	0.09	0.3	1003.0
10/5/08 6:00 PM	0.10	0.3	1009.4
10/5/08 7:00 PM	0.10	0.3	920.7
10/5/08 8:00 PM	0.09	0.2	809.1
10/5/08 9:00 PM	0.08	0.2	731.8
10/5/08 10:00 PM	0.08	0.2	696.8
10/5/08 11:00 PM	0.08	0.2	708.4
10/6/08 12:00 AM	0.08	0.2	719.9
10/6/08 1:00 AM	0.08	0.2	737.5
10/6/08 2:00 AM	0.08	0.2	784.9
10/6/08 3:00 AM	0.08	0.2	851.6
10/6/08 4:00 AM	0.09	0.2	876.1
10/6/08 5:00 AM	0.09	0.2	894.9
10/6/08 6:00 AM	0.09	0.3	901.1
10/6/08 7:00 AM	0.09	0.2	876.0
10/6/08 8:00 AM	0.09	0.2	876.0
10/6/08 9:00 AM	0.09	0.2	851.5
10/6/08 10:00 AM	0.08	0.2	773.4
10/6/08 11:00 AM	0.08	0.2	669.0
10/6/08 12:00 PM	0.07	0.2	534.1
10/6/08 1:00 PM	0.06	0.1	450.1
10/6/08 2:00 PM	0.06	0.1	322.8
10/6/08 3:00 PM	0.03	0.1	188.1
10/6/08 4:00 PM	0.03	0.1	177.0
10/6/08 5:00 PM	0.03	0.0	647.6
10/6/08 6:00 PM	0.10	0.3	1240.1
10/6/08 7:00 PM	0.12	0.4	1329.8
10/6/08 8:00 PM	0.12	0.4	1245.6
10/6/08 9:00 PM	0.11	0.3	1155.8
10/6/08 10:00 PM	0.10	0.3	1075.4
10/6/08 11:00 PM	0.10	0.3	1015.9
10/7/08 12:00 AM	0.10	0.3	983.6
10/7/08 1:00 AM	0.09	0.3	951.5

Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/7/08 2:00 AM	0.09	0.3	938.7
10/7/08 3:00 AM	0.09	0.3	907.4
10/7/08 4:00 AM	0.09	0.2	869.9
10/7/08 5:00 AM	0.09	0.2	839.2
10/7/08 6:00 AM	0.08	0.2	796.8
10/7/08 7:00 AM	0.08	0.2	749.3
10/7/08 8:00 AM	0.08	0.2	719.9
10/7/08 9:00 AM	0.08	0.2	725.7
10/7/08 10:00 AM	0.08	0.2	791.5
10/7/08 11:00 AM	0.09	0.2	785.6
10/7/08 12:00 PM	0.08	0.2	773.4
10/7/08 1:00 PM	0.08	0.2	908.4
10/7/08 2:00 PM	0.10	0.3	1076.2
10/7/08 3:00 PM	0.11	0.3	1089.2
10/7/08 4:00 PM	0.10	0.3	1055.4
10/7/08 5:00 PM	0.10	0.3	1042.5
10/7/08 6:00 PM	0.10	0.3	996.4
10/7/08 7:00 PM	0.10	0.3	1009.4
10/7/08 8:00 PM	0.10	0.3	933.6
10/7/08 9:00 PM	0.09	0.2	809.1
10/7/08 10:00 PM	0.08	0.2	743.4
10/7/08 11:00 PM	0.08	0.2	697.0
10/8/08 12:00 AM	0.07	0.2	640.5
10/8/08 1:00 AM	0.07	0.2	607.0
10/8/08 2:00 AM	0.07	0.2	585.3
10/8/08 3:00 AM	0.07	0.2	542.5
10/8/08 4:00 AM	0.06	0.1	505.9
10/8/08 5:00 AM	0.06	0.1	480.3
10/8/08 6:00 AM	0.06	0.1	455.2
10/8/08 7:00 AM	0.06	0.1	430.4
10/8/08 8:00 AM	0.05	0.1	411.0
10/8/08 9:00 AM	0.05	0.1	401.4
10/8/08 10:00 AM	0.05	0.1	415.9
10/8/08 11:00 AM	0.05	0.1	430.4
10/8/08 12:00 PM	0.05	0.1	445.2
10/8/08 1:00 PM	0.06	0.1	450.2
10/8/08 2:00 PM	0.06	0.1	425.6
10/8/08 3:00 PM	0.05	0.1	373.7
10/8/08 4:00 PM	0.05	0.1	388.3
10/8/08 5:00 PM	0.06	0.1	445.2
10/8/08 6:00 PM	0.06	0.1	450.1
10/8/08 7:00 PM	0.06	0.1	460.1
10/8/08 8:00 PM	0.06	0.1	460.1
10/8/08 9:00 PM	0.06	0.1	435.4
10/8/08 10:00 PM	0.05	0.1	396.9
10/8/08 11:00 PM	0.05	0.1	363.8
10/9/08 12:00 AM	0.05	0.1	354.6
10/9/08 1:00 AM	0.05	0.1	350.0
10/9/08 2:00 AM	0.05	0.1	323.2
10/9/08 3:00 AM	0.04	0.1	296.7

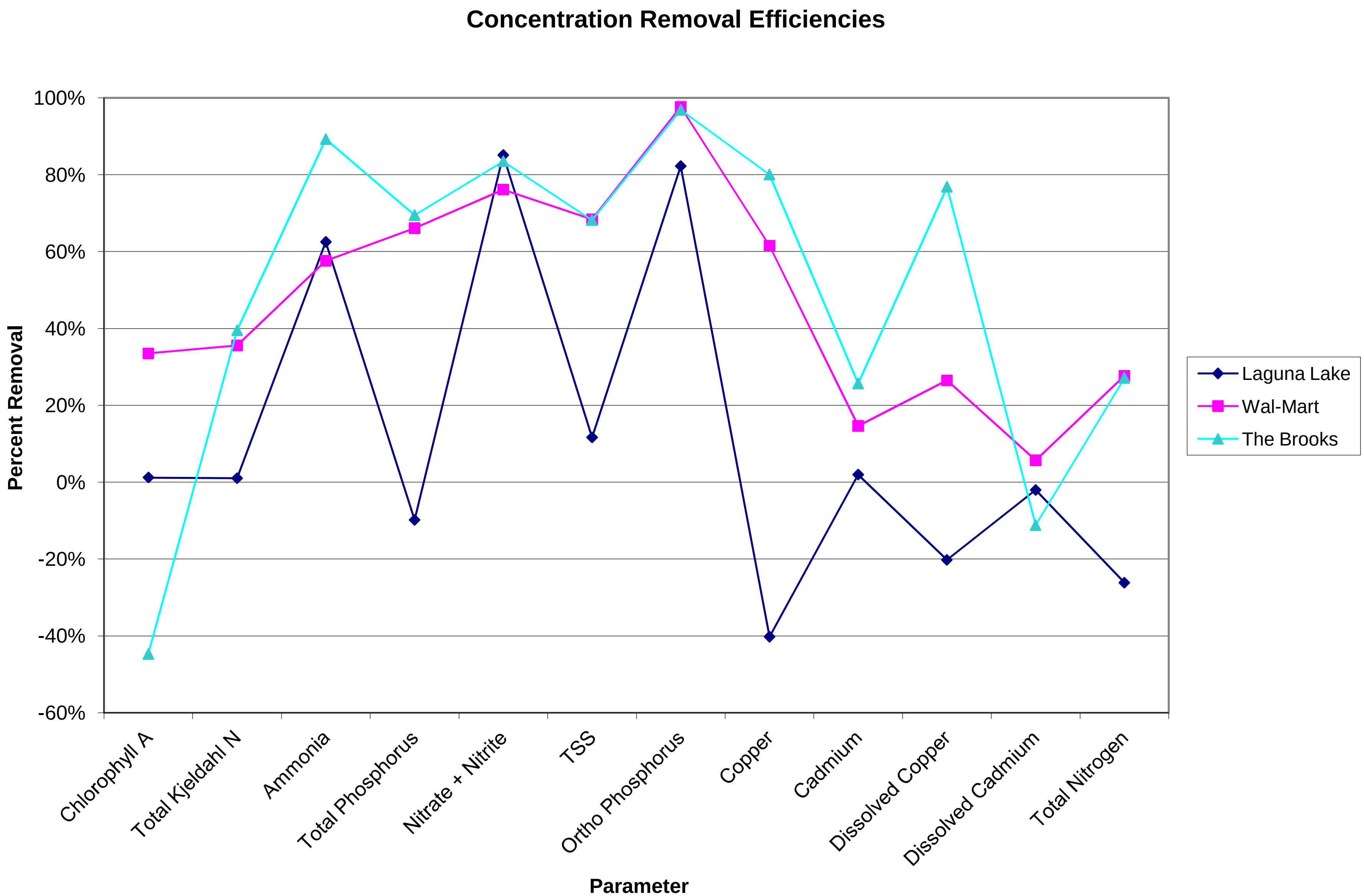
Brooks Outfall Discharge Calculations

Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/9/08 4:00 AM	0.04	0.1	288.1
10/9/08 5:00 AM	0.04	0.1	267.1
10/9/08 6:00 AM	0.04	0.1	230.6
10/9/08 7:00 AM	0.03	0.1	199.4
10/9/08 8:00 AM	0.03	0.1	184.3
10/9/08 9:00 AM	0.03	0.1	177.0
10/9/08 10:00 AM	0.03	0.0	180.7
10/9/08 11:00 AM	0.03	0.1	203.3
10/9/08 12:00 PM	0.04	0.1	230.4
10/9/08 1:00 PM	0.04	0.1	276.0
10/9/08 2:00 PM	0.04	0.1	314.1
10/9/08 3:00 PM	0.04	0.1	305.4
10/9/08 4:00 PM	0.04	0.1	309.9
10/9/08 5:00 PM	0.05	0.1	297.2
10/9/08 6:00 PM	0.04	0.1	279.7
10/9/08 7:00 PM	0.04	0.1	301.0
10/9/08 8:00 PM	0.04	0.1	288.3
10/9/08 9:00 PM	0.04	0.1	246.6
10/9/08 10:00 PM	0.04	0.1	203.5
10/9/08 11:00 PM	0.03	0.1	177.0
10/10/08 12:00 AM	0.03	0.0	162.8
10/10/08 1:00 AM	0.03	0.0	145.4
10/10/08 2:00 AM	0.03	0.0	128.7
10/10/08 3:00 AM	0.02	0.0	115.8
10/10/08 4:00 AM	0.02	0.0	109.5
10/10/08 5:00 AM	0.02	0.0	97.5
10/10/08 6:00 AM	0.02	0.0	82.9
10/10/08 7:00 AM	0.02	0.0	66.8
10/10/08 8:00 AM	0.01	0.0	51.4
10/10/08 9:00 AM	0.01	0.0	46.6
10/10/08 10:00 AM	0.01	0.0	44.3
10/10/08 11:00 AM	0.01	0.0	42.0
10/10/08 12:00 PM	0.01	0.0	49.2
10/10/08 1:00 PM	0.01	0.0	58.8
10/10/08 2:00 PM	0.01	0.0	58.8
10/10/08 3:00 PM	0.01	0.0	66.8
10/10/08 4:00 PM	0.02	0.0	77.2
10/10/08 5:00 PM	0.02	0.0	101.3
10/10/08 6:00 PM	0.02	0.0	107.0
10/10/08 7:00 PM	0.02	0.0	77.5
10/10/08 8:00 PM	0.02	0.0	71.9
10/10/08 9:00 PM	0.02	0.0	66.8
10/10/08 10:00 PM	0.01	0.0	51.4
10/10/08 11:00 PM	0.01	0.0	38.0
10/11/08 12:00 AM	0.01	0.0	22.1
10/11/08 1:00 AM	0.01	0.0	8.6
10/11/08 2:00 AM	0.00	0.0	2.3
10/11/08 3:00 AM	0.00	0.0	1.1
10/11/08 4:00 AM	0.00	0.0	0.0
10/11/08 5:00 AM	0.00	0.0	0.0

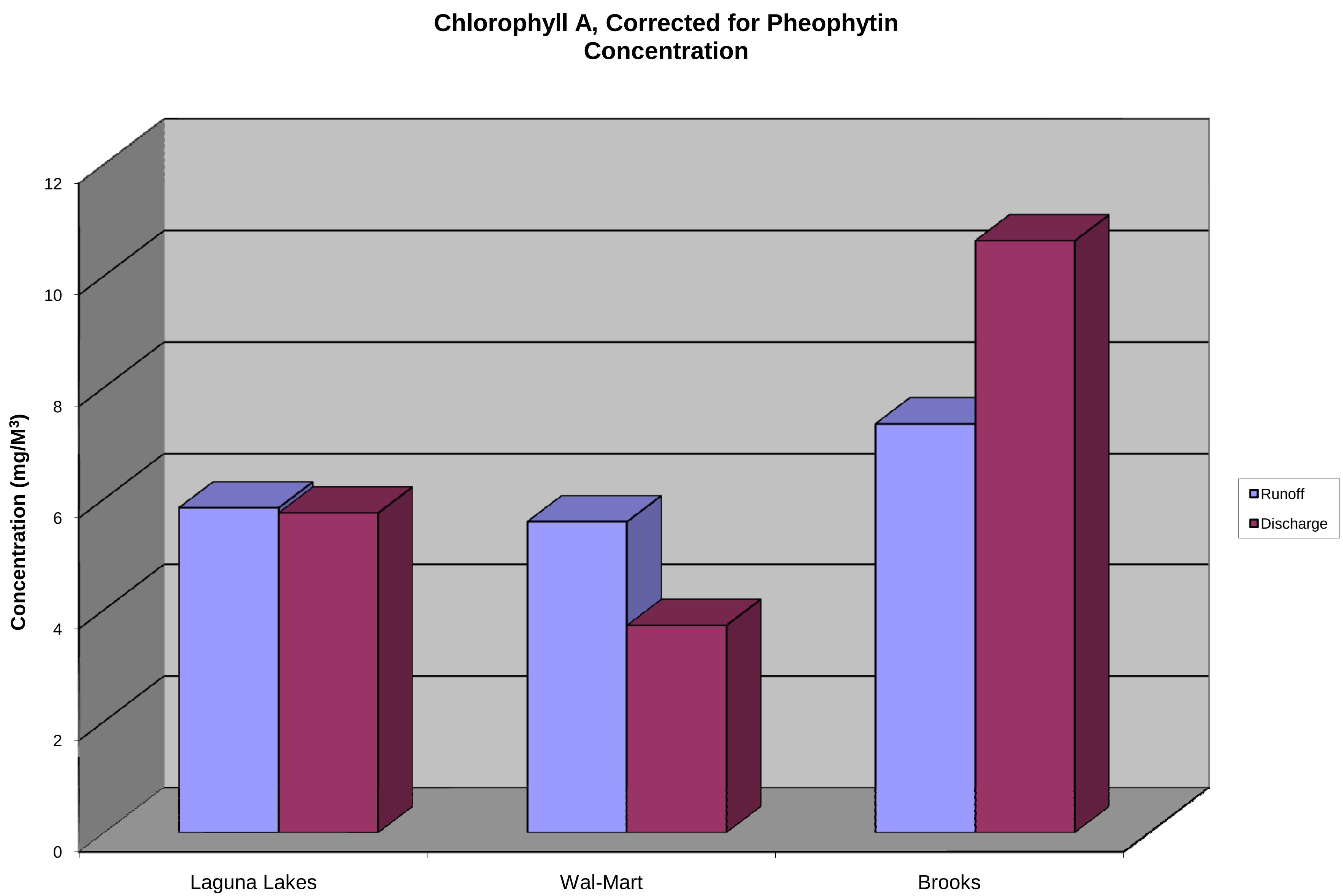
Brooks Outfall Discharge Calculations

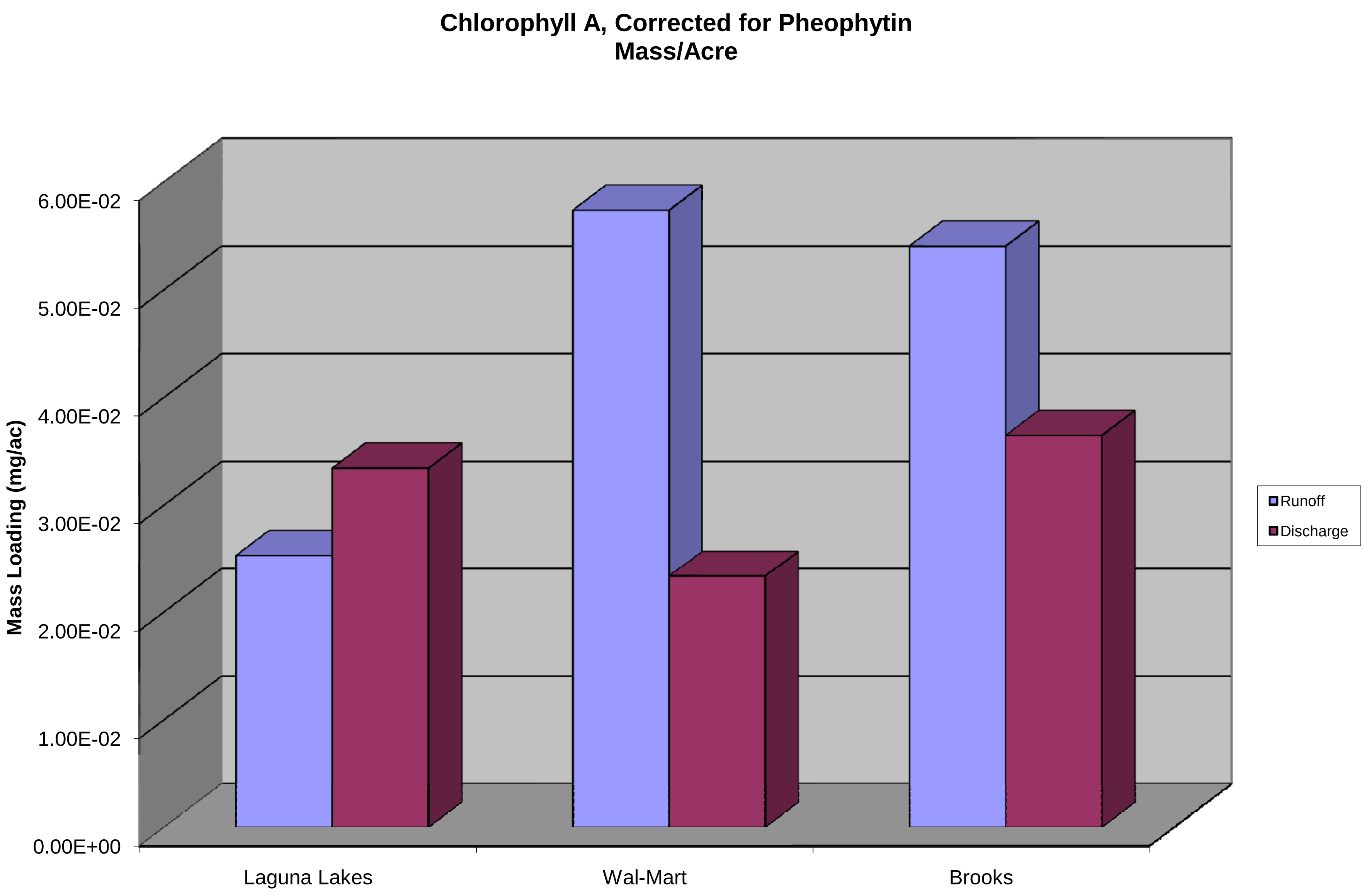
Date	WSEL Above Invert (ft)	Flow (cfs)	Incremental Volume (cf)
10/11/08 6:00 AM	-0.01	0.0	0.0
10/11/08 7:00 AM	-0.01	0.0	0.0
10/11/08 8:00 AM	-0.01	0.0	0.0
10/11/08 9:00 AM	-0.01	0.0	0.0
10/11/08 10:00 AM	-0.01	0.0	0.0
10/11/08 11:00 AM	-0.01	0.0	0.0
10/11/08 12:00 PM	-0.01	0.0	0.0
10/11/08 1:00 PM	0.00	0.0	4.5
10/11/08 2:00 PM	0.00	0.0	5.6
10/11/08 3:00 PM	0.00	0.0	7.0
10/11/08 4:00 PM	0.00	0.0	7.0
10/11/08 5:00 PM	0.00	0.0	1.1
10/11/08 6:00 PM	0.00	0.0	0.0
10/11/08 7:00 PM	0.00	0.0	0.0
10/11/08 8:00 PM	-0.01	0.0	0.0
Data range not printed - WSEL below invert for entire range			
12/22/08 2:00 PM	-0.79	0.0	0.0
		Total =	16857096.2

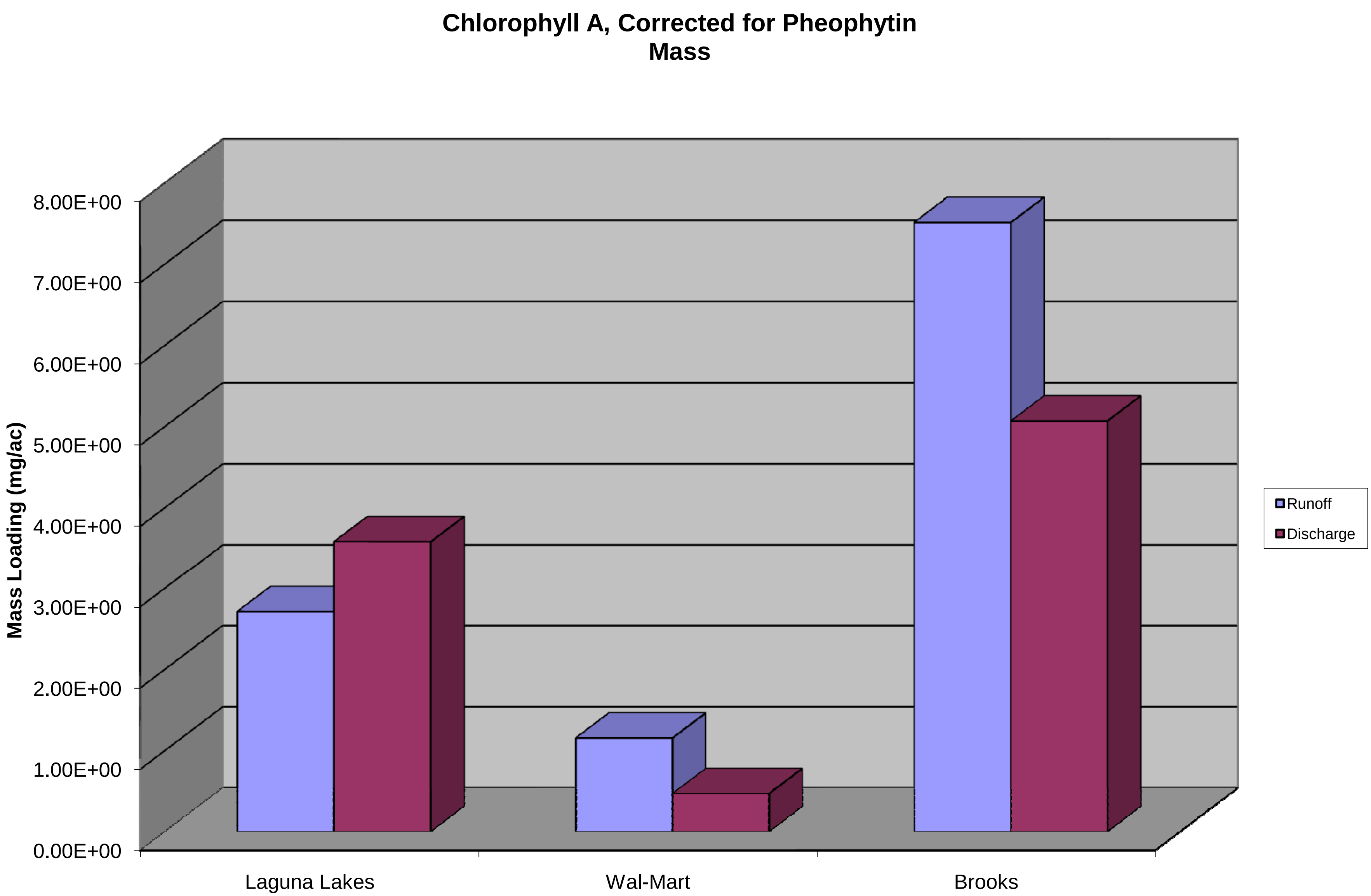
APPENDIX D - REMOVAL EFFICIENCY LINE GRAPHS

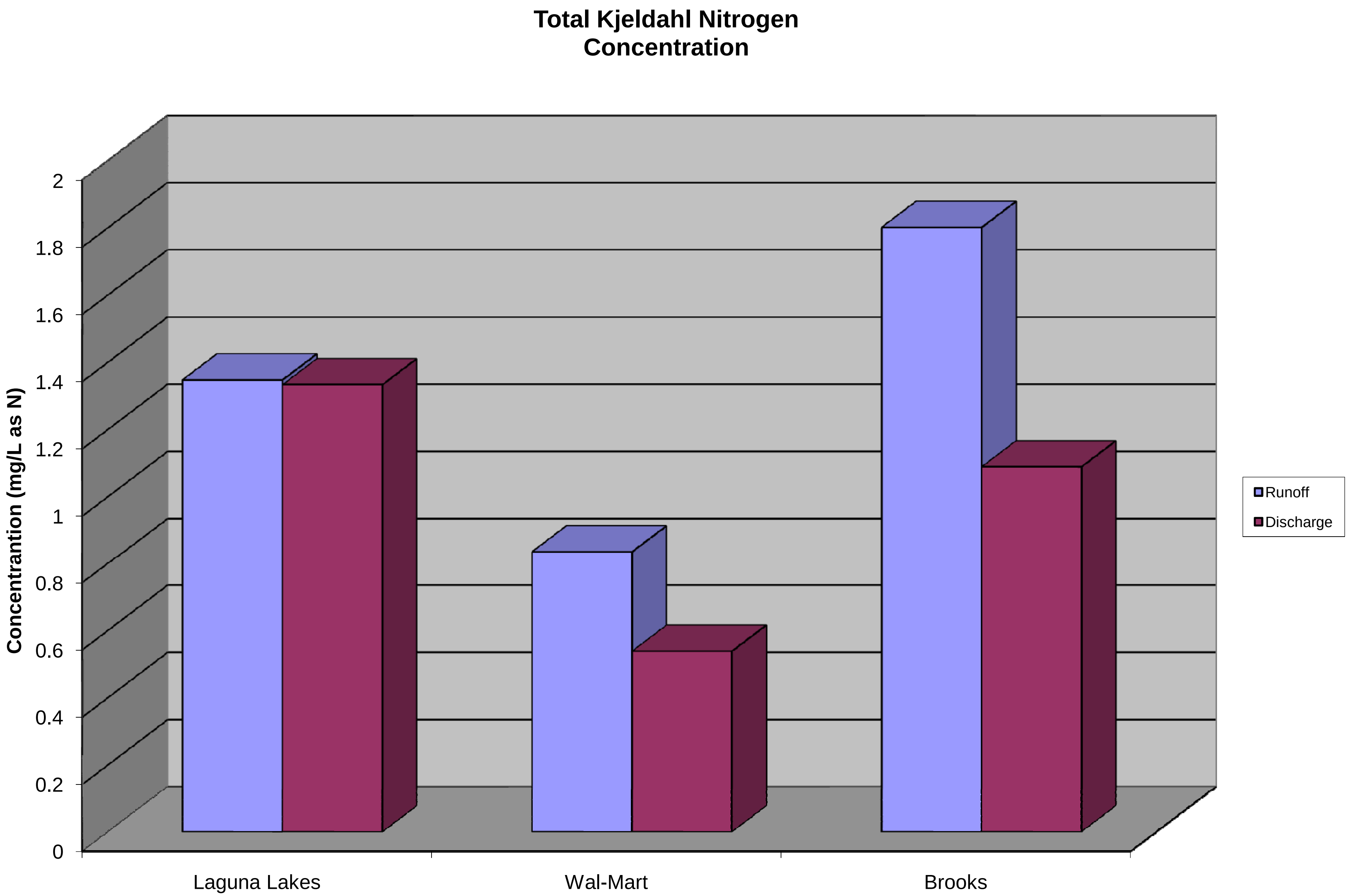

Concentration Removal Efficiencies
Percent Removal
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
Chlorophyll A
Total Kjeldahl N
Ammonia
Total Phosphorus
Nitrate + Nitrite
TSS
Ortho Phosphorus
Copper
Cadmium
Dissolved Copper
Dissolved Cadmium
Total Nitrogen
Parameter
Laguna Lake
Wal-Mart
The Brooks

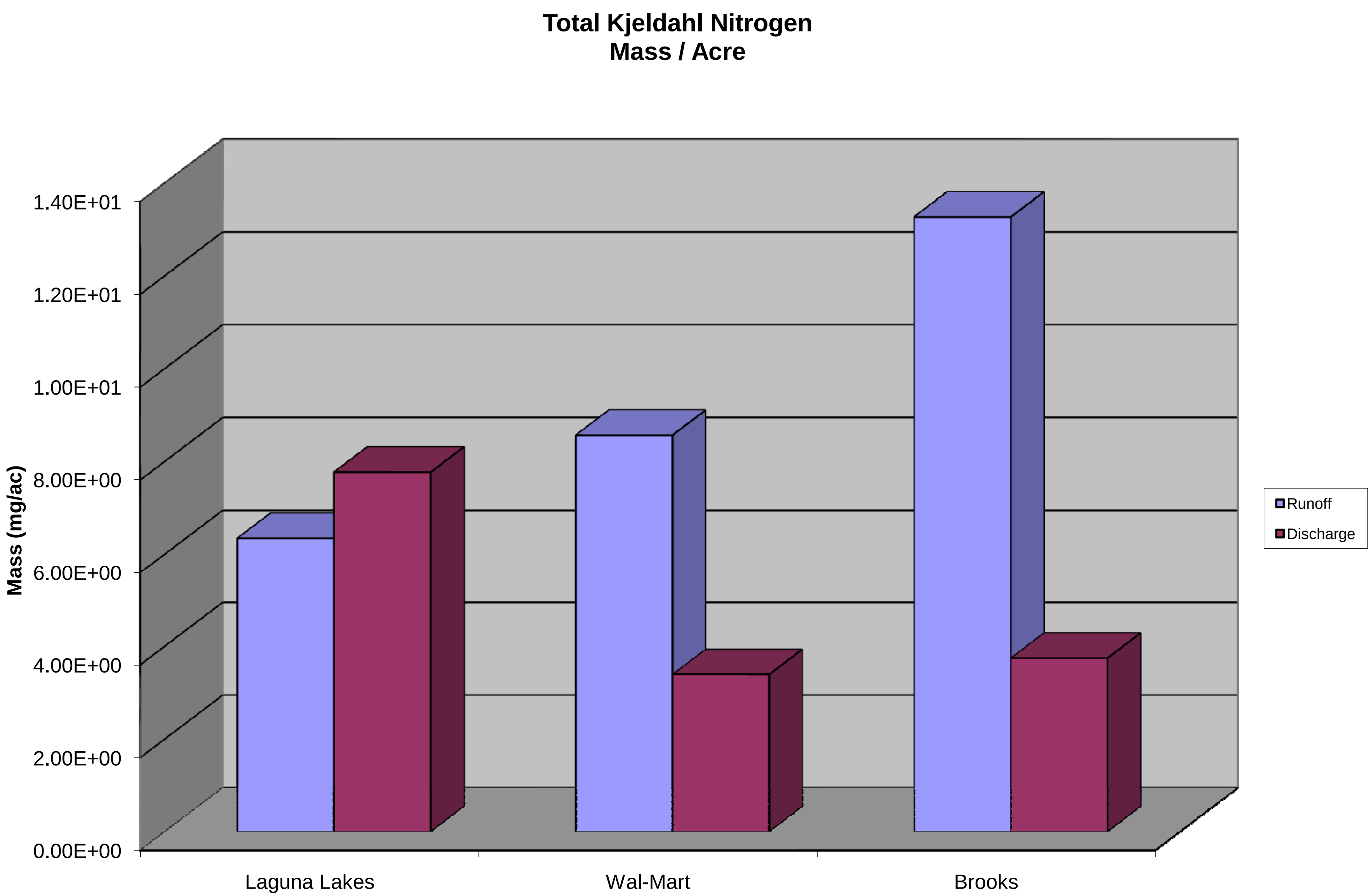
APPENDIX E - LOADING BAR GRAPHS

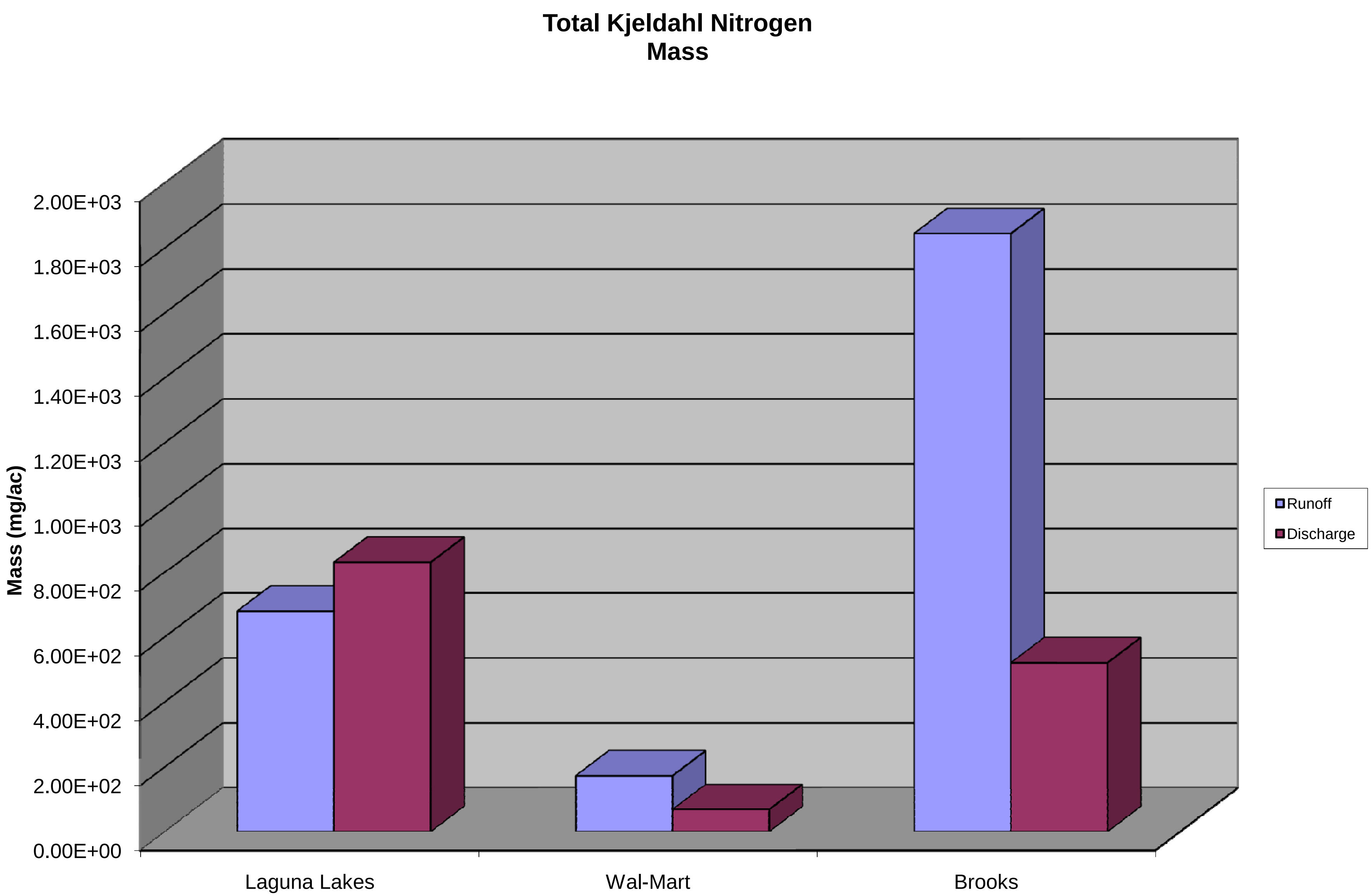

Chlorophyll A, Corrected for Pheophytin
Concentration
Concentration (mg/M³)
0
2
4
6
8
10
12
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

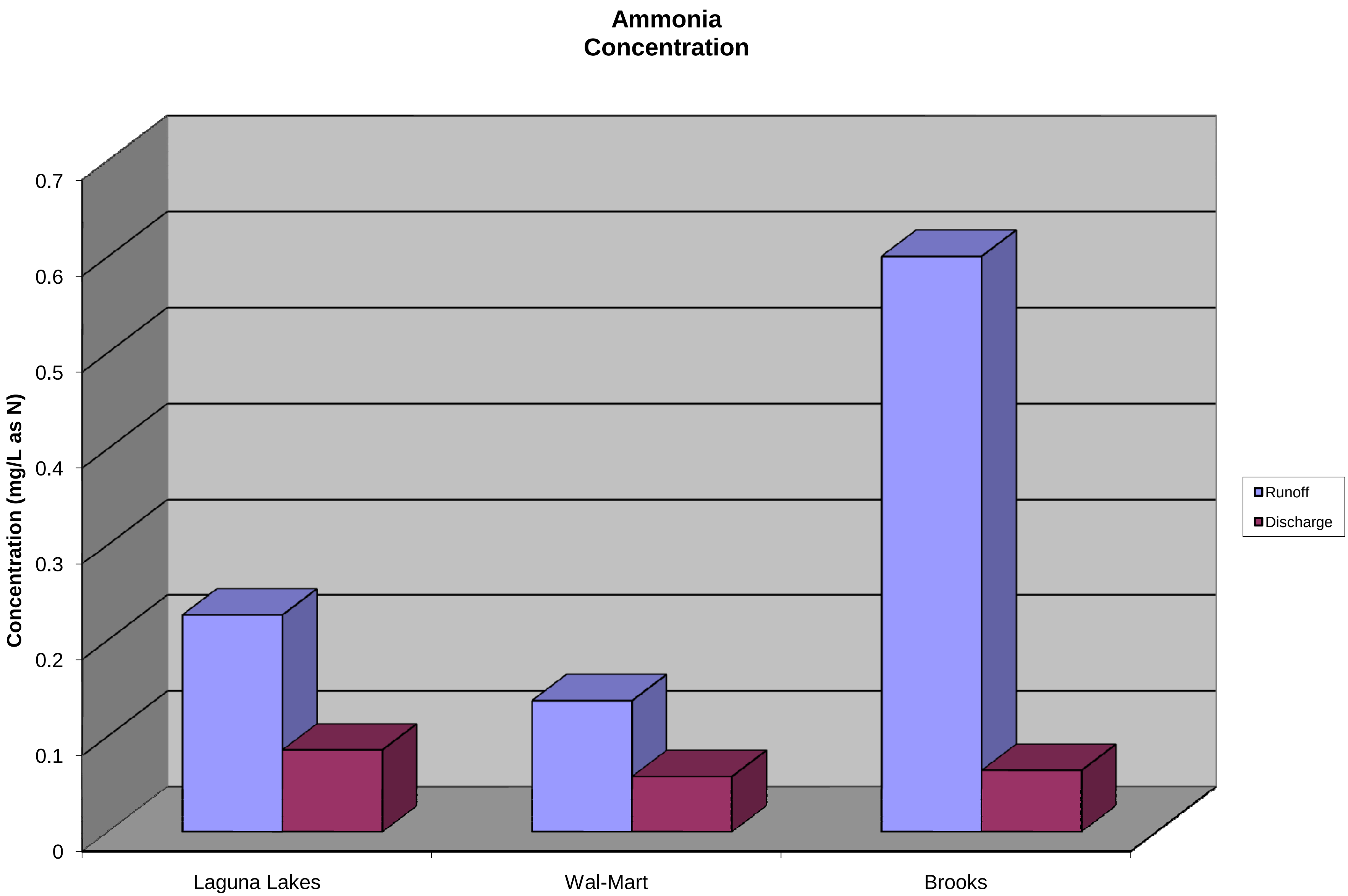

Chlorophyll A, Corrected for Pheophytin
Mass/Acre
Mass Loading (mg/ac)
6.00E-02
5.00E-02
4.00E-02
3.00E-02
2.00E-02
1.00E-02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Chlorophyll A, Corrected for Pheophytin
Mass
Mass Loading (mg/ac)
8.00E+00
7.00E+00
6.00E+00
5.00E+00
4.00E+00
3.00E+00
2.00E+00
1.00E+00
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

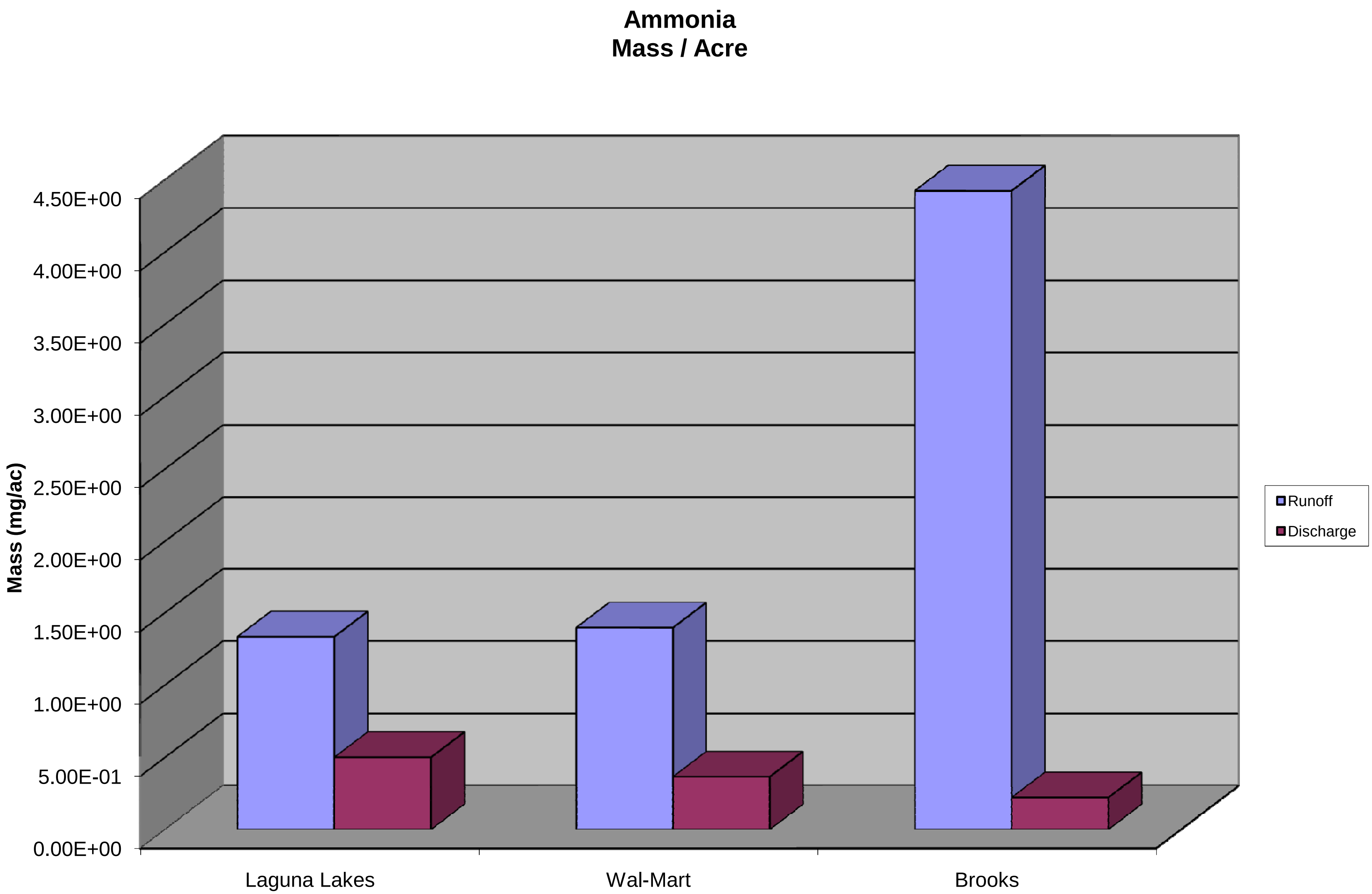

Total Kjeldahl Nitrogen
Concentration
Concentrantion (mg/L as N)
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

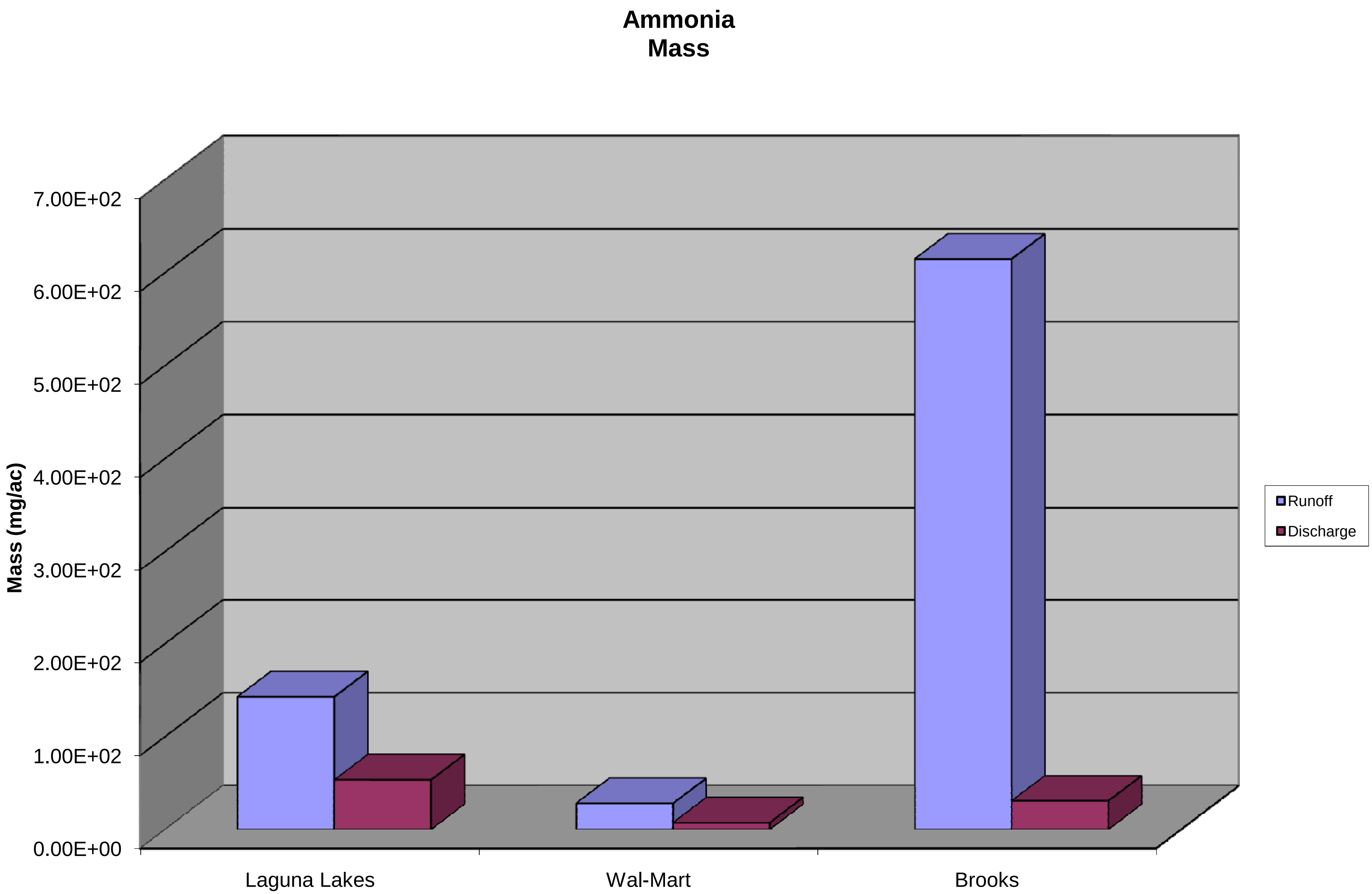

Total Kjeldahl Nitrogen
Mass / Acre
Mass (mg/ac)
1.40E+01
1.20E+01
1.00E+01
8.00E+00
6.00E+00
4.00E+00
2.00E+00
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

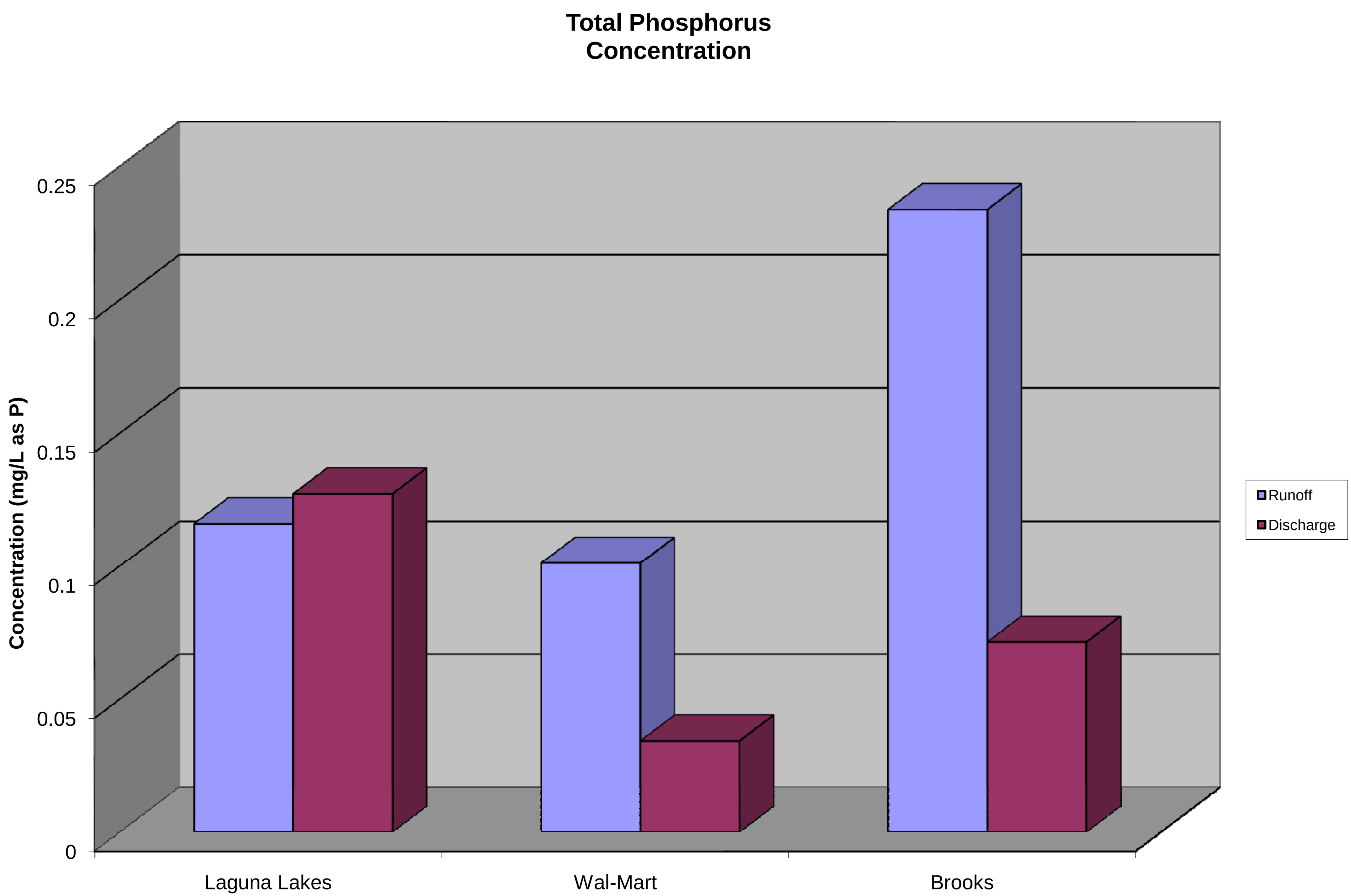

Total Kjeldahl Nitrogen
Mass
Mass (mg/ac)
2.00E+03
1.80E+03
1.60E+03
1.40E+03
1.20E+03
1.00E+03
8.00E+02
6.00E+02
4.00E+02
2.00E+02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

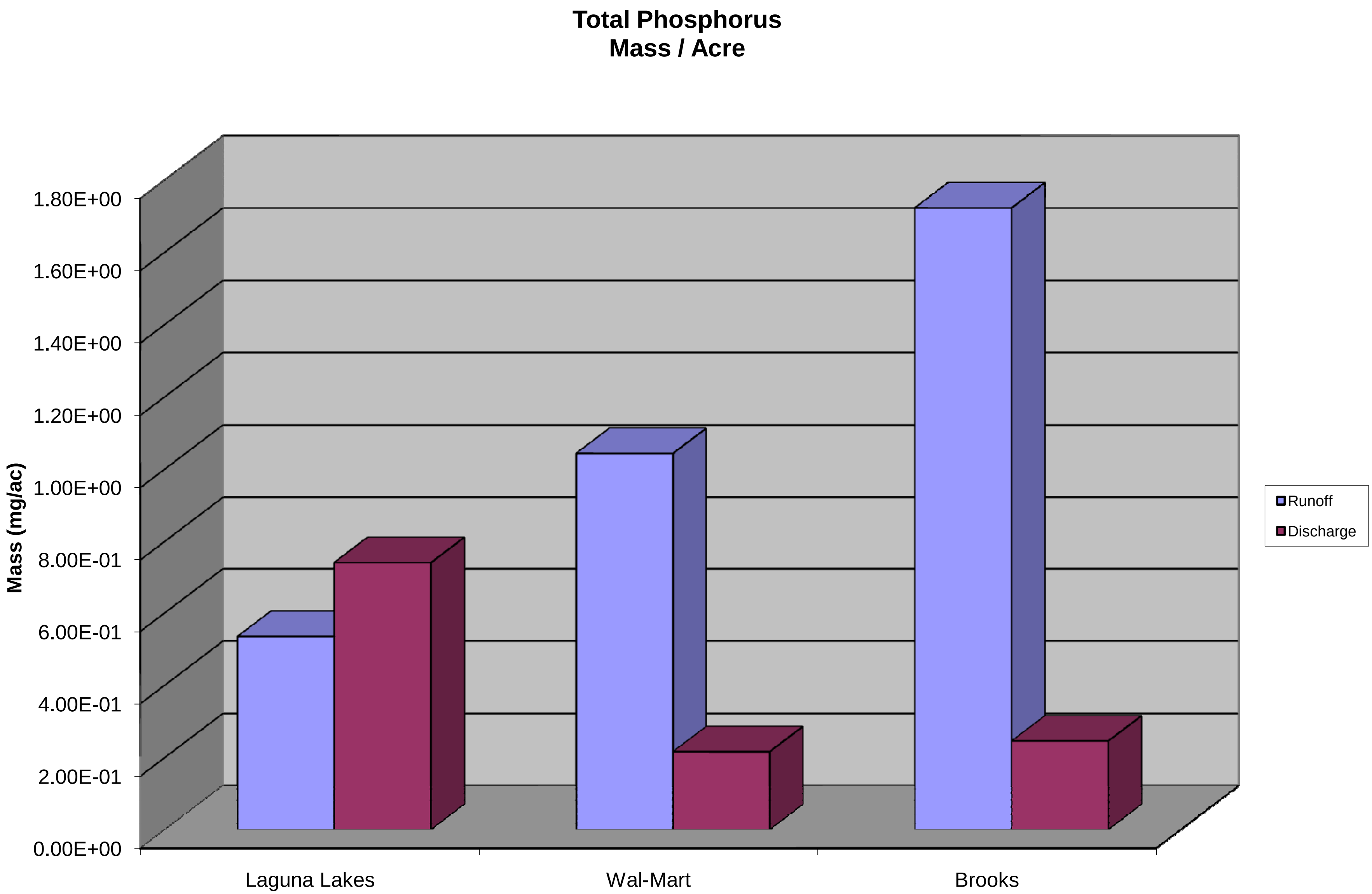


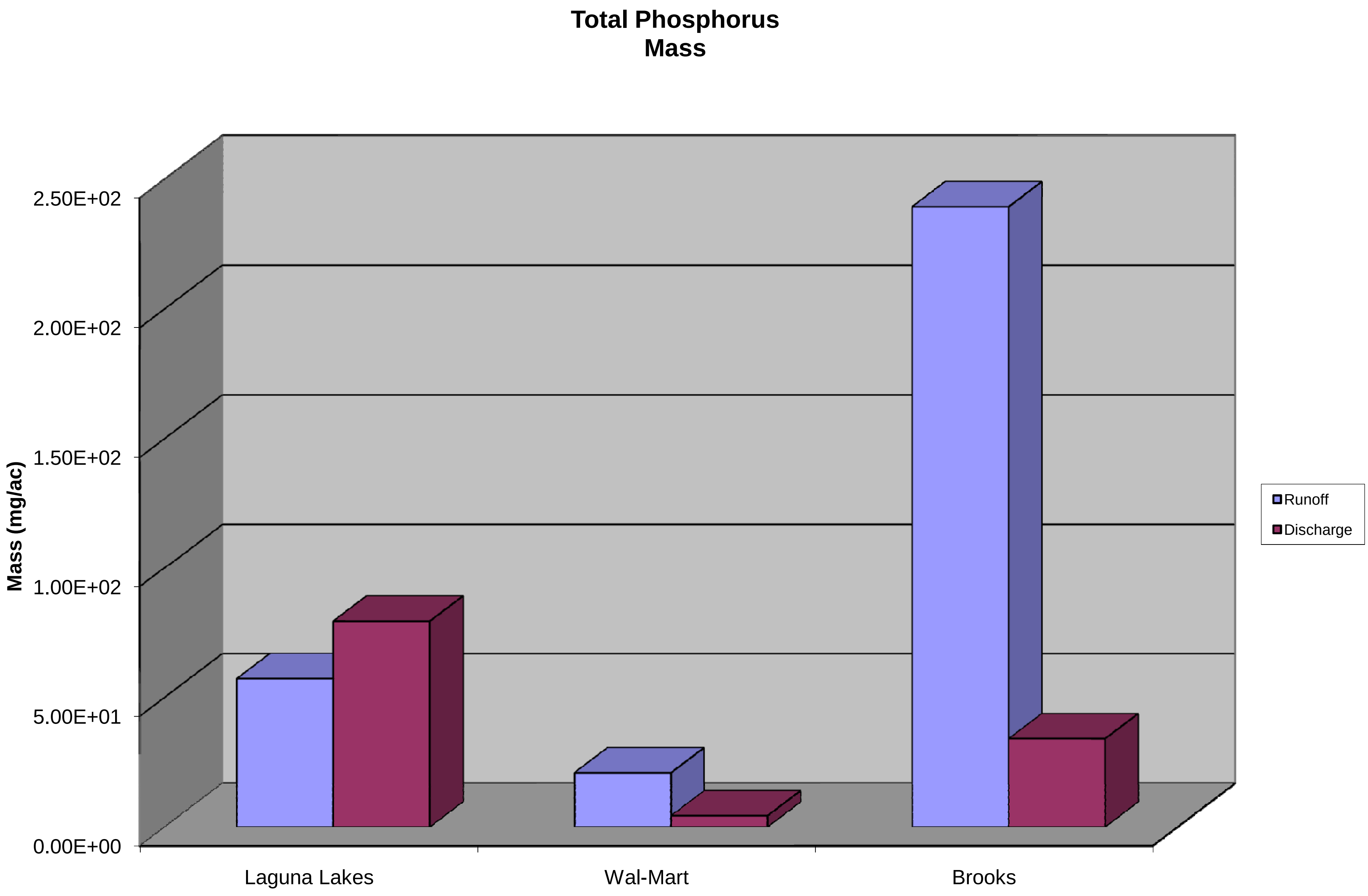
Ammonia
Concentration
Concentration (mg/L as N)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Ammonia
Mass / Acre
Mass (mg/ac)
4.50E+00
4.00E+00
3.50E+00
3.00E+00
2.50E+00
2.00E+00
1.50E+00
1.00E+00
5.00E-01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

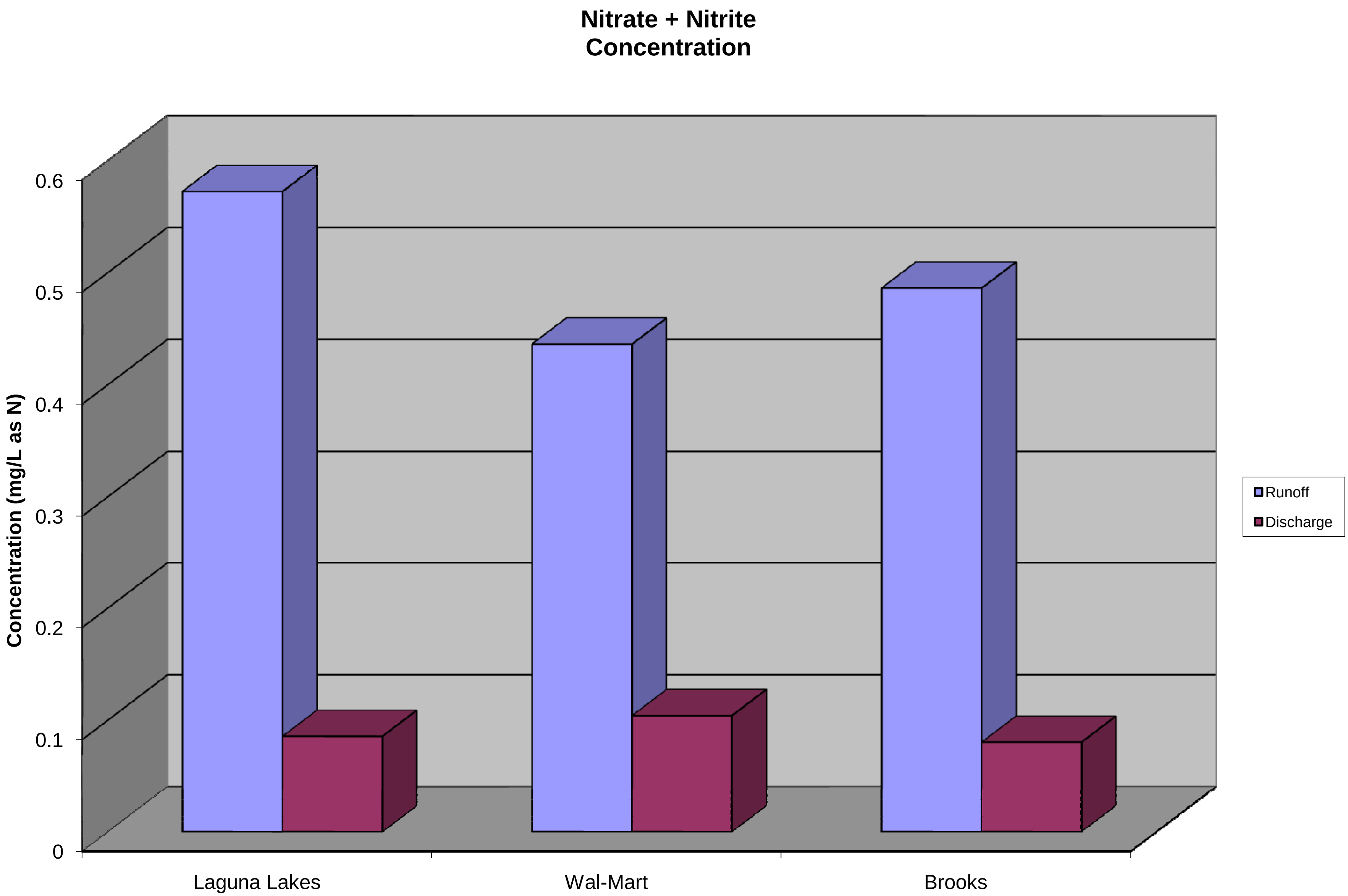

Ammonia
Mass
Mass (mg/ac)
7.00E+02
6.00E+02
5.00E+02
4.00E+02
3.00E+02
2.00E+02
1.00E+02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Total Phosphorus
Concentration
Concentration (mg/L as P)
0.25
0.2
0.15
0.1
0.05
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

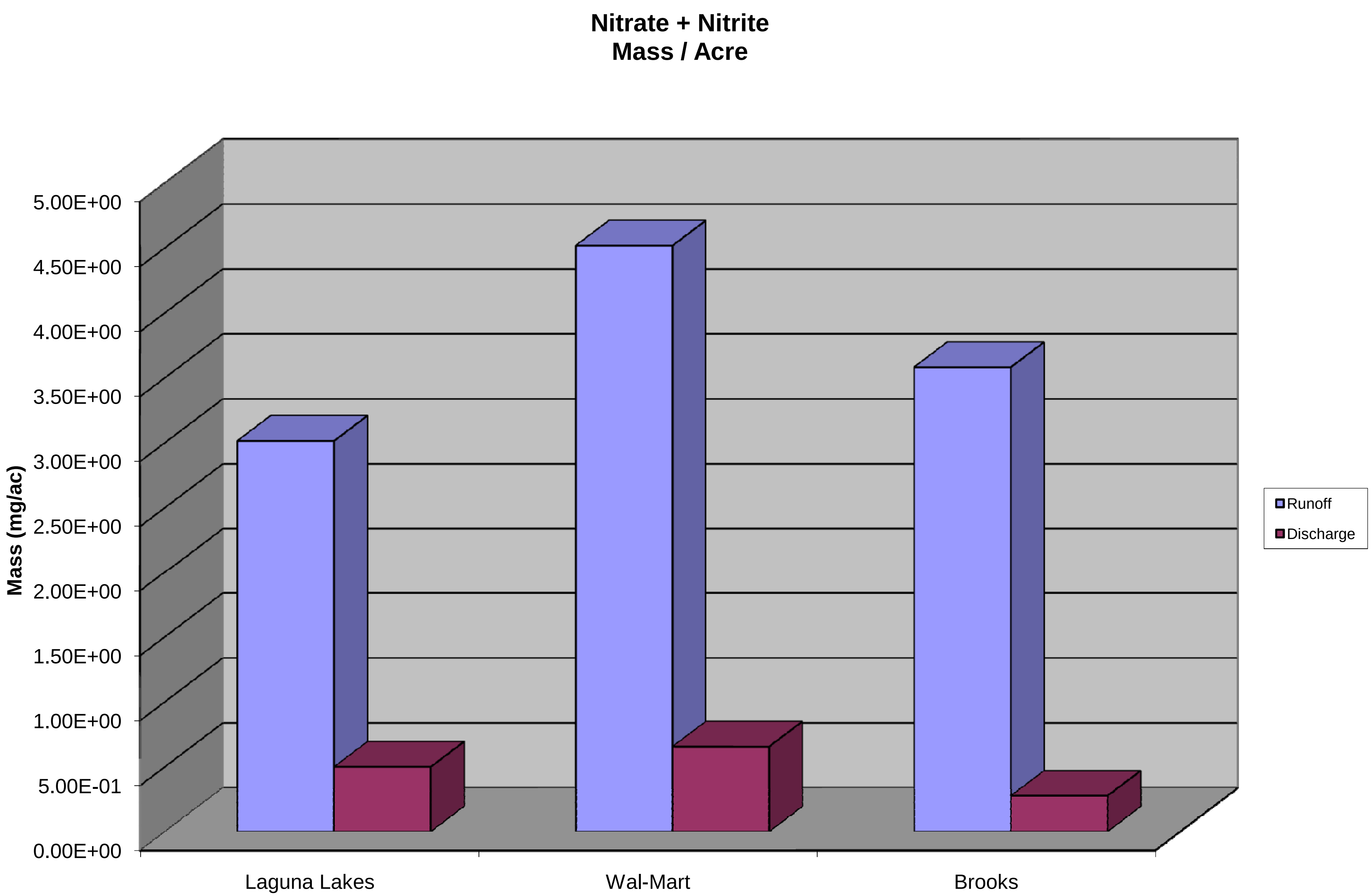

Total Phosphorus
Mass / Acre
Mass (mg/ac)
1.80E+00
1.60E+00
1.40E+00
1.20E+00
1.00E+00
8.00E-01
6.00E-01
4.00E-01
2.00E-01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

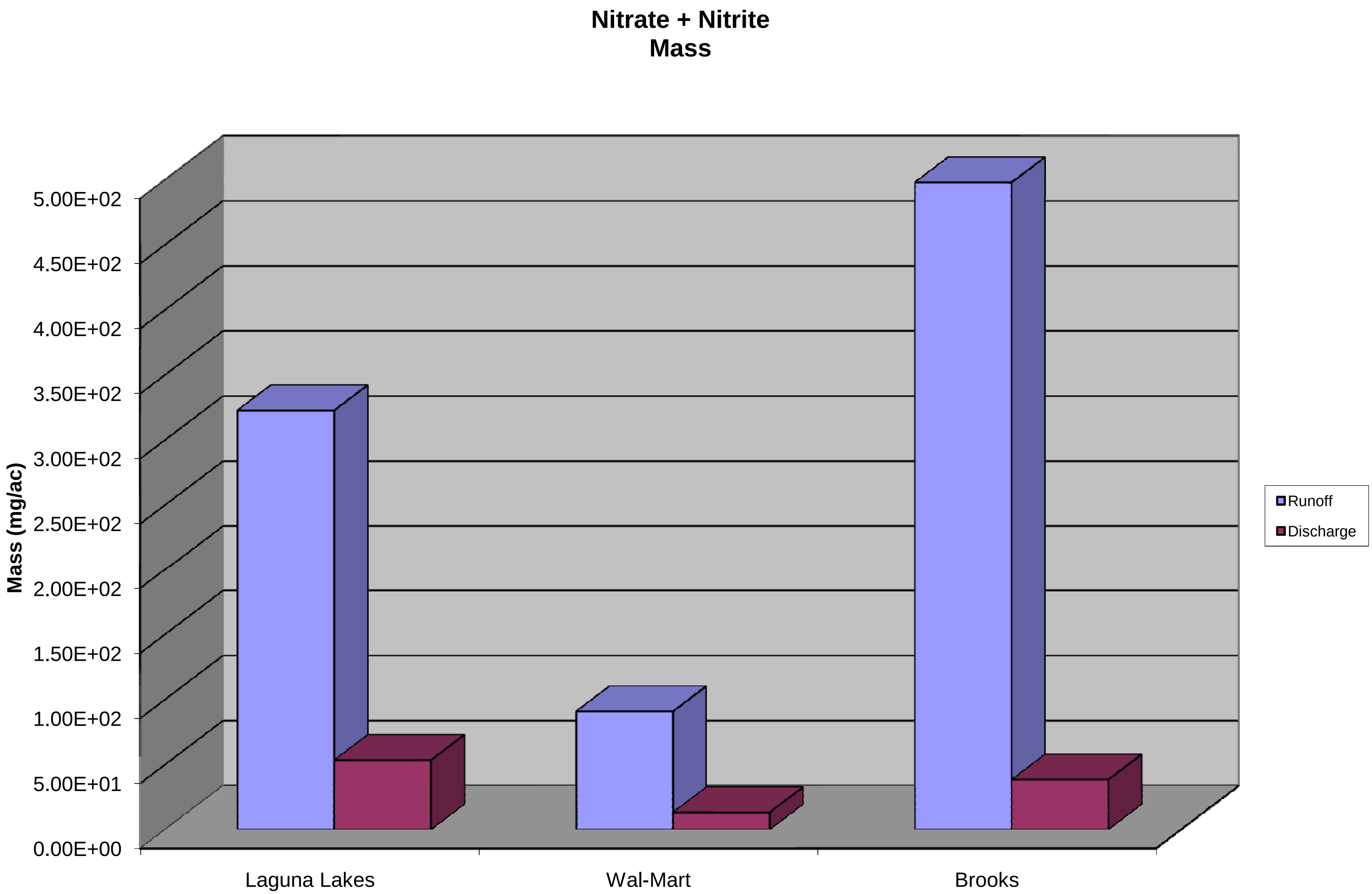


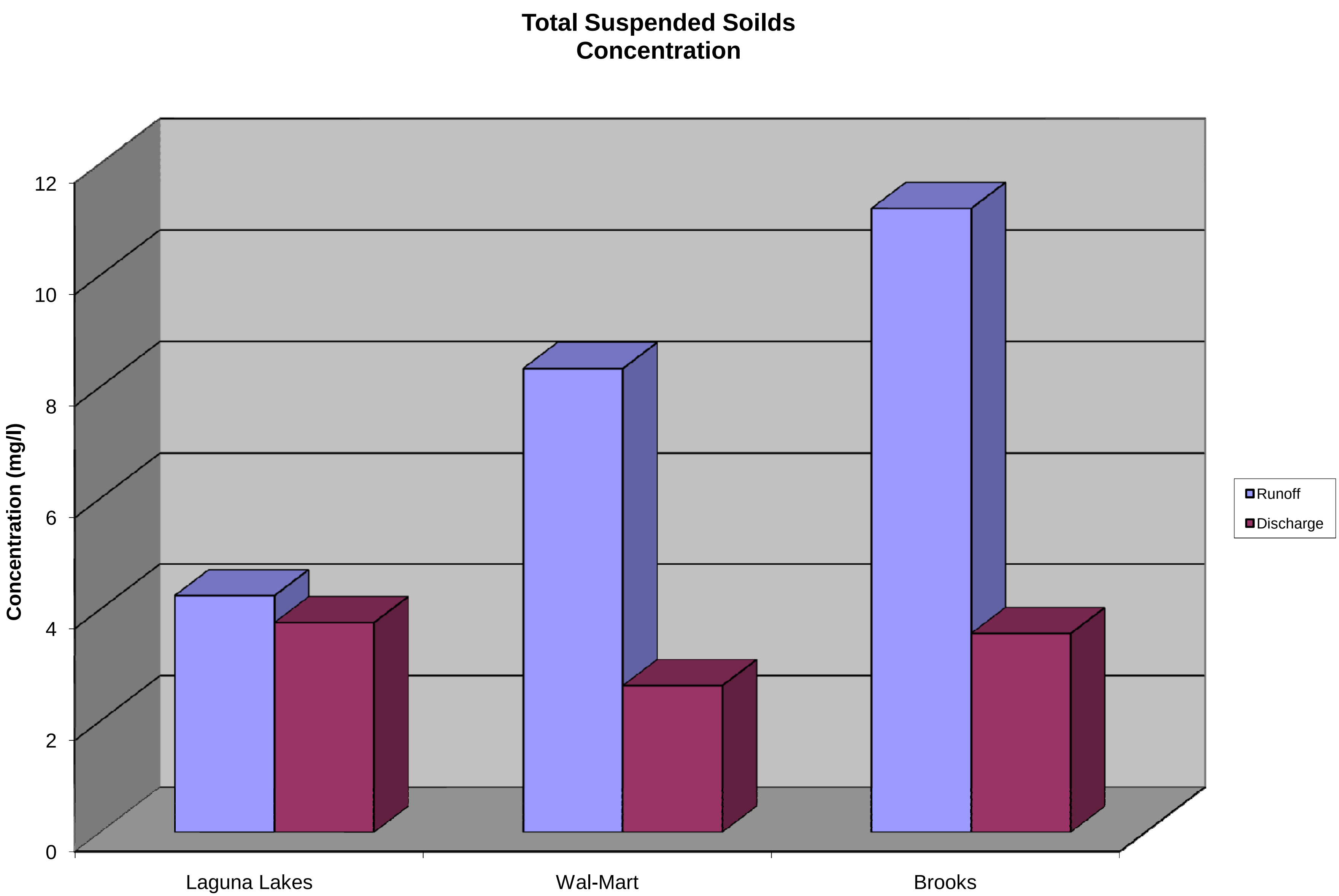
Total Phosphorus
Mass
Mass (mg/ac)
2.50E+02
2.00E+02
1.50E+02
1.00E+02
5.00E+01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge



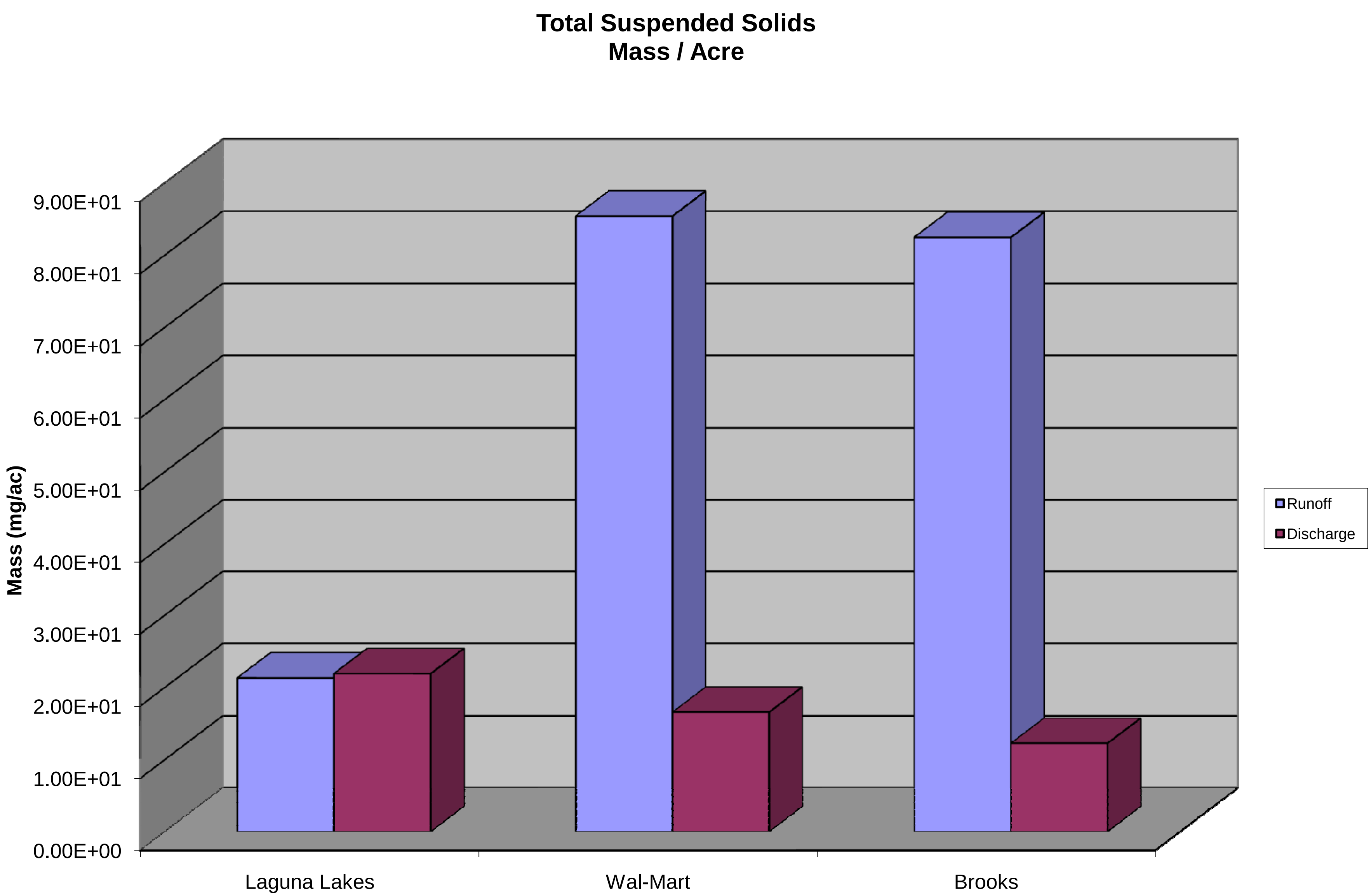
Nitrate + Nitrite
Concentration
Concentration (mg/L as N)
0.6
0.5
0.4
0.3
0.2
0.1
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

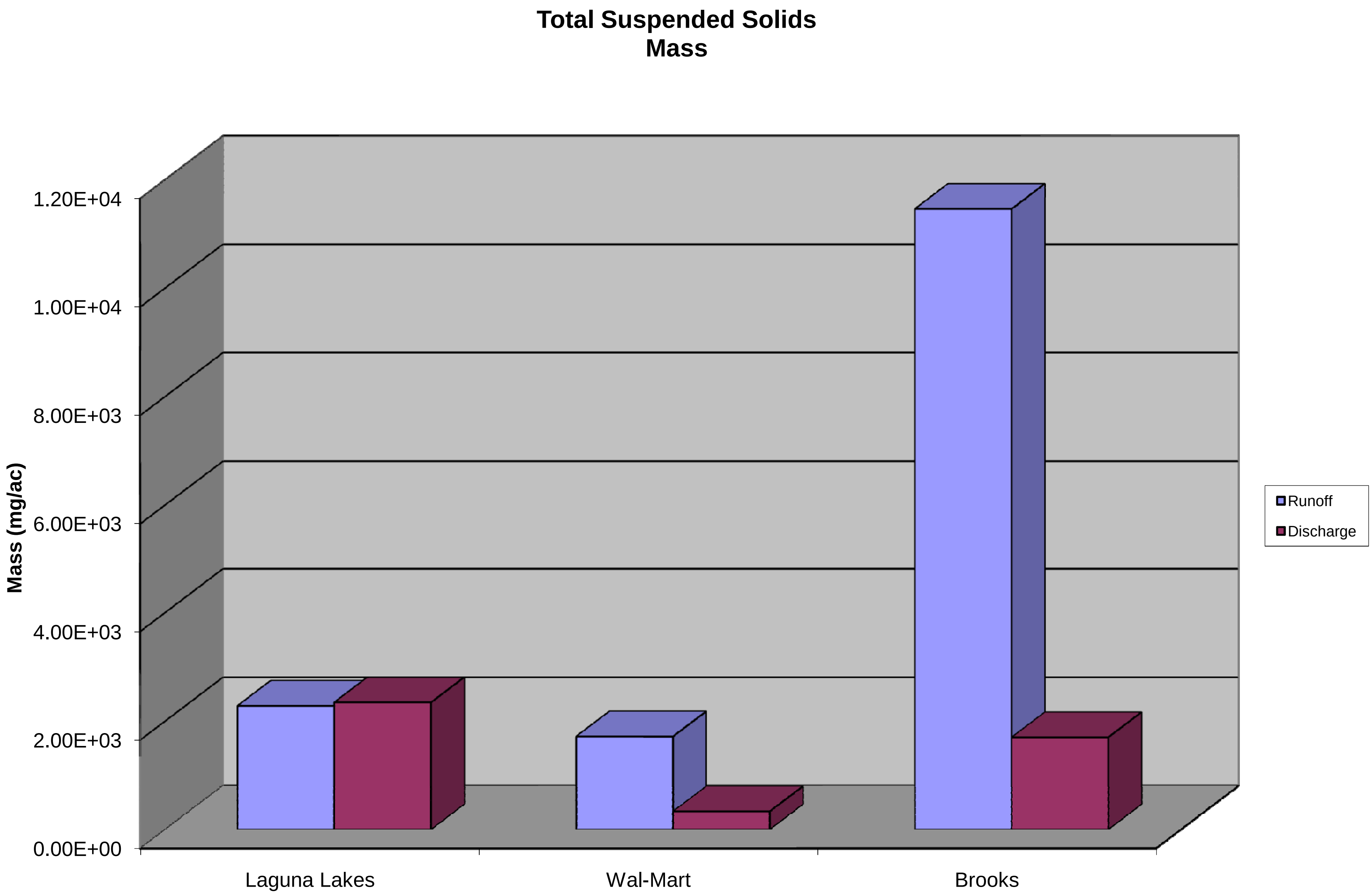

Nitrate + Nitrite
Mass / Acre
Mass (mg/ac)
5.00E+00
4.50E+00
4.00E+00
3.50E+00
3.00E+00
2.50E+00
2.00E+00
1.50E+00
1.00E+00
5.00E-01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Nitrate + Nitrite
Mass
Mass (mg/ac)
5.00E+02
4.50E+02
4.00E+02
3.50E+02
3.00E+02
2.50E+02
2.00E+02
1.50E+02
1.00E+02
5.00E+01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

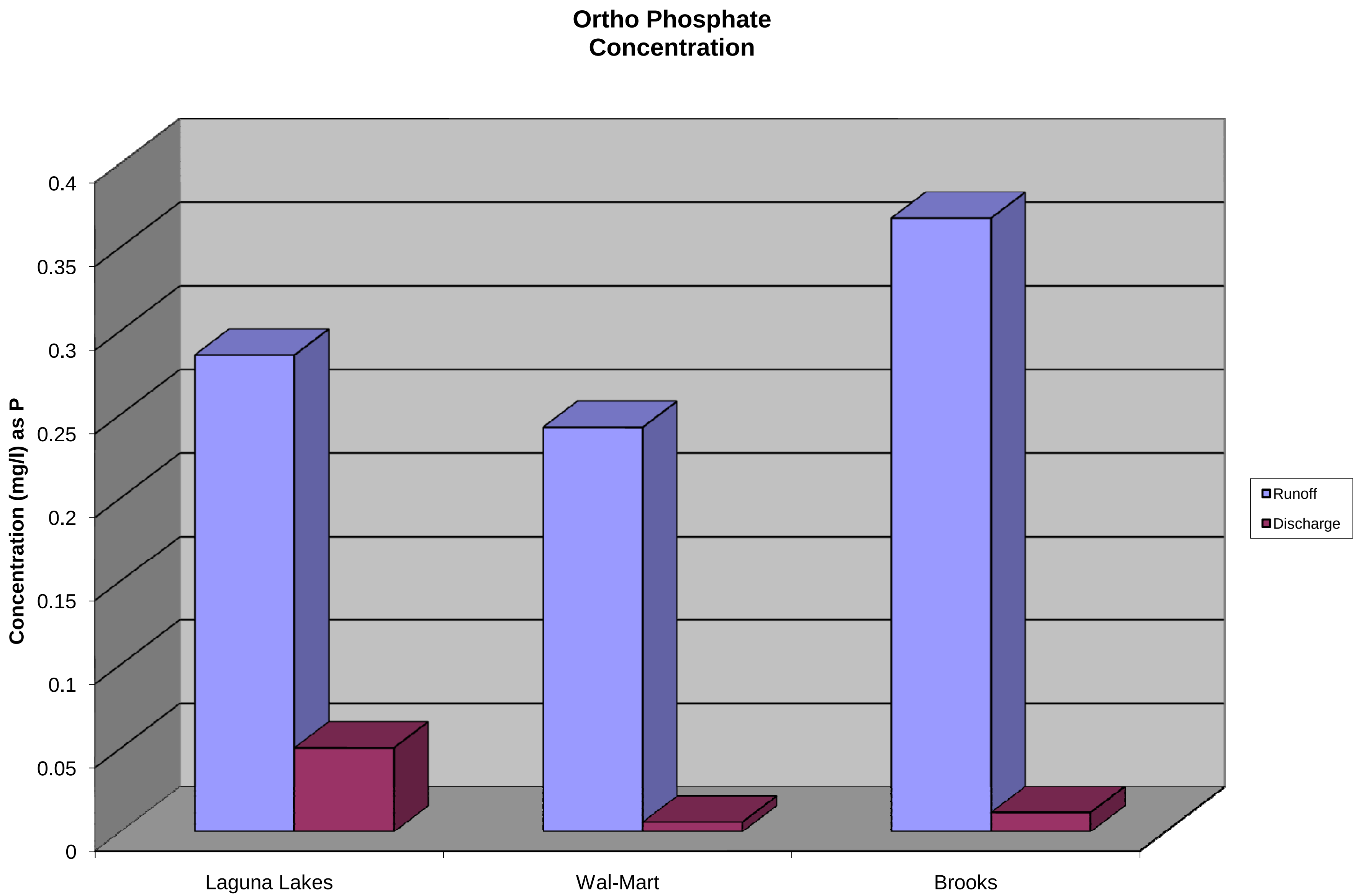


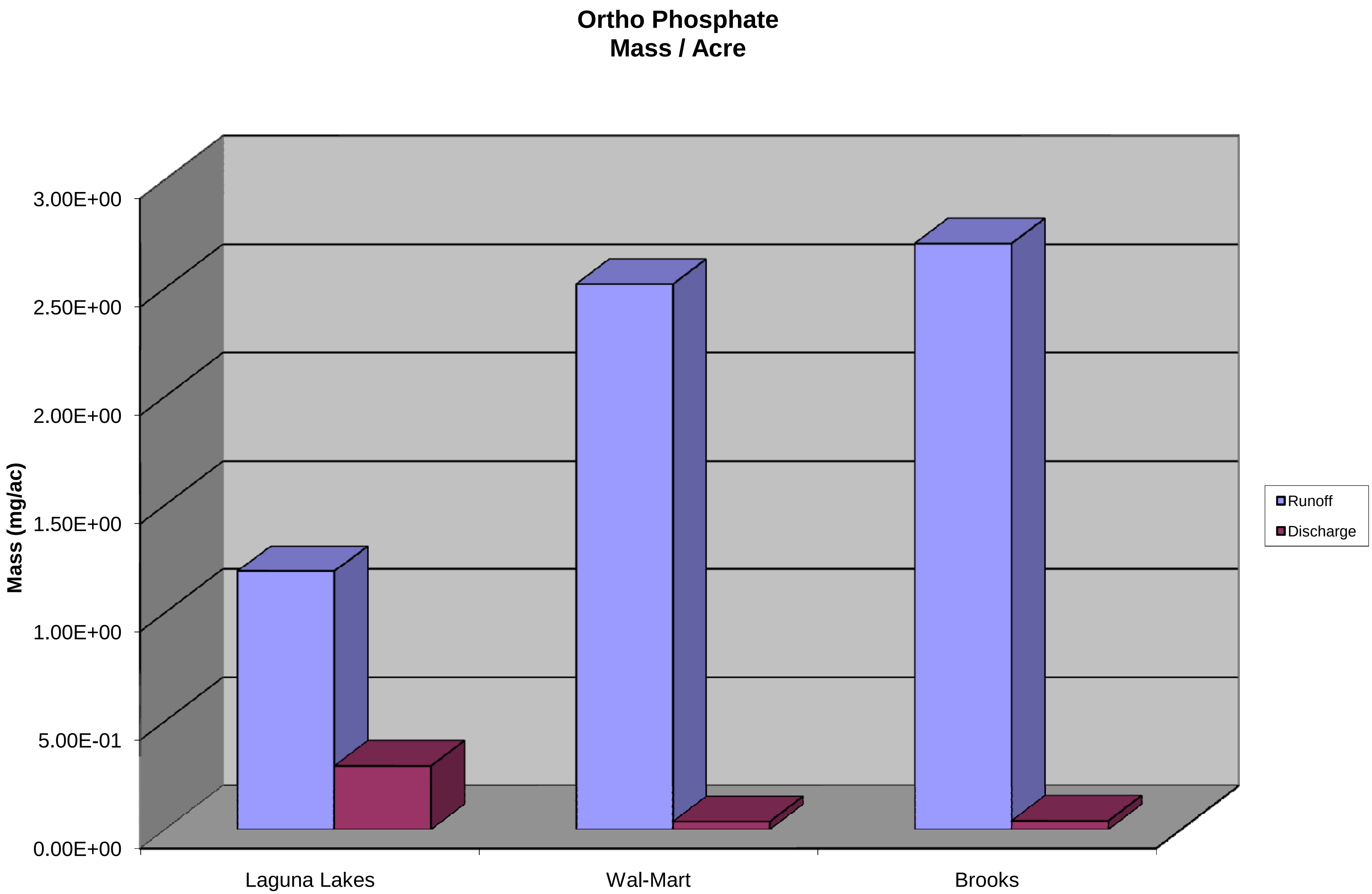
Total Suspended Soilds
Concentration
Concentration (mg/l)
0
2
4
6
8
10
12
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

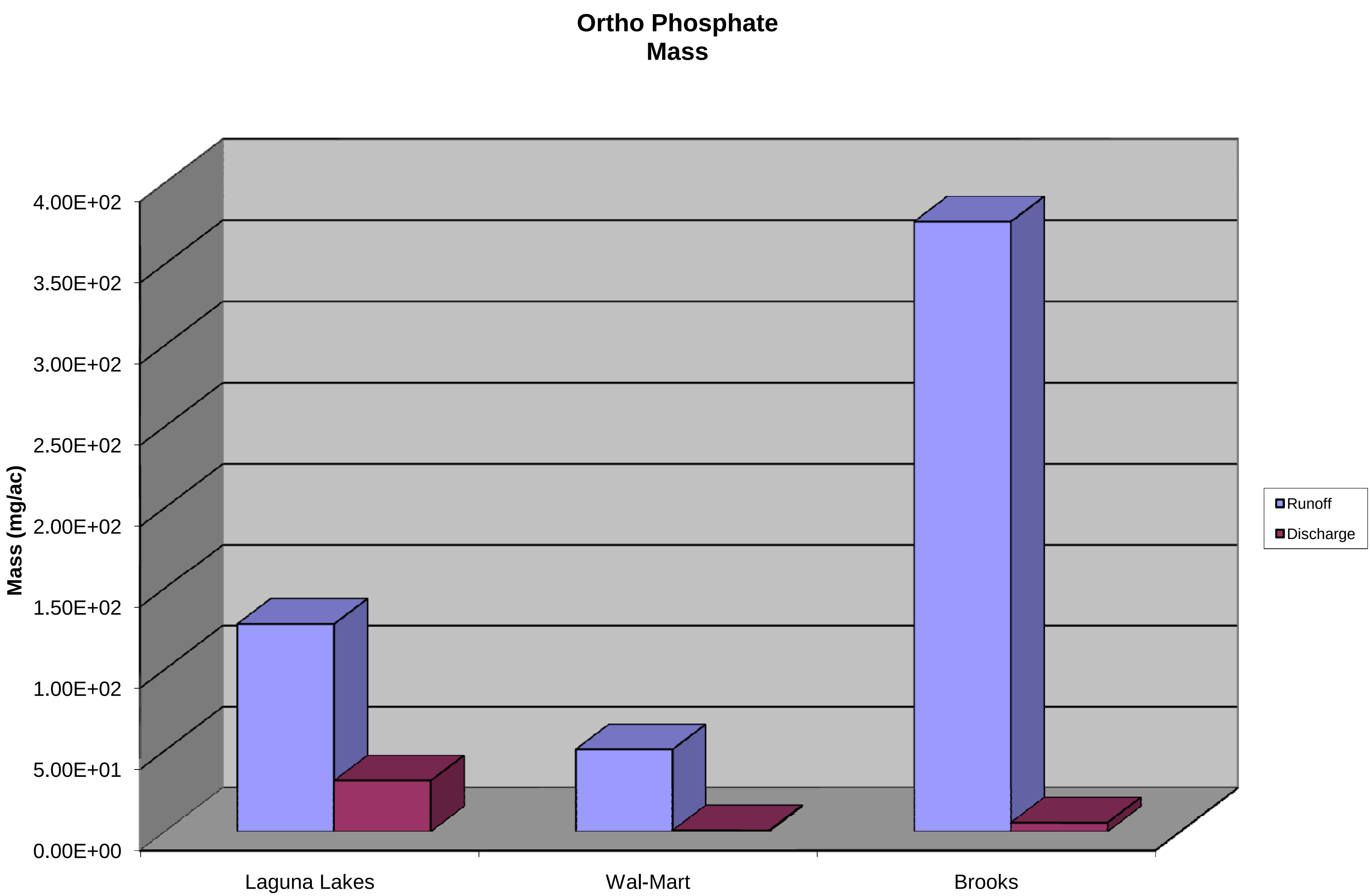

Total Suspended Solids
Mass / Acre
Mass (mg/ac)
9.00E+01
8.00E+01
7.00E+01
6.00E+01
5.00E+01
4.00E+01
3.00E+01
2.00E+01
1.00E+01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge



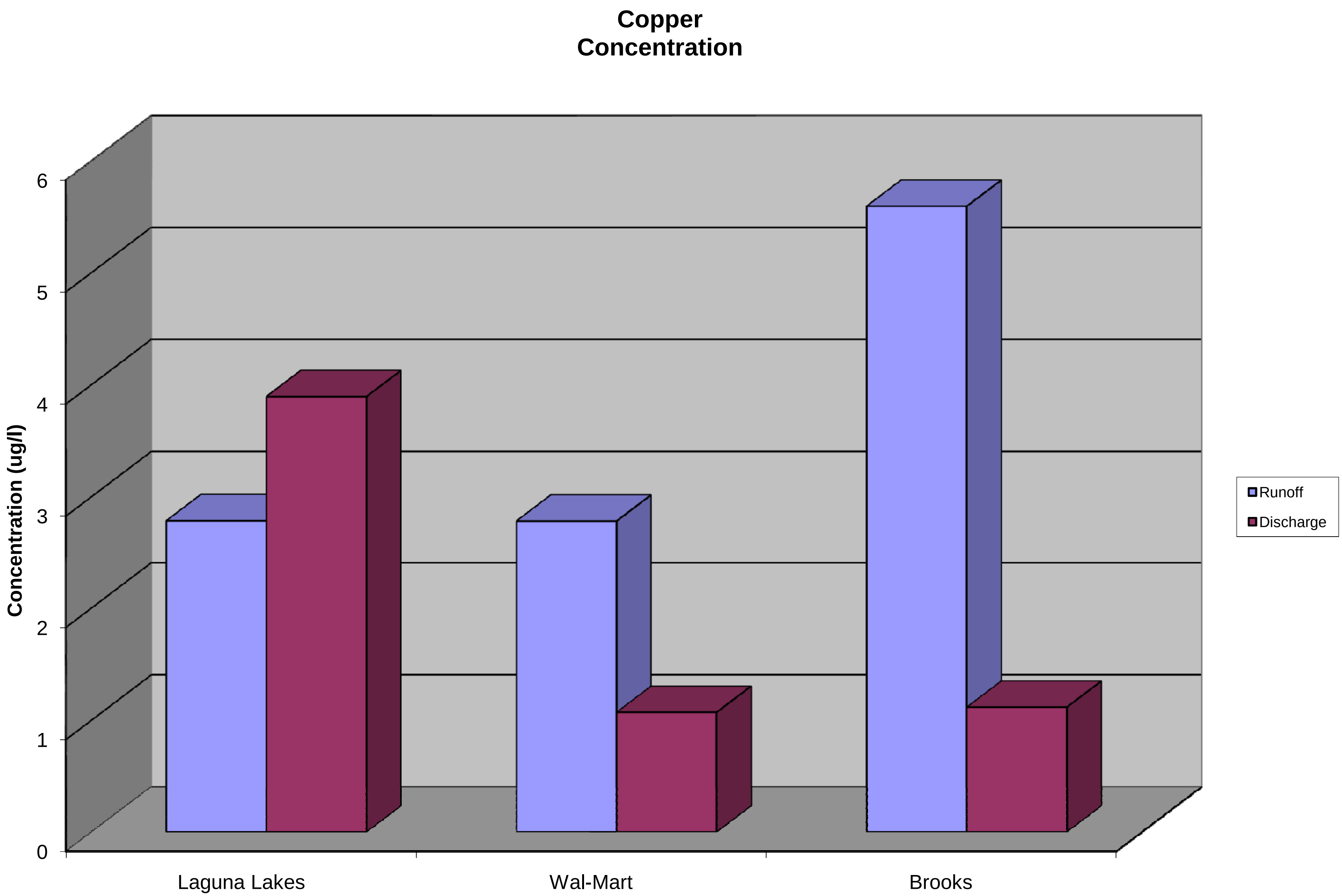
Total Suspended Solids
Mass
Mass (mg/ac)
1.20E+04
1.00E+04
8.00E+03
6.00E+03
4.00E+03
2.00E+03
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Ortho Phosphate
Concentration
Concentration (mg/l) as P
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

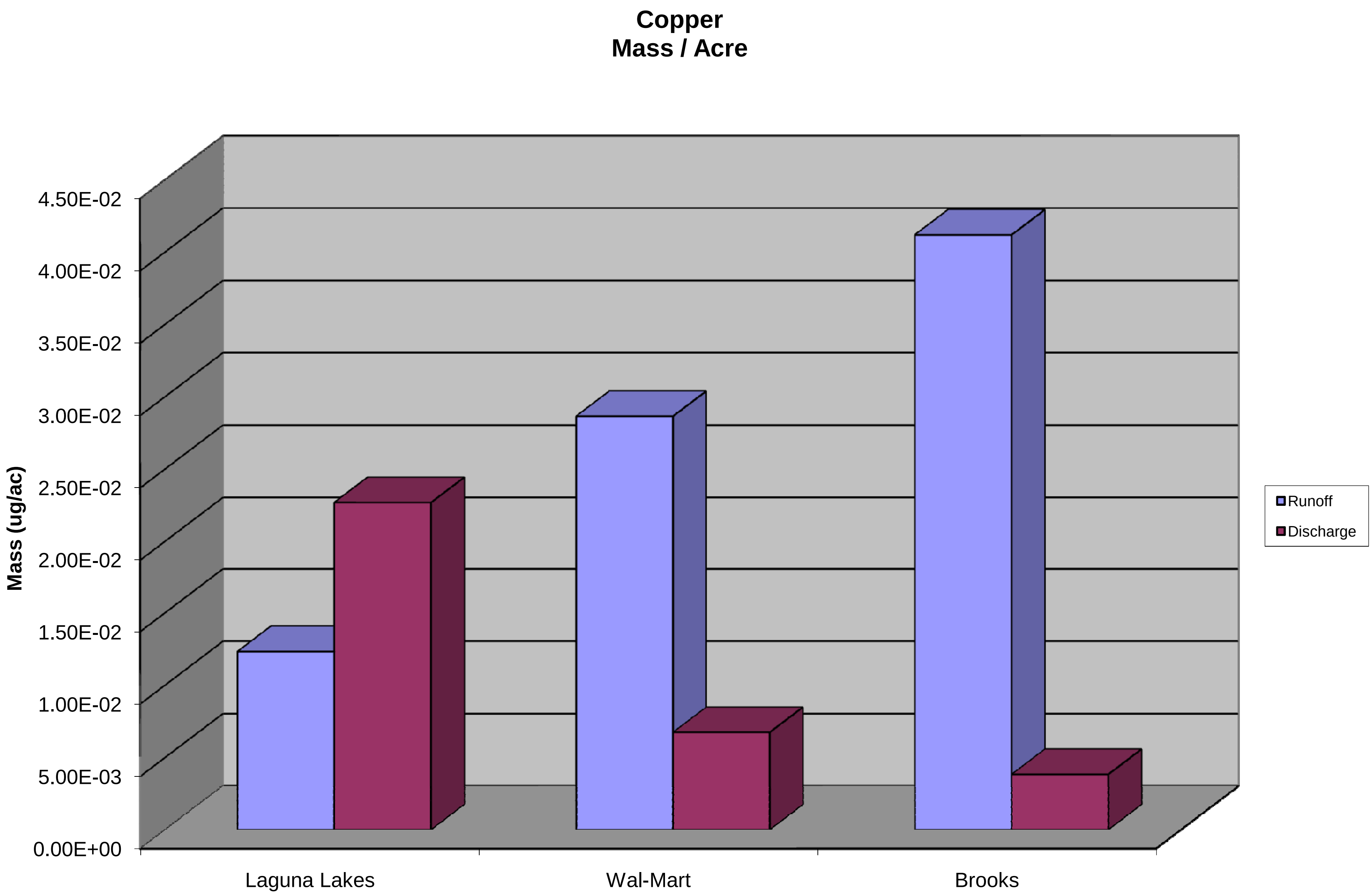

Ortho Phosphate
Mass / Acre
Mass (mg/ac)
3.00E+00
2.50E+00
2.00E+00
1.50E+00
1.00E+00
5.00E-01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

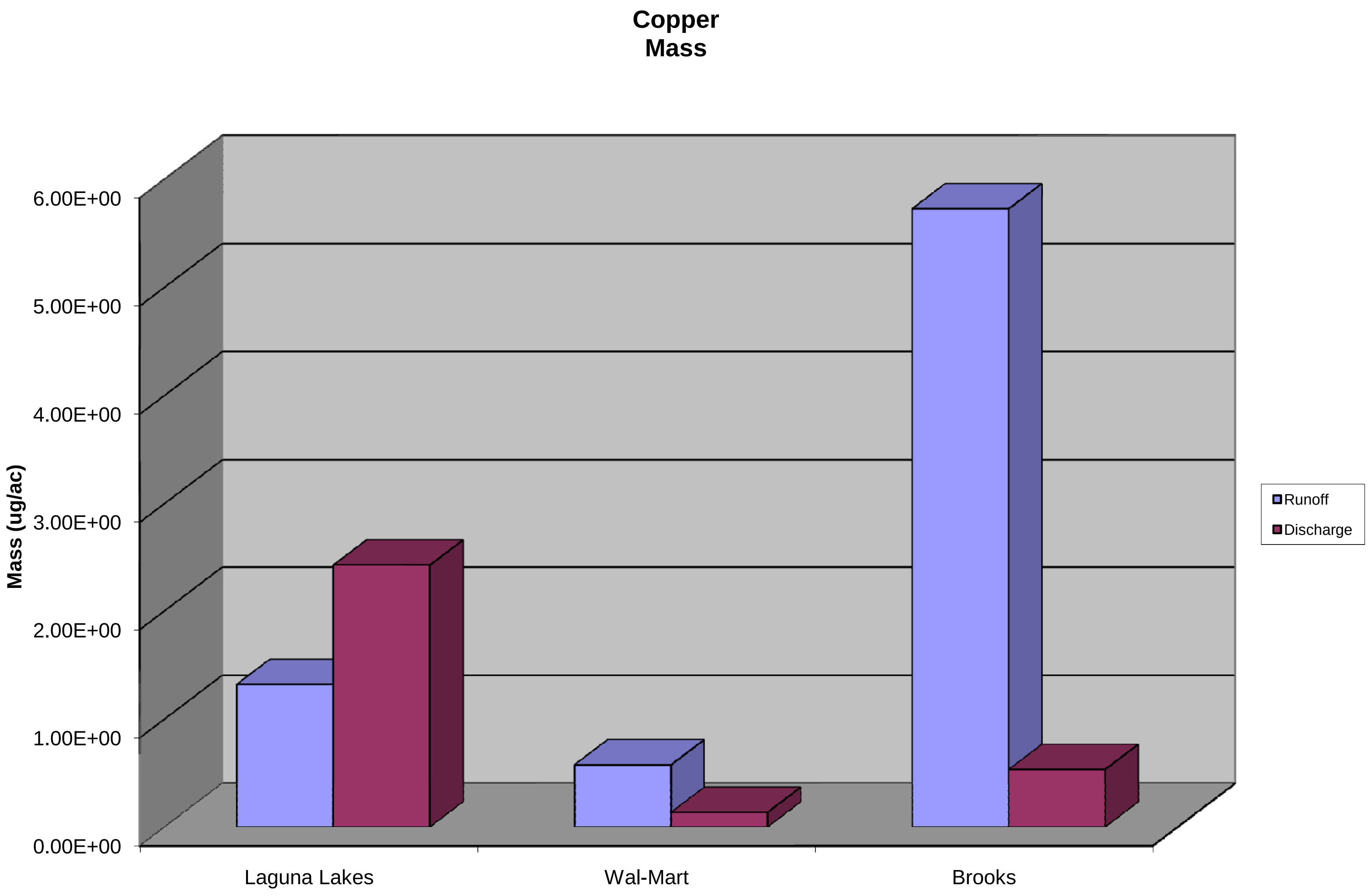


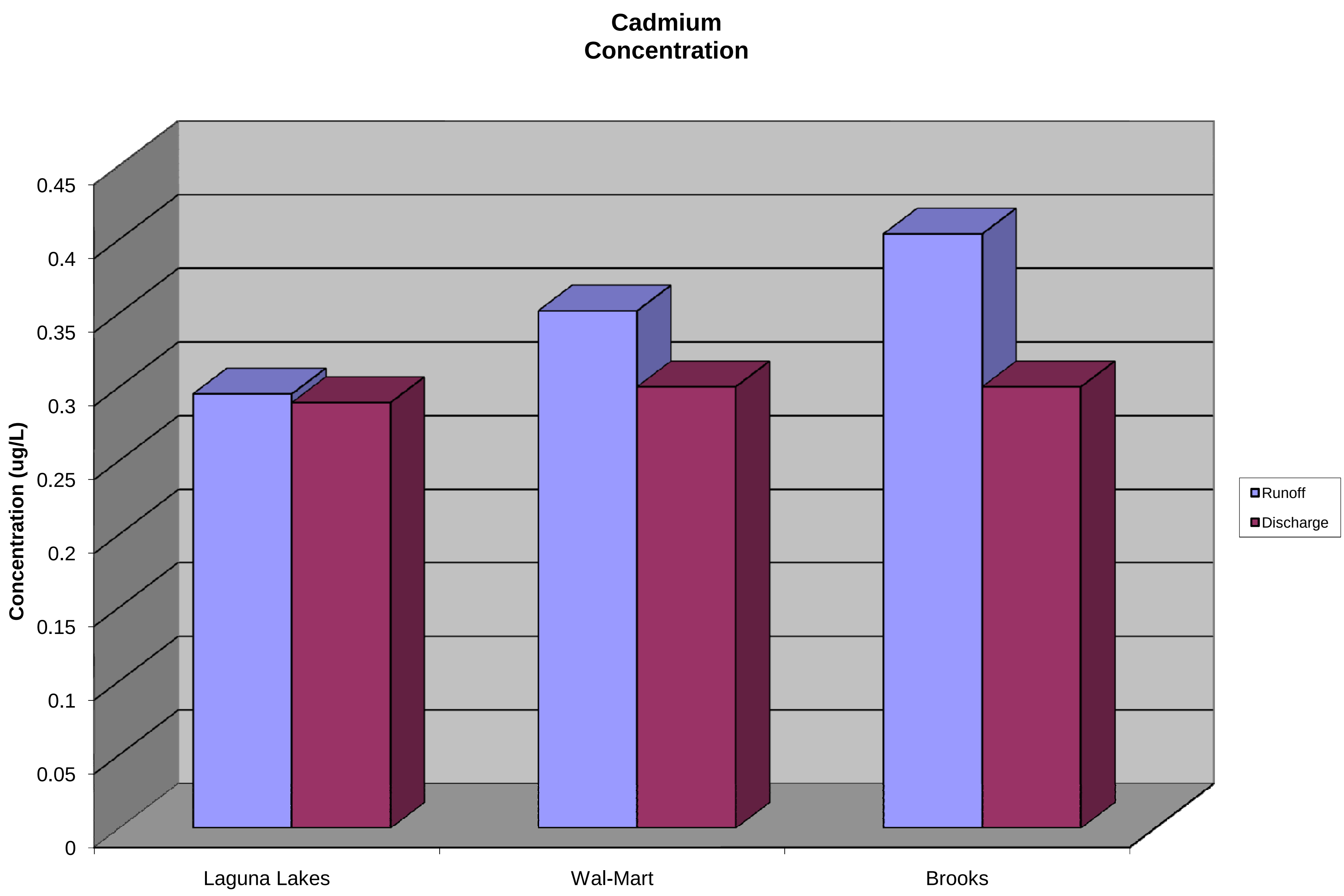
Ortho Phosphate
Mass
Mass (mg/ac)
4.00E+02
3.50E+02
3.00E+02
2.50E+02
2.00E+02
1.50E+02
1.00E+02
5.00E+01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

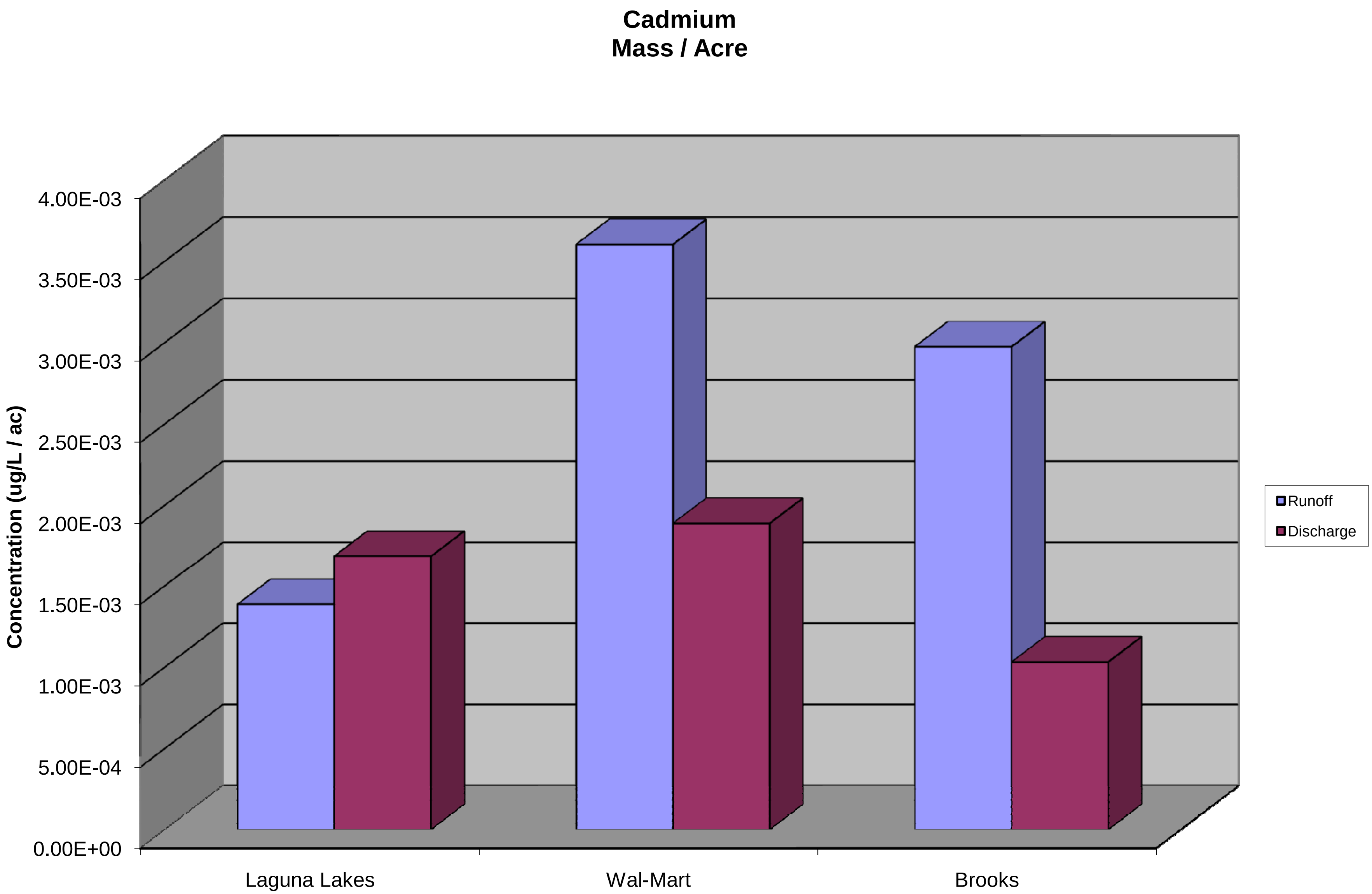


Copper
Concentration
Concentration (ug/l)
0
1
2
3
4
5
6
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

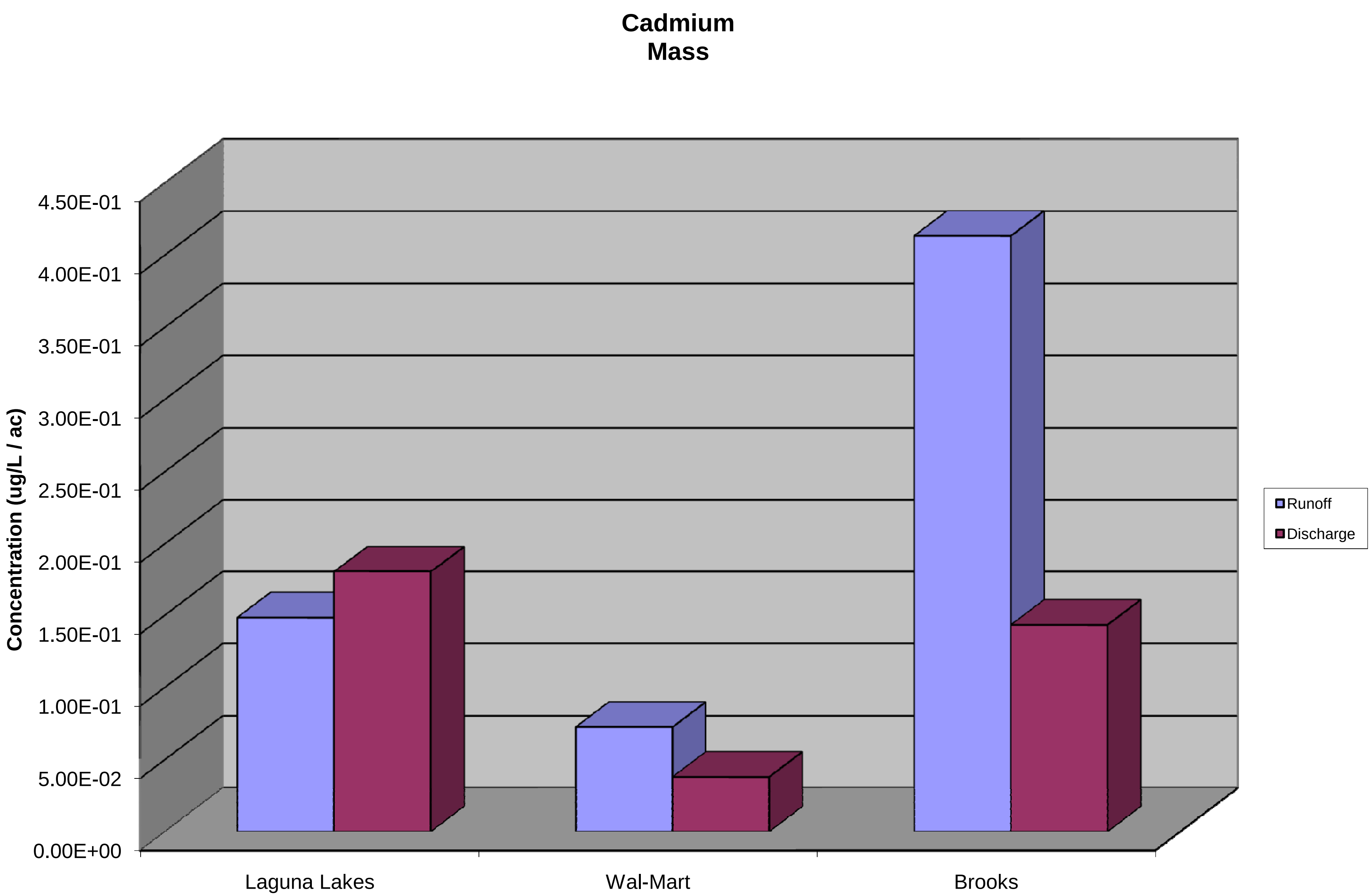

Copper
Mass / Acre
Mass (ug/ac)
4.50E-02
4.00E-02
3.50E-02
3.00E-02
2.50E-02
2.00E-02
1.50E-02
1.00E-02
5.00E-03
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

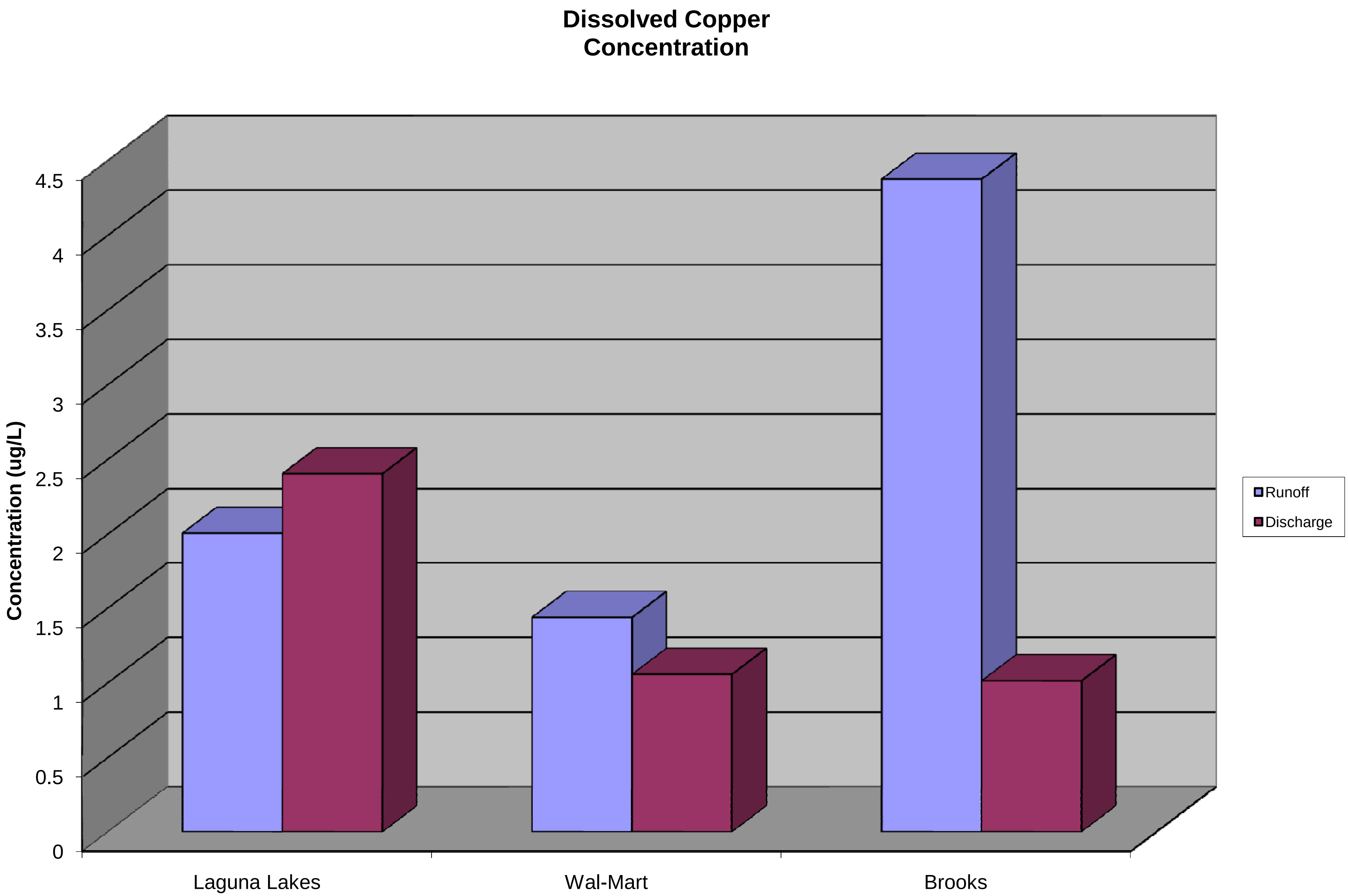

Copper
Mass
Mass (ug/ac)
6.00E+00
5.00E+00
4.00E+00
3.00E+00
2.00E+00
1.00E+00
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

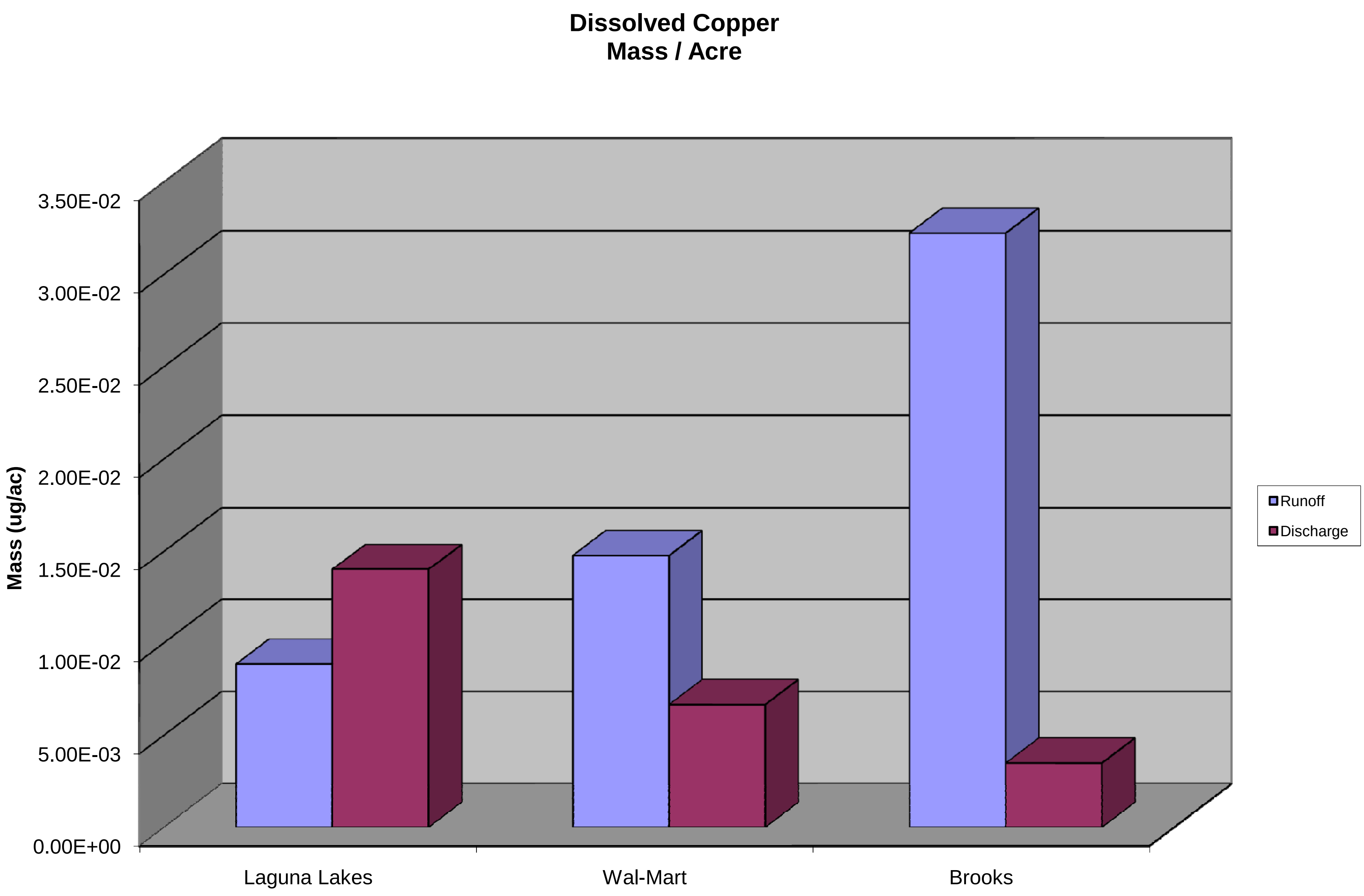

Cadmium
Concentration
Concentration (ug/L)
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

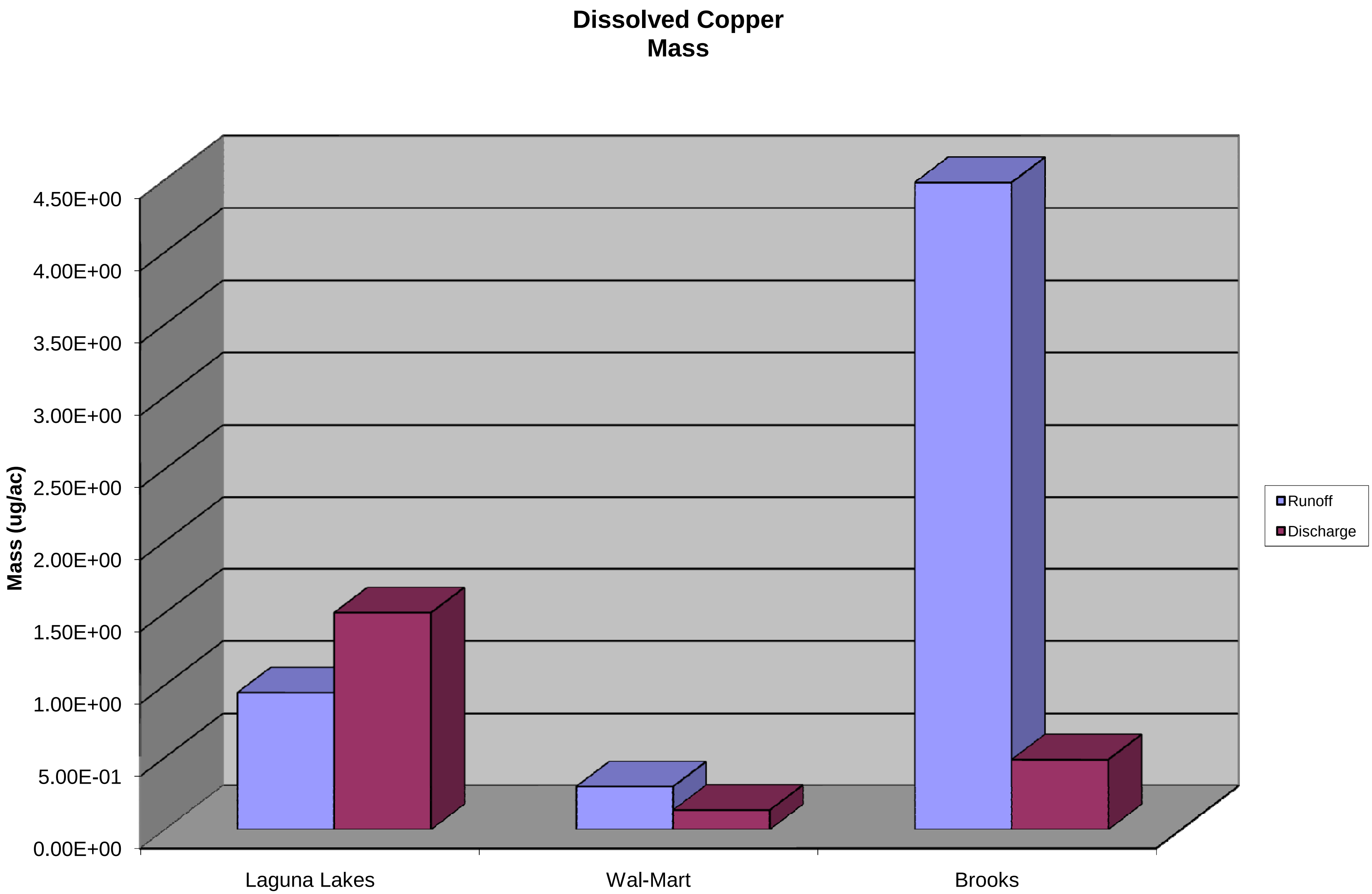


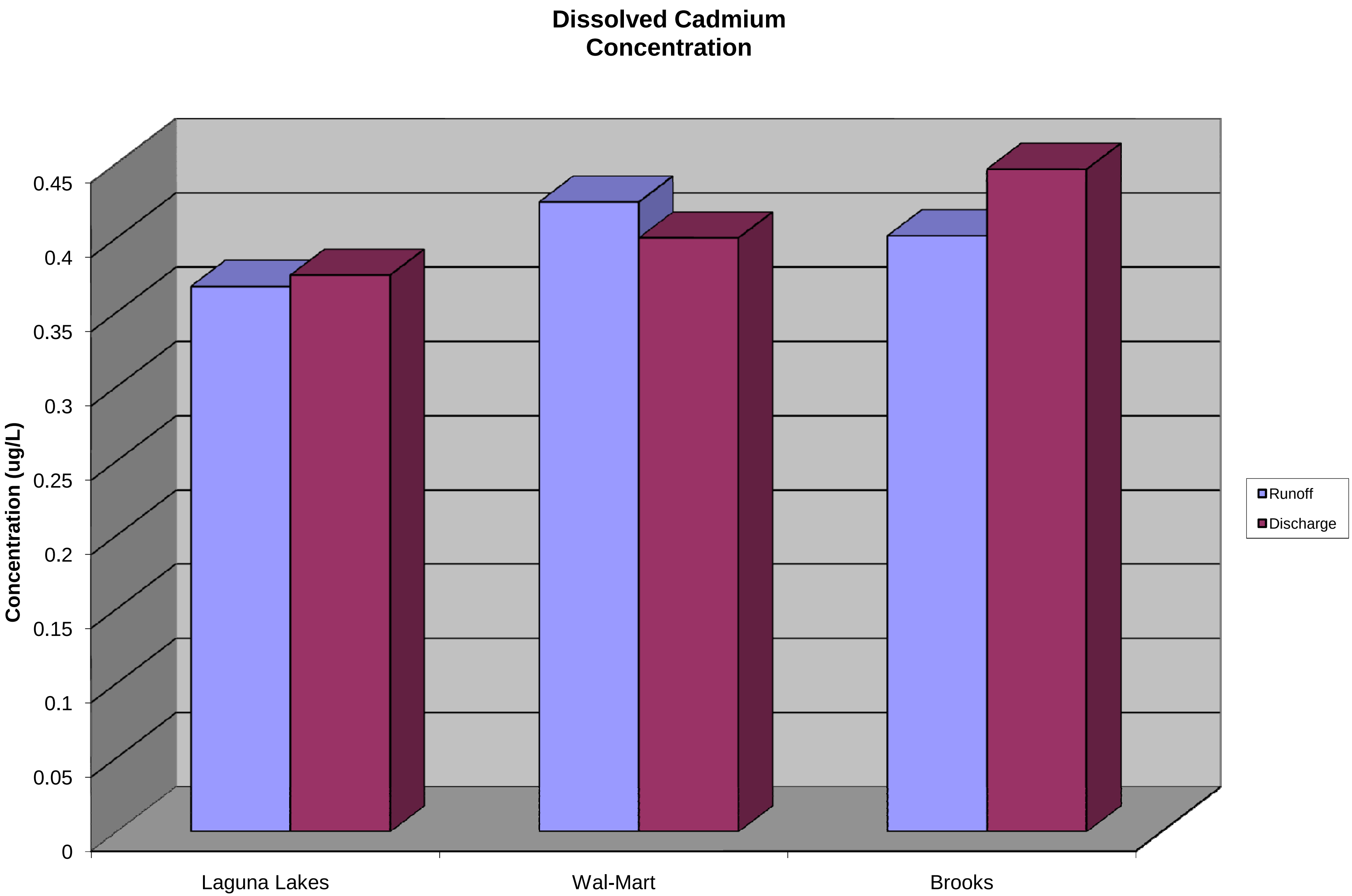
Cadmium
Mass / Acre
Concentration (ug/L / ac)
4.00E-03
3.50E-03
3.00E-03
2.50E-03
2.00E-03
1.50E-03
1.00E-03
5.00E-04
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

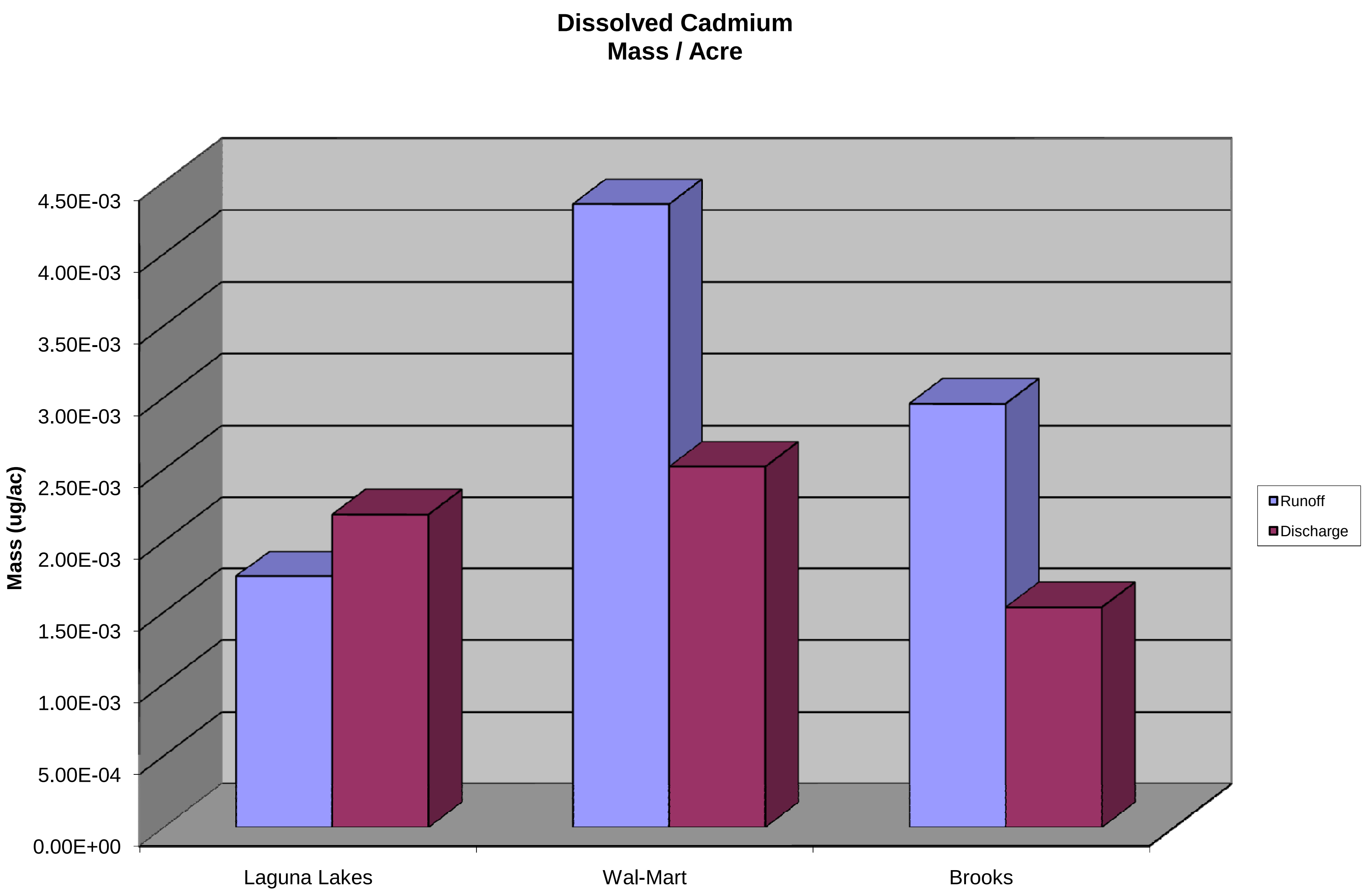

Cadmium
Mass
Concentration (ug/L / ac)
4.50E-01
4.00E-01
3.50E-01
3.00E-01
2.50E-01
2.00E-01
1.50E-01
1.00E-01
5.00E-02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Dissolved Copper
Concentration
Concentration (ug/L)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

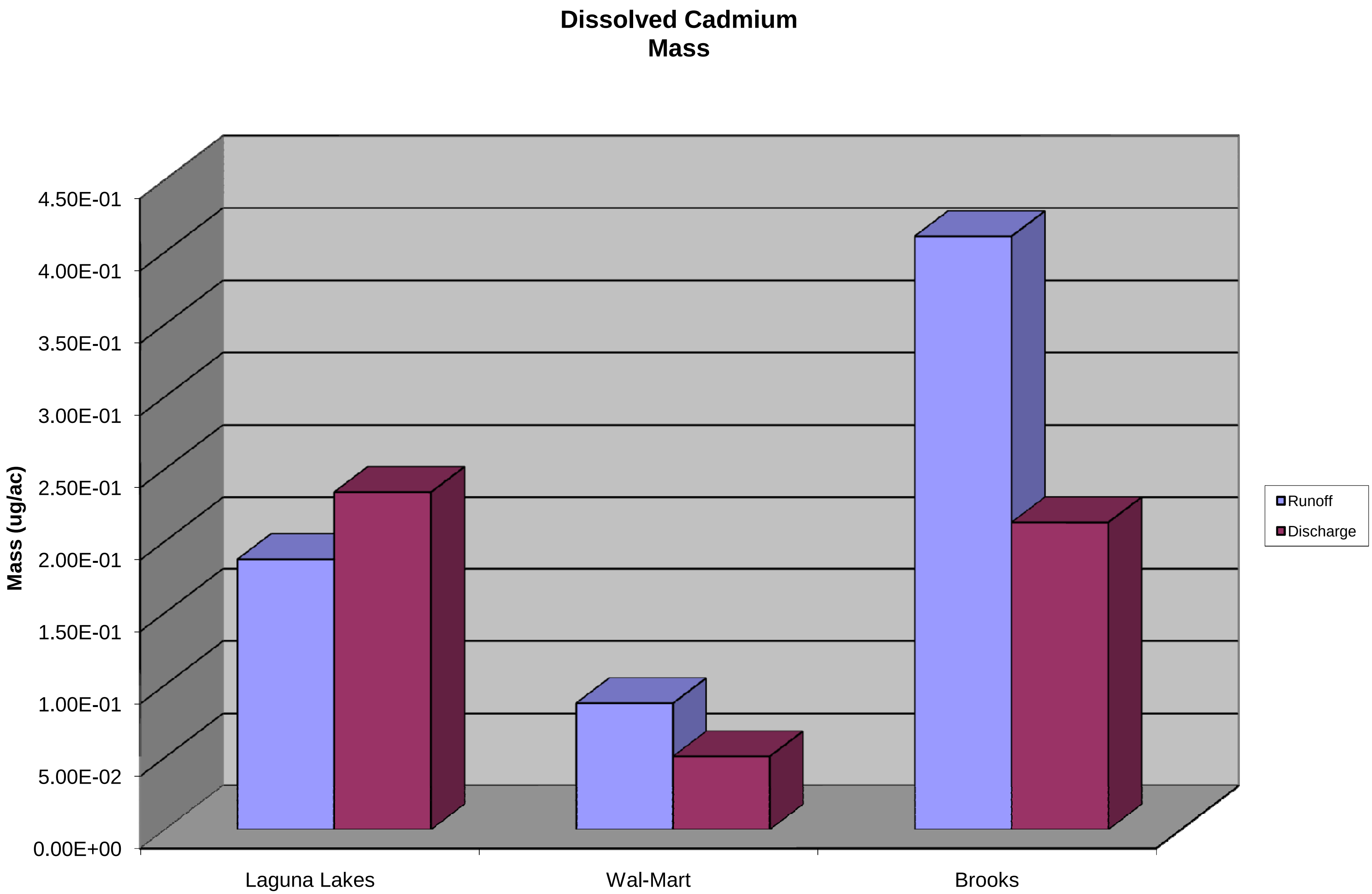

Dissolved Copper
Mass / Acre
Mass (ug/ac)
3.50E-02
3.00E-02
2.50E-02
2.00E-02
1.50E-02
1.00E-02
5.00E-03
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Dissolved Copper
Mass
Mass (ug/ac)
4.50E+00
4.00E+00
3.50E+00
3.00E+00
2.50E+00
2.00E+00
1.50E+00
1.00E+00
5.00E-01
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

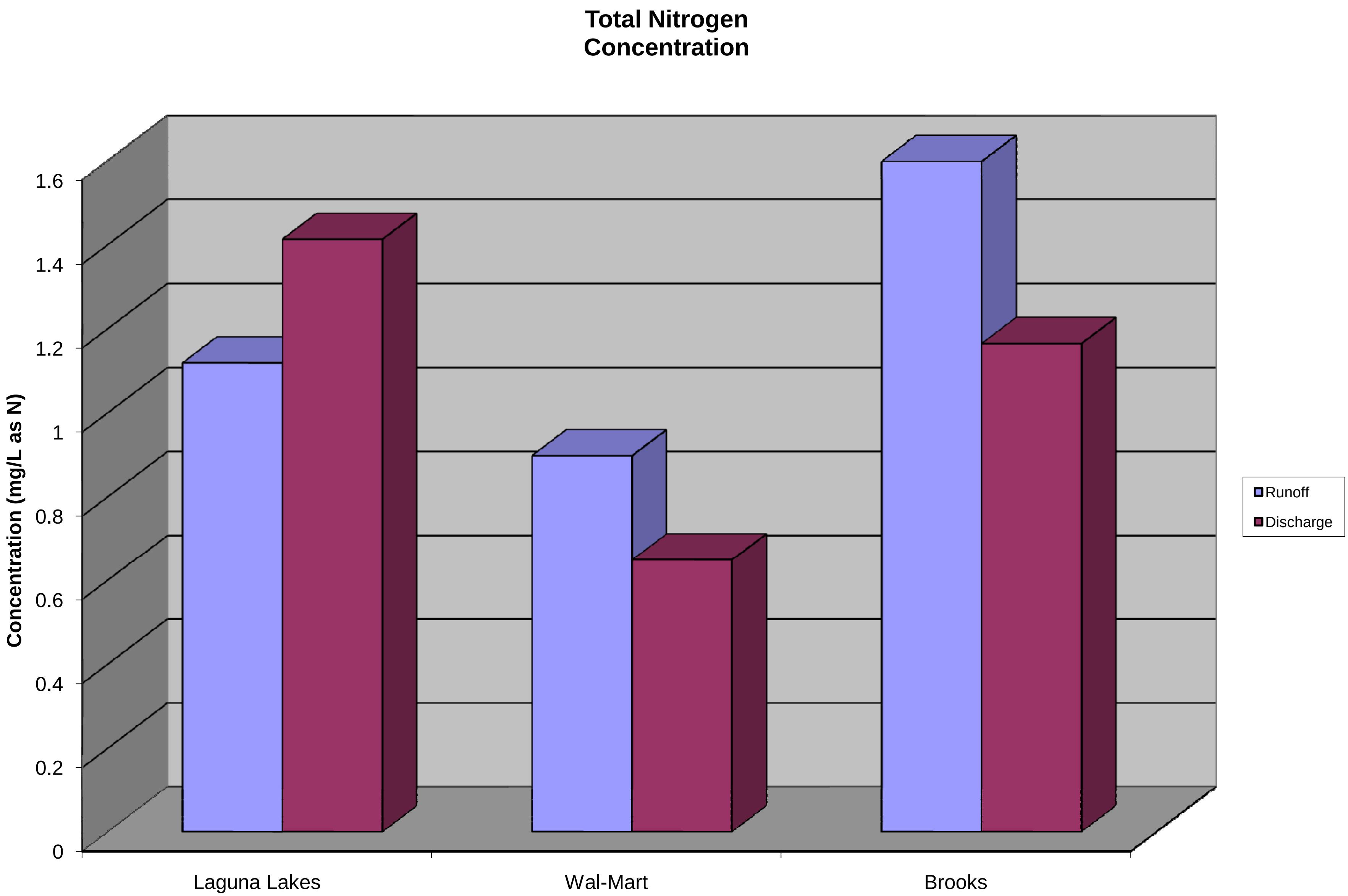

Dissolved Cadmium
Concentration
Concentration (ug/L)
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

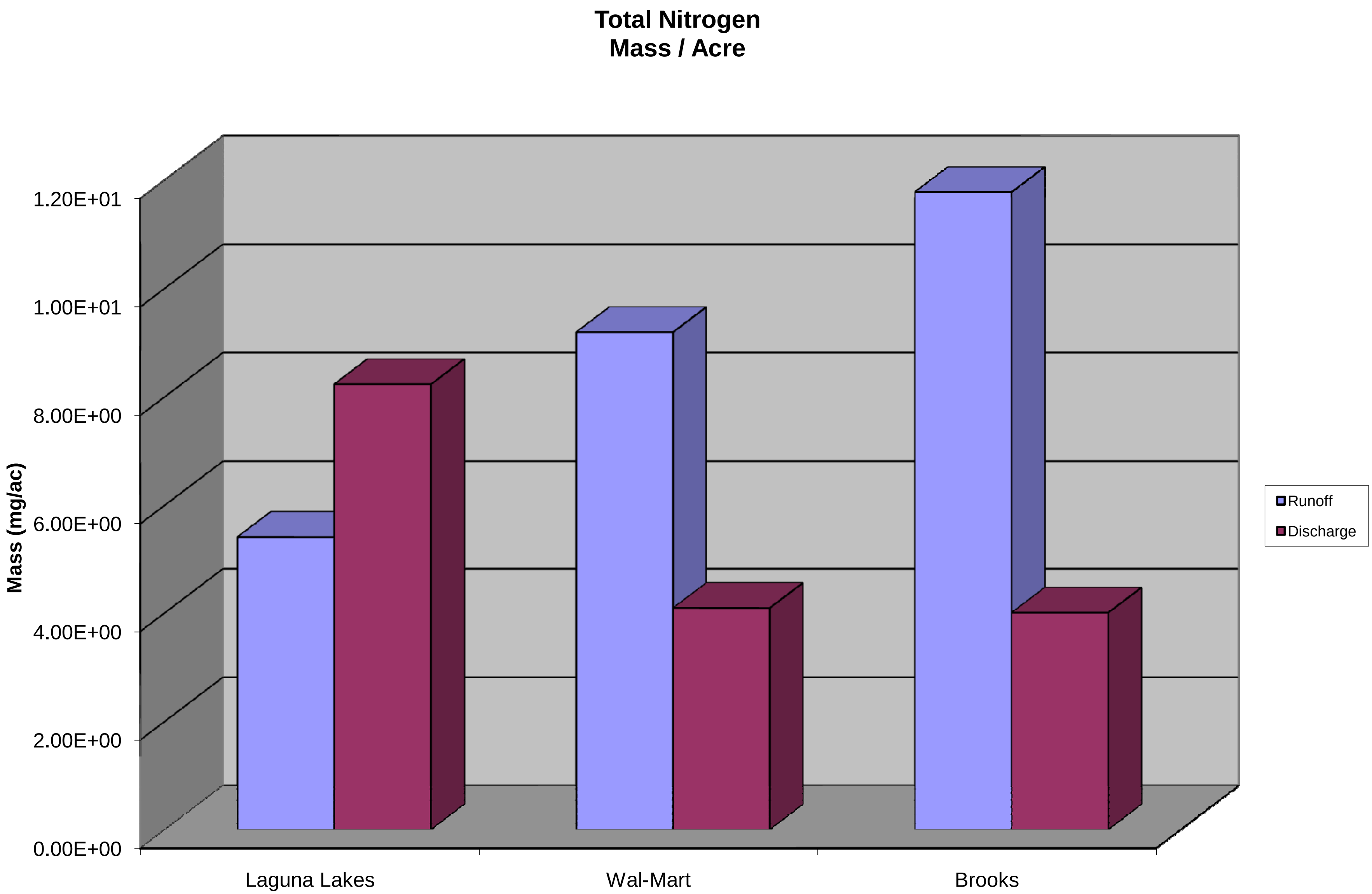


Dissolved Cadmium
Mass / Acre
Mass (ug/ac)
4.50E-03
4.00E-03
3.50E-03
3.00E-03
2.50E-03
2.00E-03
1.50E-03
1.00E-03
5.00E-04
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

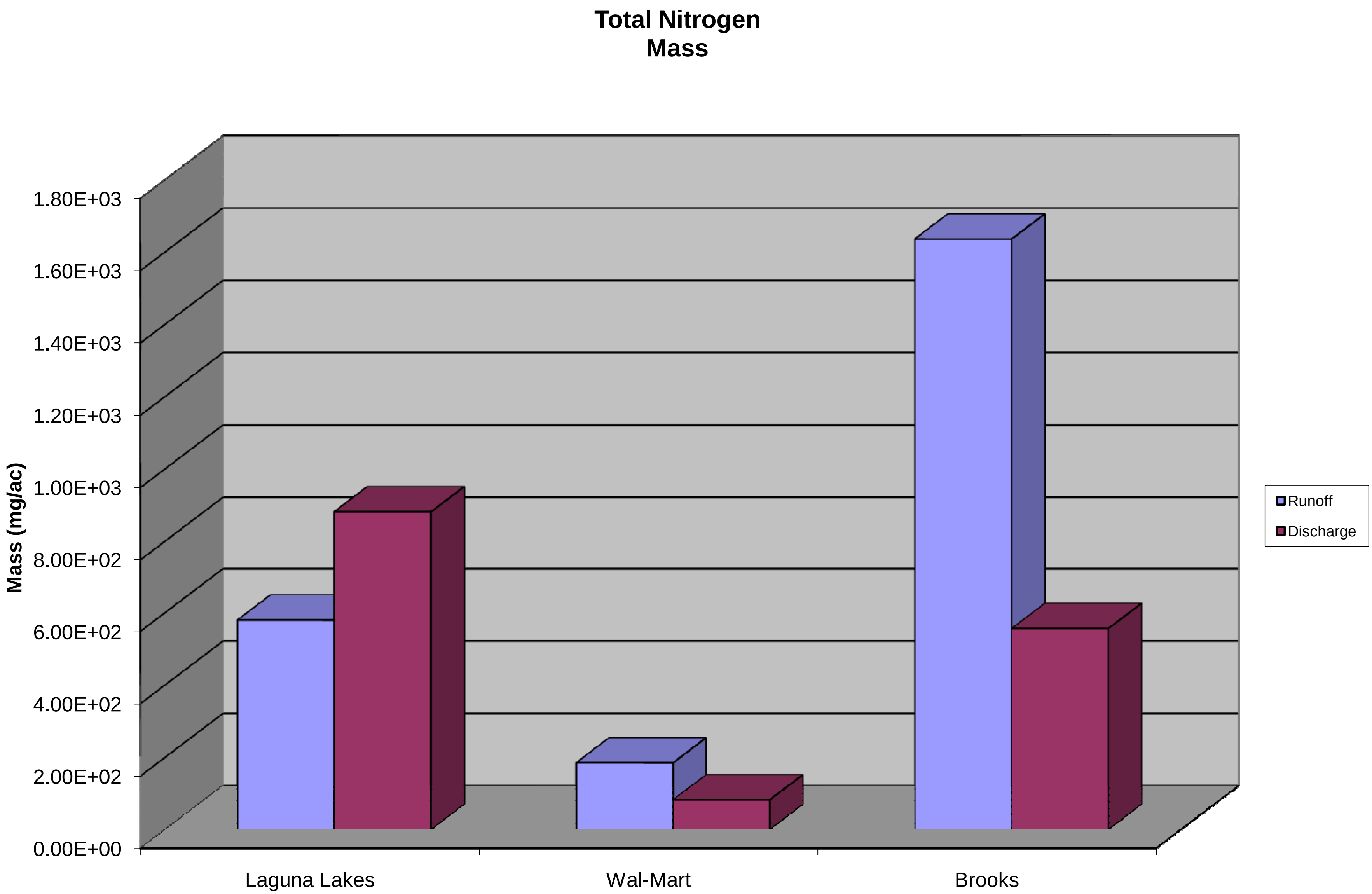


Dissolved Cadmium
Mass
Mass (ug/ac)
4.50E-01
4.00E-01
3.50E-01
3.00E-01
2.50E-01
2.00E-01
1.50E-01
1.00E-01
5.00E-02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Total Nitrogen
Concentration
Concentration (mg/L as N)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge



Total Nitrogen
Mass / Acre
Mass (mg/ac)
1.20E+01
1.00E+01
8.00E+00
6.00E+00
4.00E+00
2.00E+00
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge


Total Nitrogen
Mass
Mass (mg/ac)
1.80E+03
1.60E+03
1.40E+03
1.20E+03
1.00E+03
8.00E+02
6.00E+02
4.00E+02
2.00E+02
0.00E+00
Laguna Lakes
Wal-Mart
Brooks
Runoff
Discharge

APPENDIX F - LABORATORY DATA

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		NH3	Ammonia, Automated Phenate	0.074		0.01	mg/L as N
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.6		0.5	mg/M3
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		CUUGL	Copper, AA furnace technique	7.2		1	µg/L
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	4.2		1	µg/L
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		NOX	Nitrate + Nitrite	0.39		0.01	mg/L as N
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	1.28		0.1	mg/L as N
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		$CHLOROA	Pheophytin	3.4		0.5	mg/M3
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		O-PO4	Phosphorus, Ortho	0.084		0.004	mg/L as P
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		T-PO4	Phosphorus, Total	0.17		0.01	mg/L as P
AB94476	JEBMPLLOUT	LLOUT	TIM DENISON	6/24/2006	22:44	6/26/2006		TSS	Total Suspended Solids	2	I	0.6	mg/L
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		NH3	Ammonia, Automated Phenate	0.03	I	0.01	mg/L as N
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.7		0.5	mg/M3
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		NOX	Nitrate + Nitrite	0.06		0.01	mg/L as N
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	0.63		0.1	mg/L as N
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		$CHLOROA	Pheophytin	3		0.5	mg/M3
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		O-PO4	Phosphorus, Ortho	0.012	I	0.004	mg/L as P
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		T-PO4	Phosphorus, Total	0.07		0.01	mg/L as P
AB94479	JEBMPWMOUT	WMOUT	TIM DENISON	6/24/2006	20:21	6/26/2006		TSS	Total Suspended Solids	6		0.6	mg/L
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		NH3	Ammonia, Automated Phenate	0.01	U	0.01	mg/L as N
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.8	I	0.5	mg/M3
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		CUUGL	Copper, AA furnace technique	2.8	I	1	µg/L
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	I	1	µg/L
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		NOX	Nitrate + Nitrite	0.06		0.01	mg/L as N
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	0.91		0.1	mg/L as N
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		$CHLOROA	Pheophytin	2.6		0.5	mg/M3
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		O-PO4	Phosphorus, Ortho	0.022		0.004	mg/L as P
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AB94474	JEBMPLLIN1	LLIN1	TIM DENISON	6/25/2006	17:18	6/26/2006		TSS	Total Suspended Solids	11.5		0.6	mg/L
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		NH3	Ammonia, Automated Phenate	0.345		0.01	mg/L as N
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	0.8	I	0.5	mg/M3
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		CUUGL	Copper, AA furnace technique	1.3	I	1	µg/L
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		NOX	Nitrate + Nitrite	1		0.01	mg/L as N
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	0.93		0.1	mg/L as N
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		O-PO4	Phosphorus, Ortho	0.092		0.004	mg/L as P
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		T-PO4	Phosphorus, Total	0.15		0.01	mg/L as P
AB94475	JEBMPLLIN2	LLIN2	TIM DENISON	6/25/2006	17:30	6/26/2006		TSS	Total Suspended Solids	5.7		0.6	mg/L
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		NH3	Ammonia, Automated Phenate	0.014	I	0.01	mg/L as N
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.3		0.5	mg/M3
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		CUUGL	Copper, AA furnace technique	6		1	µg/L
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	2.3	I	1	µg/L
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	0.84		0.1	mg/L as N
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		$CHLOROA	Pheophytin	7.6		0.5	mg/M3
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		O-PO4	Phosphorus, Ortho	0.017		0.004	mg/L as P
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		T-PO4	Phosphorus, Total	0.08		0.01	mg/L as P
AB94477	JEBMPWMIN1	WMIN1	TIM DENISON	6/25/2006	14:59	6/26/2006		TSS	Total Suspended Solids	7.8		0.6	mg/L
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		NH3	Ammonia, Automated Phenate	0.01	U	0.01	mg/L as N
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.8	I	0.5	mg/M3
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		CUUGL	Copper, AA furnace technique	3.8	I	1	µg/L
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		TKN	Nitrogen, Kjeldahl, Total	0.47		0.1	mg/L as N
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		$CHLOROA	Pheophytin	3.3		0.5	mg/M3
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		O-PO4	Phosphorus, Ortho	0.133		0.004	mg/L as P
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		T-PO4	Phosphorus, Total	0.24		0.01	mg/L as P
AB94478	JEBMPWMIN2	WMIN2	TIM DENISON	6/25/2006	17:16	6/26/2006		TSS	Total Suspended Solids	23.8		0.6	mg/L
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		NH3	Ammonia, Automated Phenate	0.045		0.01	mg/L as N
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.4	I	0.5	mg/M3
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	0.49		0.1	mg/L as N
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		$CHLOROA	Pheophytin	3.2		0.5	mg/M3
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		O-PO4	Phosphorus, Ortho	0.033		0.004	mg/L as P
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		T-PO4	Phosphorus, Total	0.08		0.01	mg/L as P
AB94804	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		TSS	Total Suspended Solids	2.7		0.6	mg/L
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		NH3	Ammonia, Automated Phenate	0.095		0.01	mg/L as N
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.8		0.5	mg/M3
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		CUUGL	Copper, AA furnace technique	1.3	I	1	µg/L
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	I	1	µg/L
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	1.25		0.1	mg/L as N
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		$CHLOROA	Pheophytin	1.4	I	0.5	mg/M3
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		O-PO4	Phosphorus, Ortho	0.086		0.004	mg/L as P
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AB94805	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/2/2006	16:38	7/3/2006		TSS	Total Suspended Solids	5.2		0.6	mg/L
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		NH3	Ammonia, Automated Phenate	0.042		0.01	mg/L as N
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.6	I	0.5	mg/M3
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		CUUGL	Copper, AA furnace technique	3.7	I	1	µg/L
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	2.6	I	1	µg/L
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	1.26		0.1	mg/L as N
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		$CHLOROA	Pheophytin	5.1		0.5	mg/M3
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		O-PO4	Phosphorus, Ortho	0.045		0.004	mg/L as P
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		T-PO4	Phosphorus, Total	0.12		0.01	mg/L as P
AB94806	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/2/2006	18:00	7/3/2006		TSS	Total Suspended Solids	3.3		0.6	mg/L
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		NH3	Ammonia, Automated Phenate	0.068		0.01	mg/L as N
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	3.6		0.5	mg/M3
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	0.28	I	0.1	mg/L as N
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		$CHLOROA	Pheophytin	1.1	I	0.5	mg/M3
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		T-PO4	Phosphorus, Total	0.03	I	0.01	mg/L as P
AB94807	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/2/2006	16:46	7/3/2006		TSS	Total Suspended Solids	4.7		0.6	mg/L
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		NH3	Ammonia, Automated Phenate	0.015	I	0.01	mg/L as N
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.7	I	0.5	mg/M3
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CUUGL	Copper, AA furnace technique	1	I	1	µg/L
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		NOX	Nitrate + Nitrite	0.07		0.01	mg/L as N
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	0.33	I	0.1	mg/L as N
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		$CHLOROA	Pheophytin	4.4		0.5	mg/M3
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		O-PO4	Phosphorus, Ortho	0.128		0.004	mg/L as P
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		T-PO4	Phosphorus, Total	0.2		0.01	mg/L as P
AB94808	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/2/2006	16:40	7/3/2006		TSS	Total Suspended Solids	10.3		0.6	mg/L
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		NH3	Ammonia, Automated Phenate	0.034	I	0.01	mg/L as N
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		CDUGL	Cadmium, AA furnace technique	0.4	U	0.4	µg/L
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.2		0.5	mg/M3
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		NOX	Nitrate + Nitrite	0.08		0.01	mg/L as N
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		TKN	Nitrogen, Kjeldahl, Total	0.39	I	0.1	mg/L as N
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		$CHLOROA	Pheophytin	4		0.5	mg/M3
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		O-PO4	Phosphorus, Ortho	0.006	I	0.004	mg/L as P
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		T-PO4	Phosphorus, Total	0.04		0.01	mg/L as P
AB94809	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/2/2006	17:26	7/3/2006		TSS	Total Suspended Solids	4.8		0.6	mg/L
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		NH3	Ammonia, Automated Phenate	0.044		0.01	mg/L as N
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.1	I	0.5	mg/M3
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		NOX	Nitrate + Nitrite	0.07		0.01	mg/L as N
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		TKN	Nitrogen, Kjeldahl, Total	0.61		0.1	mg/L as N
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		$CHLOROA	Pheophytin	2.5		0.5	mg/M3
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		O-PO4	Phosphorus, Ortho	0.042		0.004	mg/L as P
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		T-PO4	Phosphorus, Total	0.09		0.01	mg/L as P
AB95050	JEBMPLLIN1	LLIN1	WAYNE KILGORE	7/6/2006	22:08	7/7/2006		TSS	Total Suspended Solids	3.8		0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		NH3	Ammonia, Automated Phenate	0.111		0.01	mg/L as N
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.1		0.5	mg/M3
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		CUUGL	Copper, AA furnace technique	1.2	I	1	µg/L
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		NOX	Nitrate + Nitrite	0.07		0.01	mg/L as N
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		TKN	Nitrogen, Kjeldahl, Total	0.41		0.1	mg/L as N
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		$CHLOROA	Pheophytin	5		0.5	mg/M3
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		O-PO4	Phosphorus, Ortho	0.062		0.004	mg/L as P
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		T-PO4	Phosphorus, Total	0.1		0.01	mg/L as P
AB95051	JEBMPLLIN2	LLIN2	WAYNE KILGORE	7/7/2006	8:53	7/7/2006		TSS	Total Suspended Solids	2.5		0.6	mg/L
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		NH3	Ammonia, Automated Phenate	0.047		0.01	mg/L as N
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.4	I	0.5	mg/M3
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		CUUGL	Copper, AA furnace technique	4.4		1	µg/L
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		TKN	Nitrogen, Kjeldahl, Total	1.23		0.1	mg/L as N
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		$CHLOROA	Pheophytin	5.6		0.5	mg/M3
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		O-PO4	Phosphorus, Ortho	0.065		0.004	mg/L as P
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		T-PO4	Phosphorus, Total	0.16		0.01	mg/L as P
AB95052	JEBMPLLOUT	LLOUT	WAYNE KILGORE	7/7/2006	11:43	7/7/2006		TSS	Total Suspended Solids	6		0.6	mg/L
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		NH3	Ammonia, Automated Phenate	0.029	I	0.01	mg/L as N
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	3.3		0.5	mg/M3
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.79		0.1	mg/L as N
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		$CHLOROA	Pheophytin	3.8		0.5	mg/M3
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		O-PO4	Phosphorus, Ortho	0.12		0.004	mg/L as P
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		T-PO4	Phosphorus, Total	0.16		0.01	mg/L as P
AB95464	JEBMPBRIN	BRIN	WAYNE KILGORE	7/13/2006	19:59	7/14/2006		TSS	Total Suspended Solids	2.7		0.6	mg/L
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		NH3	Ammonia, Automated Phenate	0.012	I	0.01	mg/L as N
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.8		0.5	mg/M3
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.99		0.1	mg/L as N
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		$CHLOROA	Pheophytin	5.9		0.5	mg/M3
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		T-PO4	Phosphorus, Total	0.05		0.01	mg/L as P
AB95465	JEBMPBROUT	BROUT	WAYNE KILGORE	7/14/2006	13:34	7/14/2006		TSS	Total Suspended Solids	3.8		0.6	mg/L
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		NH3	Ammonia, Automated Phenate	0.086		0.01	mg/L as N
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.9		0.5	mg/M3
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		CUUGL	Copper, AA furnace technique	1.1	I	1	µg/L
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		TKN	Nitrogen, Kjeldahl, Total	0.64		0.1	mg/L as N
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		$CHLOROA	Pheophytin	2.2		0.5	mg/M3
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		O-PO4	Phosphorus, Ortho	0.035		0.004	mg/L as P
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		T-PO4	Phosphorus, Total	0.06		0.01	mg/L as P
AB95716	JEBMPBRIN	BRIN	WAYNE KILGORE	7/18/2006	16:29	7/19/2006		TSS	Total Suspended Solids	1	I	0.6	mg/L
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		NH3	Ammonia, Automated Phenate	0.036	I	0.01	mg/L as N
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	4		0.5	mg/M3
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		CUUGL	Copper, AA furnace technique	1.1	I	1	µg/L
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		NOX	Nitrate + Nitrite	0.01	U	0.01	mg/L as N
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		TKN	Nitrogen, Kjeldahl, Total	0.61		0.1	mg/L as N
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		T-PO4	Phosphorus, Total	0.02	I	0.01	mg/L as P
AB95717	JEBMPBROUT	BROUT	WAYNE KILGORE	7/19/2006	6:41	7/19/2006		TSS	Total Suspended Solids	2.5		0.6	mg/L
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		NH3	Ammonia, Automated Phenate	0.238		0.01	mg/L as N
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	4		0.5	mg/M3
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		CUUGL	Copper, AA furnace technique	1.7	I	1	µg/L
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		NOX	Nitrate + Nitrite	0.3		0.01	mg/L as N
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		TKN	Nitrogen, Kjeldahl, Total	1.1		0.1	mg/L as N
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		$CHLOROA	Pheophytin	4.5		0.5	mg/M3
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		O-PO4	Phosphorus, Ortho	0.125		0.004	mg/L as P
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		T-PO4	Phosphorus, Total	0.16		0.01	mg/L as P
AB96457	JEBMPBRIN	BRIN	WAYNE KILGORE	7/31/2006	21:18	8/1/2006		TSS	Total Suspended Solids	11		0.6	mg/L
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		NH3	Ammonia, Automated Phenate	0.234		0.01	mg/L as N
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.3		0.5	mg/M3
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		TKN	Nitrogen, Kjeldahl, Total	0.78		0.1	mg/L as N
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		$CHLOROA	Pheophytin	2.6		0.5	mg/M3
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		O-PO4	Phosphorus, Ortho	0.004	I	0.004	mg/L as P
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		T-PO4	Phosphorus, Total	0.03	I	0.01	mg/L as P
AB96458	JEBMPBROUT	BROUT	WAYNE KILGORE	8/1/2006	10:47	8/1/2006		TSS	Total Suspended Solids	3.75		0.6	mg/L
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		NH3	Ammonia, Automated Phenate	0.81		0.01	mg/L as N
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.1		0.5	mg/M3
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		CUUGL	Copper, AA furnace technique	1.2	I	1	µg/L
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		NOX	Nitrate + Nitrite	0.22		0.01	mg/L as N
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		TKN	Nitrogen, Kjeldahl, Total	1.3		0.1	mg/L as N
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		$CHLOROA	Pheophytin	2		0.5	mg/M3
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		O-PO4	Phosphorus, Ortho	0.16		0.004	mg/L as P
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		T-PO4	Phosphorus, Total	0.22		0.01	mg/L as P
AB96765	JEBMPBRIN	BRIN	WAYNE KILGORE	8/7/2006	16:50	8/8/2006		TSS	Total Suspended Solids	10.5		0.6	mg/L
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		NH3	Ammonia, Automated Phenate	0.82		0.01	mg/L as N
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.4	I	0.5	mg/M3
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		CUUGL	Copper, AA furnace technique	1.2	I	1	µg/L
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		NOX	Nitrate + Nitrite	0.22		0.01	mg/L as N
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		TKN	Nitrogen, Kjeldahl, Total	1.1		0.1	mg/L as N
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		$CHLOROA	Pheophytin	2.7		0.5	mg/M3
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		O-PO4	Phosphorus, Ortho	0.17		0.004	mg/L as P
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		T-PO4	Phosphorus, Total	0.22		0.01	mg/L as P
AB96766	JEBMPBRIN	BRIN D	WAYNE KILGORE	8/7/2006	16:55	8/8/2006		TSS	Total Suspended Solids	11.8		0.6	mg/L
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		NH3	Ammonia, Automated Phenate	0.01	U	0.01	mg/L as N
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.2	I	0.5	mg/M3
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		TKN	Nitrogen, Kjeldahl, Total	1.2		0.1	mg/L as N
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		T-PO4	Phosphorus, Total	0.02	I	0.01	mg/L as P
AB96767	JEBMPBROUT	BROUT	WAYNE KILGORE	8/7/2006	21:08	8/8/2006		TSS	Total Suspended Solids	2	I	0.6	mg/L
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		NH3	Ammonia, Automated Phenate	1.25		0.01	mg/L as N
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.2	I	0.5	mg/M3
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CUUGL	Copper, AA furnace technique	1.8	I	1	µg/L
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		NOX	Nitrate + Nitrite	0.7		0.01	mg/L as N
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	2.8		0.1	mg/L as N
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		$CHLOROA	Pheophytin	1	I	0.5	mg/M3
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		O-PO4	Phosphorus, Ortho	0.659		0.004	mg/L as P
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		T-PO4	Phosphorus, Total	0.74		0.01	mg/L as P
AB97074	JEBMPBRIN	BRIN	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		TSS	Total Suspended Solids	24.3		0.6	mg/L
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		NH3	Ammonia, Automated Phenate	0.04	I	0.01	mg/L as N
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.5	I	0.5	mg/M3
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	1.2		0.1	mg/L as N
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		O-PO4	Phosphorus, Ortho	0.004	I	0.004	mg/L as P
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		T-PO4	Phosphorus, Total	0.03	I	0.01	mg/L as P
AB97075	JEBMPBROUT	BROUT	W. KILGORE/T.DENISON	8/14/2006	18:38	8/15/2006		TSS	Total Suspended Solids	4		0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		NH3	Ammonia, Automated Phenate	0.174		0.01	mg/L as N
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.5		0.5	mg/M3
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		NOX	Nitrate + Nitrite	0.35		0.01	mg/L as N
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	2.6		0.1	mg/L as N
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		$CHLOROA	Pheophytin	2.5		0.5	mg/M3
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		O-PO4	Phosphorus, Ortho	0.08	Q	0.004	mg/L as P
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		T-PO4	Phosphorus, Total	0.14		0.01	mg/L as P
AB97150	JEBMPLLIN1	LLIN1	W. KILGORE/ T. DENISON	8/14/2006	17:35	8/15/2006		TSS	Total Suspended Solids	14		0.6	mg/L
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		NH3	Ammonia, Automated Phenate	0.205		0.01	mg/L as N
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1	I	0.5	mg/M3
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		CUUGL	Copper, AA furnace technique	3.5	I	1	µg/L
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1.2	I	1	µg/L
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		NOX	Nitrate + Nitrite	0.24		0.01	mg/L as N
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	1.2		0.1	mg/L as N
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		O-PO4	Phosphorus, Ortho	0.033		0.004	mg/L as P
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AB97076	JEBMPWMIN1	WMIN1	W. KILGORE/T.DENISON	8/14/2006	17:29	8/15/2006		TSS	Total Suspended Solids	31		0.6	mg/L
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		NH3	Ammonia, Automated Phenate	0.226		0.01	mg/L as N
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.1	I	0.5	mg/M3
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CUUGL	Copper, AA furnace technique	8.1		1	µg/L
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	2.1	I	1	µg/L
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		NOX	Nitrate + Nitrite	0.43		0.01	mg/L as N
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	2		0.1	mg/L as N
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		O-PO4	Phosphorus, Ortho	0.124		0.004	mg/L as P
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		T-PO4	Phosphorus, Total	0.26		0.01	mg/L as P
AB97077	JEBMPWMIN2	WMIN2	W. KILGORE/T.DENISON	8/14/2006	17:15	8/15/2006		TSS	Total Suspended Solids	27.8		0.6	mg/L
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		NH3	Ammonia, Automated Phenate	0.01	U	0.01	mg/L as N
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2.4		0.5	mg/M3
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		CUUGL	Copper, AA furnace technique	2.2	I	1	µg/L
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	1.07		0.05	mg/L as N
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		O-PO4	Phosphorus, Ortho	0.092		0.004	mg/L as P
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		T-PO4	Phosphorus, Total	0.15		0.01	mg/L as P
AB97151	JEBMPLLOUT	LLOUT	W. KILGORE/ T. DENISON	8/15/2006	9:42	8/15/2006		TSS	Total Suspended Solids	1.25	I	0.6	mg/L
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		NH3	Ammonia, Automated Phenate	0.094		0.01	mg/L as N
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.3	I	0.5	mg/M3
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		NOX	Nitrate + Nitrite	0.14		0.01	mg/L as N
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		TKN	Nitrogen, Kjeldahl, Total	0.84		0.1	mg/L as N
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		$CHLOROA	Pheophytin	1.3	I	0.5	mg/M3
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		O-PO4	Phosphorus, Ortho	0.007	I	0.004	mg/L as P
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		T-PO4	Phosphorus, Total	0.03	I	0.01	mg/L as P
AB97078	JEBMPWMOUT	WMOUT	W. KILGORE/T.DENISON	8/15/2006	0:02	8/15/2006		TSS	Total Suspended Solids	0.75	I	0.6	mg/L
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		NH3	Ammonia, Automated Phenate	0.087		0.017	mg/L as N
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.3	I	0.5	mg/M3
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		TKN	Nitrogen, Kjeldahl, Total	1.3		0.1	mg/L as N
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		TN	Nitrogen, Total	1.35		0.11	mg/L as N
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		O-PO4	Phosphorus, Ortho	0.014	I	0.004	mg/L as P
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		T-PO4	Phosphorus, Total	0.06		0.01	mg/L as P
AB97980	JEBMPLLIN1	LLIN1	WAYNE KILGORE	8/30/2006	13:30	8/31/2006		TSS	Total Suspended Solids	7.75		0.6	mg/L
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		NH3	Ammonia, Automated Phenate	0.056	I	0.017	mg/L as N
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2		0.5	mg/M3
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		CUUGL	Copper, AA furnace technique	2.1	I	1	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		TKN	Nitrogen, Kjeldahl, Total	0.63		0.1	mg/L as N
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		TN	Nitrogen, Total	0.67		0.11	mg/L as N
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		$CHLOROA	Pheophytin	0.9	I	0.5	mg/M3
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		O-PO4	Phosphorus, Ortho	0.071		0.004	mg/L as P
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		T-PO4	Phosphorus, Total	0.12		0.01	mg/L as P
AB97981	JEBMPLLOUT	LLOUT	WAYNE KILGORE	8/30/2006	22:42	8/31/2006		TSS	Total Suspended Solids	8		0.6	mg/L
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		NH3	Ammonia, Automated Phenate	0.017	U	0.017	mg/L as N
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.4	I	0.5	mg/M3
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		TKN	Nitrogen, Kjeldahl, Total	0.37	I	0.1	mg/L as N
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		TN	Nitrogen, Total	0.39	I	0.11	mg/L as N
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		$CHLOROA	Pheophytin	2.9		0.5	mg/M3
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		O-PO4	Phosphorus, Ortho	0.004	I	0.004	mg/L as P
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		T-PO4	Phosphorus, Total	0.02	I	0.01	mg/L as P
AB97984	JEBMPWMOUT	WMOUT	WAYNE KILGORE	8/30/2006	20:16	8/31/2006		TSS	Total Suspended Solids	3.5		0.6	mg/L
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		NH3	Ammonia, Automated Phenate	0.105		0.017	mg/L as N
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.3	I	0.5	mg/M3
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		CUUGL	Copper, AA furnace technique	1.5	I	1	µg/L
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		NOX	Nitrate + Nitrite	0.07		0.01	mg/L as N
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		TKN	Nitrogen, Kjeldahl, Total	1.1		0.1	mg/L as N
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		TN	Nitrogen, Total	1.17		0.11	mg/L as N
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		$CHLOROA	Pheophytin	0.9	I	0.5	mg/M3
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		O-PO4	Phosphorus, Ortho	0.01	I	0.004	mg/L as P
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		T-PO4	Phosphorus, Total	0.08		0.01	mg/L as P
AB97982	JEBMPWMIN1	WMIN1	WAYNE KILGORE	8/31/2006	11:24	8/31/2006		TSS	Total Suspended Solids	19.3		0.6	mg/L
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		NH3	Ammonia, Automated Phenate	0.017	U	0.017	mg/L as N
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	0.8	I	0.5	mg/M3
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		CUUGL	Copper, AA furnace technique	2.2	I	1	µg/L
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		NOX	Nitrate + Nitrite	0.12		0.01	mg/L as N
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		TKN	Nitrogen, Kjeldahl, Total	0.52		0.1	mg/L as N
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		TN	Nitrogen, Total	0.64		0.11	mg/L as N
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		$CHLOROA	Pheophytin	4.2		0.5	mg/M3
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		O-PO4	Phosphorus, Ortho	0.075		0.004	mg/L as P
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		T-PO4	Phosphorus, Total	0.14		0.01	mg/L as P
AB97983	JEBMPWMIN2	WMIN2	WAYNE KILGORE	8/31/2006	7:23	8/31/2006		TSS	Total Suspended Solids	12.3		0.6	mg/L
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		NH3	Ammonia, Automated Phenate	0.045	I	0.017	mg/L as N
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	2		0.5	mg/M3
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.87		0.1	mg/L as N
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		TN	Nitrogen, Total	0.92		0.11	mg/L as N
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		$CHLOROA	Pheophytin	0.9	I	0.5	mg/M3
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		O-PO4	Phosphorus, Ortho	0.017		0.004	mg/L as P
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		T-PO4	Phosphorus, Total	0.07		0.01	mg/L as P
AB98731	JEBMPLLIN1	LLIN1	WAYNE KILGORE	9/13/2006	20:16	9/14/2006		TSS	Total Suspended Solids	3.25		0.6	mg/L
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		NH3	Ammonia, Automated Phenate	0.097		0.017	mg/L as N
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.6	I	0.5	mg/M3
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		NOX	Nitrate + Nitrite	0.08		0.01	mg/L as N
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.39	I	0.1	mg/L as N
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		TN	Nitrogen, Total	0.47		0.11	mg/L as N
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		$CHLOROA	Pheophytin	1	I	0.5	mg/M3
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		O-PO4	Phosphorus, Ortho	0.057		0.004	mg/L as P
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		T-PO4	Phosphorus, Total	0.1		0.01	mg/L as P
AB98732	JEBMPLLIN2	LLIN2	WAYNE KILGORE	9/13/2006	20:14	9/14/2006		TSS	Total Suspended Solids	0.75	I	0.6	mg/L
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		NH3	Ammonia, Automated Phenate	0.017	U	0.017	mg/L as N
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.5	I	0.5	mg/M3
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		CUUGL	Copper, AA furnace technique	1.4	I	1	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.33	I	0.1	mg/L as N
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		TN	Nitrogen, Total	0.37	I	0.11	mg/L as N
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		O-PO4	Phosphorus, Ortho	0.01	I	0.004	mg/L as P
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		T-PO4	Phosphorus, Total	0.04	I	0.01	mg/L as P
AB98734	JEBMPWMIN1	WMIN1	WAYNE KILGORE	9/13/2006	20:30	9/14/2006		TSS	Total Suspended Solids	3.5		0.6	mg/L
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		NH3	Ammonia, Automated Phenate	0.017	U	0.017	mg/L as N
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.4	I	0.5	mg/M3
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		CUUGL	Copper, AA furnace technique	1.4	I	1	µg/L
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		NOX	Nitrate + Nitrite	0.12		0.01	mg/L as N
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.31	I	0.1	mg/L as N
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		TN	Nitrogen, Total	0.43	I	0.11	mg/L as N
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		$CHLOROA	Pheophytin	2		0.5	mg/M3
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		O-PO4	Phosphorus, Ortho	0.045		0.004	mg/L as P
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		T-PO4	Phosphorus, Total	0.08		0.01	mg/L as P
AB98735	JEBMPWMIN2	WMIN2	WAYNE KILGORE	9/13/2006	20:32	9/14/2006		TSS	Total Suspended Solids	4.75		0.6	mg/L
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		NH3	Ammonia, Automated Phenate	0.017	U	0.017	mg/L as N
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.8	I	0.5	mg/M3
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	0.48		0.1	mg/L as N
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		TN	Nitrogen, Total	0.51		0.11	mg/L as N
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		$CHLOROA	Pheophytin	3		0.5	mg/M3
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		O-PO4	Phosphorus, Ortho	0.005	I	0.004	mg/L as P
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		T-PO4	Phosphorus, Total	0.03	I	0.01	mg/L as P
AB98736	JEBMPWMOUT	WMOUT	WAYNE KILGORE	9/13/2006	21:33	9/14/2006		TSS	Total Suspended Solids	3.25		0.6	mg/L
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		NH3	Ammonia, Automated Phenate	0.175		0.017	mg/L as N
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		$CHLOROA	Chlorophyll a, corrected for Pheophytin	1.7	I	0.5	mg/M3
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		CUUGL	Copper, AA furnace technique	1.9	I	1	µg/L
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		TKN	Nitrogen, Kjeldahl, Total	1.1		0.1	mg/L as N
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		TN	Nitrogen, Total	1.14		0.11	mg/L as N
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		$CHLOROA	Pheophytin	8.6		0.5	mg/M3
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		O-PO4	Phosphorus, Ortho	0.091		0.004	mg/L as P
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		T-PO4	Phosphorus, Total	0.15		0.01	mg/L as P
AB98733	JEBMPLLOUT	LLOUT	WAYNE KILGORE	9/14/2006	11:31	9/14/2006		TSS	Total Suspended Solids	2	I	0.6	mg/L
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	NH3	Ammonia, Automated Phenate	0.293		0.014	mg/L as N
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	$CHLOROA	Chlorophyll a - corrected for Pheophytin	8.7	J3	0.5	mg/M3
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	CUUGL	Copper, AA furnace technique	2.7	I	1	µg/L
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	CUUGLD	Copper, Dissolved, AA furnace technique	1.4	I	1	µg/L
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	NOX	Nitrate + Nitrite	0.38		0.01	mg/L as N
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	TKN	Nitrogen, Kjeldahl, Total	1.4	J4	0.1	mg/L as N
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	TN	Nitrogen, Total	1.78		0.11	mg/L as N
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	$CHLOROA	Pheophytin	5.9	J3	0.5	mg/M3
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	O-PO4	Phosphorus, Ortho	0.026		0.004	mg/L as P
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	T-PO4	Phosphorus, Total	0.1		0.01	mg/L as P
AC06310	JEBMPBRIN	BRIN	W KILGORE & T DENISON	1/25/2007	10:36	1/25/2007	ence with TKN s	TSS	Total Suspended Solids	68		0.6	mg/L
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		NH3	Ammonia, Automated Phenate	0.226		0.014	mg/L as N
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.5	J3	0.5	mg/M3
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		CUUGL	Copper, AA furnace technique	7.7		1	µg/L
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.5	I	1	µg/L
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		NOX	Nitrate + Nitrite	0.21		0.01	mg/L as N
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		TKN	Nitrogen, Kjeldahl, Total	1.6		0.1	mg/L as N
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		TN	Nitrogen, Total	1.81		0.11	mg/L as N
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		$CHLOROA	Pheophytin	3.5	J3	0.5	mg/M3
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		O-PO4	Phosphorus, Ortho	0.024		0.004	mg/L as P
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		T-PO4	Phosphorus, Total	0.2		0.01	mg/L as P
AC06311	JEBMPLLIN1	LLIN1	W KILGORE & T DENISON	1/25/2007	9:06	1/25/2007		TSS	Total Suspended Solids	17.5		0.6	mg/L
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		NH3	Ammonia, Automated Phenate	0.084		0.014	mg/L as N
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3	J3	0.5	mg/M3
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		CUUGL	Copper, AA furnace technique	16.3		1	µg/L
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		CUUGLD	Copper, Dissolved, AA furnace technique	8.7		1	µg/L
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		NOX	Nitrate + Nitrite	0.34		0.01	mg/L as N
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		TKN	Nitrogen, Kjeldahl, Total	1.4		0.1	mg/L as N

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		TN	Nitrogen, Total	1.74		0.11	mg/L as N
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		$CHLOROA	Pheophytin	2.7	J3	0.5	mg/M3
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		O-PO4	Phosphorus, Ortho	0.045		0.004	mg/L as P
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		T-PO4	Phosphorus, Total	0.17		0.01	mg/L as P
AC06312	JEBMPLLIN2	LLIN2	W KILGORE & T DENISON	1/25/2007	4:04	1/25/2007		TSS	Total Suspended Solids	10		0.6	mg/L
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		NH3	Ammonia, Automated Phenate	0.093		0.014	mg/L as N
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.2	J3	0.5	mg/M3
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		CUUGL	Copper, AA furnace technique	13.6		1	µg/L
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		CUUGLD	Copper, Dissolved, AA furnace technique	4.1		1	µg/L
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		NOX	Nitrate + Nitrite	0.19		0.01	mg/L as N
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		TKN	Nitrogen, Kjeldahl, Total	1.6		0.1	mg/L as N
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		TN	Nitrogen, Total	1.79		0.11	mg/L as N
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		$CHLOROA	Pheophytin	1.4	I J3	0.5	mg/M3
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		O-PO4	Phosphorus, Ortho	0.09		0.004	mg/L as P
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		T-PO4	Phosphorus, Total	0.35		0.01	mg/L as P
AC06313	JEBMPWMIN2	WMIN2	W KILGORE & T DENISON	1/25/2007	10:22	1/25/2007		TSS	Total Suspended Solids	31.3		0.6	mg/L
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		NH3	Ammonia, Automated Phenate	0.234		0.014	mg/L as N
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.9		0.5	mg/M3
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		CUUGL	Copper, AA furnace technique	11.2		1	µg/L
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.5	I	1	µg/L
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		NOX	Nitrate + Nitrite	0.2		0.01	mg/L as N
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		TKN	Nitrogen, Kjeldahl, Total	0.92		0.05	mg/L as N
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		TN	Nitrogen, Total	1.12		0.06	mg/L as N
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		$CHLOROA	Pheophytin	3.9		0.5	mg/M3
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		O-PO4	Phosphorus, Ortho	0.043	J4	0.004	mg/L as P
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		T-PO4	Phosphorus, Total	0.16		0.01	mg/L as P
AC10724	JEBMPLLIN1	LLIN1	WAYNE KILGORE	4/10/2007	22:27	4/11/2007		TSS	Total Suspended Solids	17		0.6	mg/L
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		NH3	Ammonia, Automated Phenate	0.549		0.014	mg/L as N
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.9		0.5	mg/M3
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		CUUGL	Copper, AA furnace technique	3.32	I	1	µg/L
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		CUUGLD	Copper, Dissolved, AA furnace technique	3.3	I	1	µg/L
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		NOX	Nitrate + Nitrite	0.13		0.01	mg/L as N
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		TKN	Nitrogen, Kjeldahl, Total	1.8		0.05	mg/L as N
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		TN	Nitrogen, Total	1.93		0.06	mg/L as N
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		$CHLOROA	Pheophytin	0.5	U	0.5	mg/M3
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		O-PO4	Phosphorus, Ortho	0.058		0.004	mg/L as P
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		T-PO4	Phosphorus, Total	0.14		0.01	mg/L as P
AC10725	JEBMPLLIN2	LLIN2	WAYNE KILGORE	4/10/2007	22:00	4/11/2007		TSS	Total Suspended Solids	30.3		0.6	mg/L
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		NH3	Ammonia, Automated Phenate	0.388		0.014	mg/L as N
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3		0.5	mg/M3
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		CUUGL	Copper, AA furnace technique	8.27		1	µg/L
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		CUUGLD	Copper, Dissolved, AA furnace technique	5.78		1	µg/L
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		NOX	Nitrate + Nitrite	0.33		0.01	mg/L as N
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		TKN	Nitrogen, Kjeldahl, Total	3.9		0.05	mg/L as N
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		TN	Nitrogen, Total	4.23		0.06	mg/L as N
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		$CHLOROA	Pheophytin	0.7	I	0.5	mg/M3
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		O-PO4	Phosphorus, Ortho	0.203		0.004	mg/L as P
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		T-PO4	Phosphorus, Total	0.72		0.01	mg/L as P
AC10726	JEBMPWMIN2	WMIN2	WAYNE KILGORE	4/10/2007	22:29	4/11/2007		TSS	Total Suspended Solids	58		0.6	mg/L
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		NH3	Ammonia, Automated Phenate	1.33		0.014	mg/L as N
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.3		0.5	mg/M3
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		CUUGL	Copper, AA furnace technique	3.27	I	1	µg/L
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.92	I	1	µg/L
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		NOX	Nitrate + Nitrite	0.28		0.01	mg/L as N
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		TKN	Nitrogen, Kjeldahl, Total	3.3		0.05	mg/L as N
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		TN	Nitrogen, Total	3.58		0.06	mg/L as N
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		$CHLOROA	Pheophytin	4.2		0.5	mg/M3
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		O-PO4	Phosphorus, Ortho	0.042		0.004	mg/L as P
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AC10723	JEBMPBRIN	BRIN	WAYNE KILGORE	4/11/2007	0:01	4/11/2007		TSS	Total Suspended Solids	2.75		0.6	mg/L
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	0.9	I Q	0.5	mg/M3
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		NOX	Nitrate + Nitrite	0.2		0.01	mg/L as N
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		TKN	Nitrogen, Kjeldahl, Total	0.3		0.05	mg/L as N
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		TN	Nitrogen, Total	0.5		0.06	mg/L as N
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		$CHLOROA	Pheophytin	1.6	I Q	0.5	mg/M3
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		O-PO4	Phosphorus, Ortho	0.004	U Q	0.004	mg/L as P
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		T-PO4	Phosphorus, Total	0.014	I	0.01	mg/L as P
AC15728	JEBMPWMIN1	WMIN1	WAYNE KILGORE	7/21/2007	11:30	7/23/2007		TSS	Total Suspended Solids	5.25		0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		NH3	Ammonia, Automated Phenate	0.079		0.014	mg/L as N
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	0.9	I Q	0.5	mg/M3
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		CUUGL	Copper, AA furnace technique	2	I	1	µg/L
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.3	I	1	µg/L
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		NOX	Nitrate + Nitrite	0.36		0.01	mg/L as N
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		TKN	Nitrogen, Kjeldahl, Total	0.12	I	0.05	mg/L as N
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		TN	Nitrogen, Total	0.48		0.06	mg/L as N
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		$CHLOROA	Pheophytin	1.3	I Q	0.5	mg/M3
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		O-PO4	Phosphorus, Ortho	0.052	Q	0.004	mg/L as P
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		T-PO4	Phosphorus, Total	0.07		0.01	mg/L as P
AC15729	JEBMPWMIN2	WMIN2	WAYNE KILGORE	7/21/2007	12:12	7/23/2007		TSS	Total Suspended Solids	1.25	I	0.6	mg/L
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	8.1	Q	0.5	mg/M3
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		CUUGL	Copper, AA furnace technique	2	I	1	µg/L
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.8	I	1	µg/L
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		TKN	Nitrogen, Kjeldahl, Total	0.52		0.05	mg/L as N
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		TN	Nitrogen, Total	0.57		0.06	mg/L as N
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		$CHLOROA	Pheophytin	1.8	I Q	0.5	mg/M3
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		O-PO4	Phosphorus, Ortho	0.004	U Q	0.004	mg/L as P
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		T-PO4	Phosphorus, Total	0.055		0.01	mg/L as P
AC15730	JEBMPWMOUT	WMOUT	WAYNE KILGORE	7/21/2007	17:37	7/23/2007		TSS	Total Suspended Solids	1.75	I	0.6	mg/L
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.9		0.5	mg/M3
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		CUUGL	Copper, AA furnace technique	1	I	1	µg/L
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.27	I	1	µg/L
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		NOX	Nitrate + Nitrite	0.27		0.01	mg/L as N
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		TKN	Nitrogen, Kjeldahl, Total	0.38		0.05	mg/L as N
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		TN	Nitrogen, Total	0.65		0.06	mg/L as N
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		$CHLOROA	Pheophytin	2.2		0.5	mg/M3
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		O-PO4	Phosphorus, Ortho	0.004	U Q	0.004	mg/L as P
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		T-PO4	Phosphorus, Total	0.028	I	0.01	mg/L as P
AC15973	JEBMPWMIN1	WMIN1	W KILGORE & J BLECHA	7/26/2007	18:18	7/27/2007		TSS	Total Suspended Solids	6		0.6	mg/L
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		NH3	Ammonia, Automated Phenate	0.072		0.014	mg/L as N
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.4		0.5	mg/M3
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		CUUGL	Copper, AA furnace technique	3.59	I	1	µg/L
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.61	I	1	µg/L
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		NOX	Nitrate + Nitrite	0.27		0.01	mg/L as N
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		TKN	Nitrogen, Kjeldahl, Total	0.91		0.05	mg/L as N
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		TN	Nitrogen, Total	1.2		0.06	mg/L as N
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		$CHLOROA	Pheophytin	0.7	I	0.5	mg/M3
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		O-PO4	Phosphorus, Ortho	0.005	I Q	0.004	mg/L as P
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		T-PO4	Phosphorus, Total	0.098		0.01	mg/L as P
AC15974	JEBMPWMIN2	WMIN2	W KILGORE & J BLECHA	7/26/2007	18:17	7/27/2007		TSS	Total Suspended Solids	3.5		0.6	mg/L
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.8		0.5	mg/M3
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		TKN	Nitrogen, Kjeldahl, Total	0.68		0.05	mg/L as N
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		TN	Nitrogen, Total	0.72		0.06	mg/L as N
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		$CHLOROA	Pheophytin	1.6	I	0.5	mg/M3
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		O-PO4	Phosphorus, Ortho	0.004	U Q	0.004	mg/L as P
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		T-PO4	Phosphorus, Total	0.04		0.01	mg/L as P
AC15975	JEBMPWMOUT	WMOUT	W KILGORE & J BLECHA	7/27/2007	7:29	7/27/2007		TSS	Total Suspended Solids	2	I	0.6	mg/L
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		NH3	Ammonia, Automated Phenate	0.9		0.014	mg/L as N
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	8.4		0.5	mg/M3
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		CUUGL	Copper, AA furnace technique	1.06	I	1	µg/L
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.14	I	1	µg/L
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		NOX	Nitrate + Nitrite	0.12		0.01	mg/L as N
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		TKN	Nitrogen, Kjeldahl, Total	3		0.05	mg/L as N
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		TN	Nitrogen, Total	3.1		0.06	mg/L as N
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		$CHLOROA	Pheophytin	5.9		0.5	mg/M3
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		O-PO4	Phosphorus, Ortho	0.066		0.004	mg/L as P
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		T-PO4	Phosphorus, Total	0.13		0.01	mg/L as P
AC16200	JEBMPWMIN1	WMIN1	JARED BLECHA	7/31/2007	21:32	8/1/2007		TSS	Total Suspended Solids	1.5	I	0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		NH3	Ammonia, Automated Phenate	0.103		0.014	mg/L as N
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.4		0.5	mg/M3
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		CUUGL	Copper, AA furnace technique	1.01	I	1	µg/L
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		NOX	Nitrate + Nitrite	0.06		0.01	mg/L as N
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		TKN	Nitrogen, Kjeldahl, Total	0.62		0.05	mg/L as N
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		TN	Nitrogen, Total	0.68		0.06	mg/L as N
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		$CHLOROA	Pheophytin	0.5	I	0.5	mg/M3
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		O-PO4	Phosphorus, Ortho	0.039		0.004	mg/L as P
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		T-PO4	Phosphorus, Total	0.072		0.01	mg/L as P
AC16227	JEBMPLLIN1	LLIN1	JARED BLECHA	8/1/2007	19:35	8/2/2007		TSS	Total Suspended Solids	1.25	I	0.6	mg/L
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		NH3	Ammonia, Automated Phenate	0.158		0.014	mg/L as N
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	12		0.5	mg/M3
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		CUUGL	Copper, AA furnace technique	3.85	I	1	µg/L
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		CUUGLD	Copper, Dissolved, AA furnace technique	5.15		1	µg/L
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		TKN	Nitrogen, Kjeldahl, Total	1.7		0.05	mg/L as N
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		TN	Nitrogen, Total	1.7		0.06	mg/L as N
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		$CHLOROA	Pheophytin	1.8	I	0.5	mg/M3
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		O-PO4	Phosphorus, Ortho	0.012	I J4	0.004	mg/L as P
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		T-PO4	Phosphorus, Total	0.086		0.01	mg/L as P
AC16228	JEBMPLLOUT	LLOUT	JARED BLECHA	8/1/2007	20:43	8/2/2007		TSS	Total Suspended Solids	2.75		0.6	mg/L
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		NH3	Ammonia, Automated Phenate	0.349		0.014	mg/L as N
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.1		0.5	mg/M3
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		TKN	Nitrogen, Kjeldahl, Total	1		0.05	mg/L as N
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		TN	Nitrogen, Total	1.1		0.06	mg/L as N
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		T-PO4	Phosphorus, Total	0.032	I	0.01	mg/L as P
AC16199	JEBMPWMOUT	WMOUT	JARED BLECHA	8/1/2007	9:27	8/1/2007		TSS	Total Suspended Solids	1.25	I	0.6	mg/L
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		NH3	Ammonia, Automated Phenate	2.46		0.014	mg/L as N
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	1.3	I	0.5	mg/M3
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		CUUGL	Copper, AA furnace technique	2.65	I	1	µg/L
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		CUUGLD	Copper, Dissolved, AA furnace technique	3.24	I	1	µg/L
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		NOX	Nitrate + Nitrite	0.48		0.01	mg/L as N
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		TKN	Nitrogen, Kjeldahl, Total	3.1		0.05	mg/L as N
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		TN	Nitrogen, Total	3.6		0.06	mg/L as N
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		$CHLOROA	Pheophytin	0.5	U	0.5	mg/M3
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		T-PO4	Phosphorus, Total	0.1		0.01	mg/L as P
AC16557	JEBMPLLIN1	LLIN1	W KILGORE/ J BLECHA	8/8/2007	18:47	8/9/2007		TSS	Total Suspended Solids	4.25		0.6	mg/L
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		NH3	Ammonia, Automated Phenate	0.047	I	0.014	mg/L as N
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.9		0.5	mg/M3
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		CUUGL	Copper, AA furnace technique	2.9	I	1	µg/L
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		CUUGLD	Copper, Dissolved, AA furnace technique	3.82	I	1	µg/L
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		TKN	Nitrogen, Kjeldahl, Total	1.2		0.05	mg/L as N
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		TN	Nitrogen, Total	1.3		0.06	mg/L as N
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		$CHLOROA	Pheophytin	1.7	I	0.5	mg/M3
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		O-PO4	Phosphorus, Ortho	0.024		0.004	mg/L as P
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		T-PO4	Phosphorus, Total	0.099		0.01	mg/L as P
AC16558	JEBMPLLIN2	LLIN2	W KILGORE/ J BLECHA	8/8/2007	19:41	8/9/2007		TSS	Total Suspended Solids	5.25		0.6	mg/L
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		NH3	Ammonia, Automated Phenate	0.056	I	0.014	mg/L as N
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	10.5		0.5	mg/M3
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		CUUGL	Copper, AA furnace technique	3.81	I	1	µg/L
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		CUUGLD	Copper, Dissolved, AA furnace technique	4.28		1	µg/L
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		TKN	Nitrogen, Kjeldahl, Total	1.4		0.05	mg/L as N
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		TN	Nitrogen, Total	1.4		0.06	mg/L as N
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		$CHLOROA	Pheophytin	1.8	I	0.5	mg/M3
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		O-PO4	Phosphorus, Ortho	0.007	I	0.004	mg/L as P
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		T-PO4	Phosphorus, Total	0.088		0.01	mg/L as P
AC16559	JEBMPLLOUT	LLOUT	W KILGORE/ J BLECHA	8/9/2007	13:38	8/9/2007		TSS	Total Suspended Solids	3		0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		NH3	Ammonia, Automated Phenate	0.102		0.014	mg/L as N
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	1.4	I	0.5	mg/M3
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		NOX	Nitrate + Nitrite	0.15		0.01	mg/L as N
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		TKN	Nitrogen, Kjeldahl, Total	0.45		0.05	mg/L as N
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		TN	Nitrogen, Total	0.6		0.06	mg/L as N
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		$CHLOROA	Pheophytin	2		0.5	mg/M3
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		O-PO4	Phosphorus, Ortho	0.071		0.004	mg/L as P
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		T-PO4	Phosphorus, Total	0.1		0.01	mg/L as P
AC17539	JEBMPLLIN1	LLIN1	KILGORE/DENISON	9/2/2007	19:24	9/4/2007		TSS	Total Suspended Solids	2.4		0.6	mg/L
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		NH3	Ammonia, Automated Phenate	0.084		0.014	mg/L as N
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	1.1	I	0.5	mg/M3
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		CUUGL	Copper, AA furnace technique	1.03	I	1	µg/L
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.28	I	1	µg/L
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		NOX	Nitrate + Nitrite	0.24		0.01	mg/L as N
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		TKN	Nitrogen, Kjeldahl, Total	0.53		0.05	mg/L as N
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		TN	Nitrogen, Total	0.77		0.06	mg/L as N
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		$CHLOROA	Pheophytin	1.2	I	0.5	mg/M3
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		O-PO4	Phosphorus, Ortho	0.189		0.004	mg/L as P
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		T-PO4	Phosphorus, Total	0.23		0.01	mg/L as P
AC17540	JEBMPLLIN2	LLIN2	KILGORE/DENISON	9/2/2007	19:30	9/4/2007		TSS	Total Suspended Solids	4.8		0.6	mg/L
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		NH3	Ammonia, Automated Phenate	0.029	I	0.014	mg/L as N
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.7		0.5	mg/M3
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		CUUGL	Copper, AA furnace technique	3.1	I	1	µg/L
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.64	I	1	µg/L
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		NOX	Nitrate + Nitrite	0.34		0.01	mg/L as N
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		TN	Nitrogen, Total	1.7		0.06	mg/L as N
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		T-PO4	Phosphorus, Total	0.087		0.01	mg/L as P
AC17541	JEBMPLLOUT	LLOUT	KILGORE/DENISON	9/2/2007	21:51	9/4/2007		TSS	Total Suspended Solids	4		0.6	mg/L
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		NH3	Ammonia, Automated Phenate	0.074		0.014	mg/L as N
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	1.6	I	0.5	mg/M3
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		CUUGL	Copper, AA furnace technique	2.62	I	1	µg/L
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		NOX	Nitrate + Nitrite	0.13		0.01	mg/L as N
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		TKN	Nitrogen, Kjeldahl, Total	0.26		0.05	mg/L as N
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		TN	Nitrogen, Total	0.39		0.06	mg/L as N
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		$CHLOROA	Pheophytin	0.5	U	0.5	mg/M3
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		T-PO4	Phosphorus, Total	0.016	I	0.01	mg/L as P
AC17542	JEBMPWMIN1	WMIN1	KILGORE/DENISON	9/2/2007	19:31	9/4/2007		TSS	Total Suspended Solids	2.78		0.6	mg/L
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		NH3	Ammonia, Automated Phenate	0.081		0.014	mg/L as N
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.6		0.5	mg/M3
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		NOX	Nitrate + Nitrite	0.89		0.01	mg/L as N
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		TKN	Nitrogen, Kjeldahl, Total	0.58		0.05	mg/L as N
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		TN	Nitrogen, Total	1.5		0.06	mg/L as N
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		T-PO4	Phosphorus, Total	0.034	I	0.01	mg/L as P
AC17543	JEBMPWMOUT	WMOUT	KILGORE/DENISON	9/2/2007	21:52	9/4/2007		TSS	Total Suspended Solids	1.63	I	0.6	mg/L
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		NH3	Ammonia, Automated Phenate	0.283		0.014	mg/L as N
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	9.8		0.5	mg/M3
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		CUUGL	Copper, AA furnace technique	5.98		1	µg/L
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.37	I	1	µg/L
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		NOX	Nitrate + Nitrite	0.13		0.01	mg/L as N
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	1.7		0.05	mg/L as N
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		TN	Nitrogen, Total	1.9		0.06	mg/L as N
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		$CHLOROA	Pheophytin	3.9		0.5	mg/M3
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		T-PO4	Phosphorus, Total	0.13		0.01	mg/L as P
AC18427	JEBMPLLIN1	LLIN1	TIM DENISON	9/20/2007	14:29	9/21/2007		TSS	Total Suspended Solids	6.88		0.6	mg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		NH3	Ammonia, Automated Phenate	0.088		0.014	mg/L as N
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.000063	I ELAB	0.00005	mg/L
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.0001	ELAB	0.00005	mg/L
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	6.3		0.5	mg/M3
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		CUUGL	Copper, AA furnace technique	5.36		1	µg/L
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	3.21	I	1	µg/L
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	1.2		0.05	mg/L as N
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		TN	Nitrogen, Total	1.2		0.06	mg/L as N
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		$CHLOROA	Pheophytin	2.9		0.5	mg/M3
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		O-PO4	Phosphorus, Ortho	0.034		0.004	mg/L as P
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		T-PO4	Phosphorus, Total	0.14		0.01	mg/L as P
AC18428	JEBMPLLIN2	LLIN2	TIM DENISON	9/20/2007	17:16	9/21/2007		TSS	Total Suspended Solids	3.55		0.6	mg/L
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		NH3	Ammonia, Automated Phenate	0.015	I	0.014	mg/L as N
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.3		0.5	mg/M3
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		CUUGL	Copper, AA furnace technique	5.18		1	µg/L
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	3.75	I	1	µg/L
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	1.4		0.05	mg/L as N
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		TN	Nitrogen, Total	1.4		0.06	mg/L as N
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		$CHLOROA	Pheophytin	2.7		0.5	mg/M3
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		O-PO4	Phosphorus, Ortho	0.014	I	0.004	mg/L as P
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		T-PO4	Phosphorus, Total	0.12		0.01	mg/L as P
AC18429	JEBMPLLOUT	LLOUT	TIM DENISON	9/20/2007	11:06	9/21/2007		TSS	Total Suspended Solids	9.9		0.6	mg/L
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		NH3	Ammonia, Automated Phenate	0.147		0.014	mg/L as N
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00022	ELAB	0.00005	mg/L
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.1		0.5	mg/M3
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		CUUGL	Copper, AA furnace technique	2.97	I	1	µg/L
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.93	I	1	µg/L
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	0.92		0.05	mg/L as N
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		TN	Nitrogen, Total	0.97		0.06	mg/L as N
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		$CHLOROA	Pheophytin	5.3		0.5	mg/M3
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		T-PO4	Phosphorus, Total	0.053		0.01	mg/L as P
AC18430	JEBMPWMIN1	WMIN1	TIM DENISON	9/20/2007	11:04	9/21/2007		TSS	Total Suspended Solids	26.4		0.6	mg/L
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		NH3	Ammonia, Automated Phenate	0.144		0.014	mg/L as N
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.0002	ELAB	0.00005	mg/L
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00048	ELAB	0.00005	mg/L
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.8		0.5	mg/M3
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		CUUGL	Copper, AA furnace technique	3.41	I	1	µg/L
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	2.29	I	1	µg/L
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		NOX	Nitrate + Nitrite	0.21		0.01	mg/L as N
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	0.81		0.05	mg/L as N
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		TN	Nitrogen, Total	1		0.06	mg/L as N
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		$CHLOROA	Pheophytin	4.2		0.5	mg/M3
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		O-PO4	Phosphorus, Ortho	0.012	I	0.004	mg/L as P
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		T-PO4	Phosphorus, Total	0.059		0.01	mg/L as P
AC18431	JEBMPWMIN2	WMIN2	TIM DENISON	9/20/2007	19:16	9/21/2007		TSS	Total Suspended Solids	20.7		0.6	mg/L
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		NH3	Ammonia, Automated Phenate	0.07		0.014	mg/L as N
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.4		0.5	mg/M3
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		CUUGL	Copper, AA furnace technique	1.53	I	1	µg/L
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		CUUGLD	Copper, Dissolved, AA furnace technique	1.52	I	1	µg/L
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		TKN	Nitrogen, Kjeldahl, Total	0.7		0.05	mg/L as N
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		TN	Nitrogen, Total	0.72		0.06	mg/L as N
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		$CHLOROA	Pheophytin	1.3	I	0.5	mg/M3
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		T-PO4	Phosphorus, Total	0.047		0.01	mg/L as P
AC18432	JEBMPWMOUT	WMOUT	TIM DENISON	9/20/2007	15:40	9/21/2007		TSS	Total Suspended Solids	9.77		0.6	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		NH3	Ammonia, Automated Phenate	0.053	I	0.014	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		NH3	Ammonia, Automated Phenate	0.053	I	0.014	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.1		0.5	mg/M3
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.1		0.5	mg/M3
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0017	ELAB	0.00056	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0017	ELAB	0.00056	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0026	ELAB	0.00056	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0026	ELAB	0.00056	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		NOX	Nitrate + Nitrite	0.33		0.01	mg/L as N

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		NOX	Nitrate + Nitrite	0.33		0.01	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	0.67		0.05	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	0.67		0.05	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TN	Nitrogen, Total	1		0.06	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TN	Nitrogen, Total	1		0.06	mg/L as N
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		O-PO4	Phosphorus, Ortho	0.023		0.004	mg/L as P
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		O-PO4	Phosphorus, Ortho	0.023		0.004	mg/L as P
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		T-PO4	Phosphorus, Total	0.089		0.01	mg/L as P
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		T-PO4	Phosphorus, Total	0.089		0.01	mg/L as P
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TSS	Total Suspended Solids	2.3	I	0.6	mg/L
AC19762	JEBMPLLIN1	LLIN1	JARED BLECHA	10/21/2007	17:14	10/22/2007		TSS	Total Suspended Solids	2.3	I	0.6	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		NH3	Ammonia, Automated Phenate	0.087		0.014	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		NH3	Ammonia, Automated Phenate	0.087		0.014	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.9		0.5	mg/M3
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.9		0.5	mg/M3
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0056	ELAB	0.00056	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0056	ELAB	0.00056	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0036	ELAB	0.00056	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0036	ELAB	0.00056	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		NOX	Nitrate + Nitrite	0.22		0.01	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		NOX	Nitrate + Nitrite	0.22		0.01	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	0.88		0.05	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	0.88		0.05	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TN	Nitrogen, Total	1.1		0.06	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TN	Nitrogen, Total	1.1		0.06	mg/L as N
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		$CHLOROA	Pheophytin	2.1		0.5	mg/M3
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		$CHLOROA	Pheophytin	2.1		0.5	mg/M3
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		O-PO4	Phosphorus, Ortho	0.053		0.004	mg/L as P
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		O-PO4	Phosphorus, Ortho	0.053		0.004	mg/L as P
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		T-PO4	Phosphorus, Total	0.12		0.01	mg/L as P
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		T-PO4	Phosphorus, Total	0.12		0.01	mg/L as P
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TSS	Total Suspended Solids	4.48		0.6	mg/L
AC19763	JEBMPLLIN2	LLIN2	JARED BLECHA	10/22/2007	7:10	10/22/2007		TSS	Total Suspended Solids	4.48		0.6	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		NH3	Ammonia, Automated Phenate	0.104		0.014	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		NH3	Ammonia, Automated Phenate	0.104		0.014	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CD-ICPMS	Cadmium by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CD-ICPMS-D	Cadmium, dissolved by ICPMS	0.00005	U ELAB	0.00005	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	6.7		0.5	mg/M3
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		$CHLOROA	Chlorophyll a - corrected for Pheophytin	6.7		0.5	mg/M3
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0062	ELAB	0.00056	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CU-ICPMS	Copper by ICP/MS	0.0062	ELAB	0.00056	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0057	ELAB	0.00056	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		CU-ICPMS-D	Copper, dissolved by ICP/MS	0.0057	ELAB	0.00056	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		NOX	Nitrate + Nitrite	0.06		0.01	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		NOX	Nitrate + Nitrite	0.06		0.01	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TN	Nitrogen, Total	1.4		0.06	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TN	Nitrogen, Total	1.4		0.06	mg/L as N
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		O-PO4	Phosphorus, Ortho	0.029		0.004	mg/L as P
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		O-PO4	Phosphorus, Ortho	0.029		0.004	mg/L as P
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		T-PO4	Phosphorus, Total	0.11		0.01	mg/L as P
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TSS	Total Suspended Solids	4.93		0.6	mg/L
AC19764	JEBMPLLOUT	LLOUT	JARED BLECHA	10/22/2007	12:24	10/22/2007		TSS	Total Suspended Solids	4.93		0.6	mg/L
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		NH3	MMONIA, AUTOMATED PHENATE	0.156		0.014	mg/L as N
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.5		0.5	mg/M3
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		CUUGL	Copper, AA furnace technique	1.63	I	1	µg/L
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		NOX	Nitrate + Nitrite	0.16		0.01	mg/L as N
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		TKN	Nitrogen, Kjeldahl, Total	0.98		0.05	mg/L as N
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		O-PO4	Phosphorus, Ortho	0.024		0.004	mg/L as P
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		T-PO4	Phosphorus, Total	0.099		0.006	mg/L as P
AC30330	JEBMPLLI	LLIN1	WAYNE KILGORE	6/23/2008	18:05	6/24/2008		TSS	Total Suspended Solids	5.35		0.6	mg/L
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		NH3	MMONIA, AUTOMATED PHENATE	0.196		0.014	mg/L as N

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.2		0.5	mg/M3
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		CUUGL	Copper, AA furnace technique	7.81		1	µg/L
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	2.48	I	1	µg/L
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		TKN	Nitrogen, Kjeldahl, Total	2		0.05	mg/L as N
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		TN	Nitrogen, Total	2		0.05	mg/L as N
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		$CHLOROA	Pheophytin	1.5	I	0.5	mg/M3
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		O-PO4	Phosphorus, Ortho	0.027		0.004	mg/L as P
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		T-PO4	Phosphorus, Total	0.13		0.006	mg/L as P
AC30331	JEBMPLLO	LLOUT	WAYNE KILGORE	6/23/2008	10:56	6/24/2008		TSS	Total Suspended Solids	4.65		0.6	mg/L
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		NH3	MMONIA, AUTOMATED PHENATE	0.09		0.014	mg/L as N
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.2		0.5	mg/M3
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		CUUGL	Copper, AA furnace technique	2.12	I	1	µg/L
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1.15	I	1	µg/L
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		NOX	NITRATE + NITRITE	0.13		0.01	mg/L as N
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		TKN	Nitrogen, Kjeldahl, Total	1.1		0.05	mg/L as N
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		TN	Nitrogen, Total	1.2		0.05	mg/L as N
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		$CHLOROA	Pheophytin	1.3	I	0.5	mg/M3
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		O-PO4	Phosphorus, Ortho	0.036		0.004	mg/L as P
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		T-PO4	Phosphorus, Total	0.084		0.006	mg/L as P
AC30854	JEBMPLLI	LLIN1	JONATHAN GUINN	7/7/2008	22:53	7/8/2008		TSS	Total Suspended Solids	2.1	I	0.6	mg/L
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		NH3	MMONIA, AUTOMATED PHENATE	0.202		0.014	mg/L as N
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.7		0.5	mg/M3
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		CUUGL	Copper, AA furnace technique	2.3	I	1	µg/L
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1.24	I	1	µg/L
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		NOX	NITRATE + NITRITE	0.08		0.01	mg/L as N
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		TKN	Nitrogen, Kjeldahl, Total	1.5		0.05	mg/L as N
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		TN	Nitrogen, Total	1.6		0.05	mg/L as N
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		$CHLOROA	Pheophytin	1.6	I	0.5	mg/M3
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		O-PO4	Phosphorus, Ortho	0.021		0.004	mg/L as P
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		T-PO4	Phosphorus, Total	0.084		0.006	mg/L as P
AC30853	JEBMPLLI	LLIN2	JONATHAN GUINN	7/8/2008	5:18	7/8/2008		TSS	Total Suspended Solids	1.85	I	0.6	mg/L
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		NH3	MMONIA, AUTOMATED PHENATE	0.127		0.014	mg/L as N
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.2		0.5	mg/M3
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		CUUGL	Copper, AA furnace technique	2.68	I	1	µg/L
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1.61	I	1	µg/L
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		NOX	NITRATE + NITRITE	0.03	I	0.01	mg/L as N
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		TKN	Nitrogen, Kjeldahl, Total	1.8		0.05	mg/L as N
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		TN	Nitrogen, Total	1.8		0.05	mg/L as N
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		O-PO4	Phosphorus, Ortho	0.027		0.004	mg/L as P
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		T-PO4	Phosphorus, Total	0.09		0.006	mg/L as P
AC30852	JEBMPLLO	LLOUT	JONATHAN GUINN	7/8/2008	3:21	7/8/2008		TSS	Total Suspended Solids	4.82		0.6	mg/L
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		NH3	MMONIA, AUTOMATED PHENATE	0.02	I	0.014	mg/L as N
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		CDUGL	Cadmium, AA furnace technique	0.306	I	0.3	µg/L
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	8		0.5	mg/M3
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		NOX	Nitrate + Nitrite	0.079		0.01	mg/L as N
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		TKN	Nitrogen, Kjeldahl, Total	0.43		0.05	mg/L as N
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		TN	Nitrogen, Total	0.51		0.05	mg/L as N
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		$CHLOROA	Pheophytin	3.4		0.5	mg/M3
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		O-PO4	Phosphorus, Ortho	0.007	I Q	0.004	mg/L as P
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		T-PO4	Phosphorus, Total	0.03		0.006	mg/L as P
AC30912	JEBMPWMI	WMIN1	JARED BLECHA	7/8/2008	18:45	7/9/2008		TSS	Total Suspended Solids	2.85		0.6	mg/L
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		NH3	MMONIA, AUTOMATED PHENATE	0.014	U	0.014	mg/L as N
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		CDUGL	Cadmium, AA furnace technique	1	I	0.3	µg/L
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.98	I	0.4	µg/L
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.8		0.5	mg/M3
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		CUUGL	Copper, AA furnace technique	1.89	I	1	µg/L
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1.01	I	1	µg/L
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		NOX	Nitrate + Nitrite	0.237		0.01	mg/L as N
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		TKN	Nitrogen, Kjeldahl, Total	0.46		0.05	mg/L as N
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		TN	Nitrogen, Total	0.7		0.05	mg/L as N
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		$CHLOROA	Pheophytin	0.9	I	0.5	mg/M3
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		O-PO4	Phosphorus, Ortho	0.036	Q	0.004	mg/L as P
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		T-PO4	Phosphorus, Total	0.061		0.006	mg/L as P
AC30913	JEBMPWMI	WMIN2	JARED BLECHA	7/8/2008	16:14	7/9/2008		TSS	Total Suspended Solids	3.35		0.6	mg/L
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		NH3	MMONIA, AUTOMATED PHENATE	0.014	I	0.014	mg/L as N
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.8		0.5	mg/M3
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		NOX	Nitrate + Nitrite	0.028	I	0.01	mg/L as N
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		TKN	Nitrogen, Kjeldahl, Total	0.28		0.05	mg/L as N
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		TN	Nitrogen, Total	0.3		0.05	mg/L as N
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		$CHLOROA	Pheophytin	1.6	I	0.5	mg/M3
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		O-PO4	Phosphorus, Ortho	0.006	I Q	0.004	mg/L as P
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		T-PO4	Phosphorus, Total	0.024		0.006	mg/L as P
AC30914	JEBMPWMO	WMOUT	JARED BLECHA	7/8/2008	19:12	7/9/2008		TSS	Total Suspended Solids	0.925	I	0.6	mg/L
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		NH3	MMONIA, AUTOMATED PHENATE	0.576		0.014	mg/L as N
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.8		0.5	mg/M3
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		NOX	Nitrate + Nitrite	0.244		0.01	mg/L as N
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		TKN	Nitrogen, Kjeldahl, Total	0.97		0.05	mg/L as N
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		TN	Nitrogen, Total	1.2		0.05	mg/L as N
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		$CHLOROA	Pheophytin	3		0.5	mg/M3
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		O-PO4	Phosphorus, Ortho	0.484		0.004	mg/L as P
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		T-PO4	Phosphorus, Total	0.52		0.006	mg/L as P
AC30988	JEBMPBRI	BRIN	JONATHAN GUINN	7/9/2008	18:13	7/10/2008		TSS	Total Suspended Solids	7.9		0.6	mg/L
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		NH3	MMONIA, AUTOMATED PHENATE	0.133		0.014	mg/L as N
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	14.7		0.5	mg/M3
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		NOX	Nitrate + Nitrite	0.646		0.01	mg/L as N
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		TKN	Nitrogen, Kjeldahl, Total	0.9		0.05	mg/L as N
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		TN	Nitrogen, Total	1.5		0.05	mg/L as N
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		$CHLOROA	Pheophytin	2.4		0.5	mg/M3
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		O-PO4	Phosphorus, Ortho	0.018		0.004	mg/L as P
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		T-PO4	Phosphorus, Total	0.073		0.006	mg/L as P
AC30987	JEBMPBRO	BROUT	JONATHAN GUINN	7/9/2008	19:20	7/10/2008		TSS	Total Suspended Solids	5.1		0.6	mg/L
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		NH3	MMONIA, AUTOMATED PHENATE	0.014	U	0.014	mg/L as N
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	0.5	U	0.5	mg/M3
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		NOX	Nitrate + Nitrite	0.018	I	0.01	mg/L as N
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		TKN	Nitrogen, Kjeldahl, Total	0.05	U	0.05	mg/L as N
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		TN	Nitrogen, Total	0.056	I	0.05	mg/L as N
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		$CHLOROA	Pheophytin	0.5	U	0.5	mg/M3
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		T-PO4	Phosphorus, Total	0.006	U	0.006	mg/L as P
AC30989	JEBMPFB	Field Blank	JONATHAN GUINN	7/10/2008	15:00	7/10/2008		TSS	Total Suspended Solids	0.6	U	0.6	mg/L
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		NH3	MMONIA, AUTOMATED PHENATE	0.464		0.014	mg/L as N
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	0.9	I	0.5	mg/M3
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		NOX	NITRATE + NITRITE	0.22		0.01	mg/L as N
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		TKN	Nitrogen, Kjeldahl, Total	0.68		0.05	mg/L as N
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		TN	Nitrogen, Total	0.9		0.05	mg/L as N
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		$CHLOROA	Pheophytin	1.4	I	0.5	mg/M3
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		O-PO4	Phosphorus, Ortho	0.011	I	0.004	mg/L as P
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		T-PO4	Phosphorus, Total	0.016	I	0.006	mg/L as P
AC31083	JEBMPWMI	WMIN1	J GUINN & J BL	7/12/2008	16:17	7/14/2008		TSS	Total Suspended Solids	2.73		0.6	mg/L
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		NH3	MMONIA, AUTOMATED PHENATE	0.045	I	0.014	mg/L as N
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		CDUGL	Cadmium, AA furnace technique	0.551	I	0.3	µg/L
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	7.4		0.5	mg/M3
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		NOX	NITRATE + NITRITE	0.22		0.01	mg/L as N
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		TKN	Nitrogen, Kjeldahl, Total	0.45	J4	0.05	mg/L as N
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		TN	Nitrogen, Total	0.67		0.05	mg/L as N
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		$CHLOROA	Pheophytin	4.7		0.5	mg/M3
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		O-PO4	Phosphorus, Ortho	0.025		0.004	mg/L as P
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		T-PO4	Phosphorus, Total	0.047		0.006	mg/L as P
AC31084	JEBMPWMI	WMIN2	J GUINN & J BL	7/12/2008	22:46	7/14/2008		TSS	Total Suspended Solids	1.45	I	0.6	mg/L
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		NH3	MMONIA, AUTOMATED PHENATE	0.05	I	0.014	mg/L as N
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.3		0.5	mg/M3
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		NOX	NITRATE + NITRITE	0.03	I	0.01	mg/L as N
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		TKN	Nitrogen, Kjeldahl, Total	0.39		0.05	mg/L as N
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		TN	Nitrogen, Total	0.42		0.05	mg/L as N
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		$CHLOROA	Pheophytin	1.3	I	0.5	mg/M3
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		O-PO4	Phosphorus, Ortho	0.006	I	0.004	mg/L as P
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		T-PO4	Phosphorus, Total	0.028		0.006	mg/L as P
AC31085	JEBMPWMO	WMOUT	J GUINN & J BL	7/12/2008	16:33	7/14/2008		TSS	Total Suspended Solids	0.6	U	0.6	mg/L
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		NH3	MMONIA, AUTOMATED PHENATE	0.028	I	0.014	mg/L as N
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4		0.5	mg/M3
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		NOX	NITRATE + NITRITE	0.09		0.01	mg/L as N
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		TKN	Nitrogen, Kjeldahl, Total	0.93		0.05	mg/L as N
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		TN	Nitrogen, Total	1		0.05	mg/L as N
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		$CHLOROA	Pheophytin	4.4		0.5	mg/M3
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		O-PO4	Phosphorus, Ortho	0.446		0.004	mg/L as P
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		T-PO4	Phosphorus, Total	0.46		0.006	mg/L as P
AC31202	JEBMPBRI	BRIN	W KILGORE & J	7/15/2008	11:10	7/16/2008		TSS	Total Suspended Solids	2.38	I	0.6	mg/L
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		NH3	MMONIA, AUTOMATED PHENATE	0.014	U	0.014	mg/L as N
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	19.7		0.5	mg/M3
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		NOX	NITRATE + NITRITE	0.03	I	0.01	mg/L as N
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		TKN	Nitrogen, Kjeldahl, Total	1.1		0.05	mg/L as N
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		$CHLOROA	Pheophytin	4.3		0.5	mg/M3
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		O-PO4	Phosphorus, Ortho	0.022		0.004	mg/L as P
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		T-PO4	Phosphorus, Total	0.064		0.006	mg/L as P
AC31203	JEBMPBRO	BROUT	W KILGORE & J	7/15/2008	10:59	7/16/2008		TSS	Total Suspended Solids	3.68		0.6	mg/L
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		NH3	MMONIA, AUTOMATED PHENATE	0.574		0.014	mg/L as N
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	10.3		0.5	mg/M3
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		NOX	NITRATE + NITRITE	0.06		0.01	mg/L as N
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		TKN	Nitrogen, Kjeldahl, Total	0.88		0.05	mg/L as N
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		TN	Nitrogen, Total	0.94		0.05	mg/L as N
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		$CHLOROA	Pheophytin	3.7		0.5	mg/M3
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		O-PO4	Phosphorus, Ortho	0.006	I	0.004	mg/L as P
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		T-PO4	Phosphorus, Total	0.032		0.006	mg/L as P
AC31201	JEBMPWMI	WMIN1	JARED BLECHA	7/16/2008	12:43	7/16/2008		TSS	Total Suspended Solids	4.75		0.6	mg/L
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		NH3	MMONIA, AUTOMATED PHENATE	0.014	U	0.014	mg/L as N
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.1		0.5	mg/M3
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		NOX	NITRATE + NITRITE	0.16		0.01	mg/L as N
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		TKN	Nitrogen, Kjeldahl, Total	0.45		0.05	mg/L as N
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		TN	Nitrogen, Total	0.61		0.05	mg/L as N
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		$CHLOROA	Pheophytin	1	I	0.5	mg/M3
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		O-PO4	Phosphorus, Ortho	0.054		0.004	mg/L as P
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		T-PO4	Phosphorus, Total	0.078		0.006	mg/L as P
AC31200	JEBMPWMI	WMIN2	JARED BLECHA	7/16/2008	14:08	7/16/2008		TSS	Total Suspended Solids	4.57		0.6	mg/L
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		NH3	MMONIA, AUTOMATED PHENATE	0.066		0.014	mg/L as N
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		DCDUGL	ADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	4.6		0.5	mg/M3
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHNI	1	U	1	µg/L
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		NOX	NITRATE + NITRITE	0.03	I	0.01	mg/L as N
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		TKN	Nitrogen, Kjeldahl, Total	0.31		0.05	mg/L as N
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		TN	Nitrogen, Total	0.34		0.05	mg/L as N
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		$CHLOROA	Pheophytin	2.3		0.5	mg/M3
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		O-PO4	Phosphorus, Ortho	0.008	I	0.004	mg/L as P
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		T-PO4	Phosphorus, Total	0.021	I	0.006	mg/L as P
AC31199	JEBMPWMO	WMOUT	JARED BLECHA	7/16/2008	13:22	7/16/2008		TSS	Total Suspended Solids	0.6	U	0.6	mg/L
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		NH3	AMMONIA, AUTOMATED PHENATE	0.014	U	0.014	mg/L as N
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L

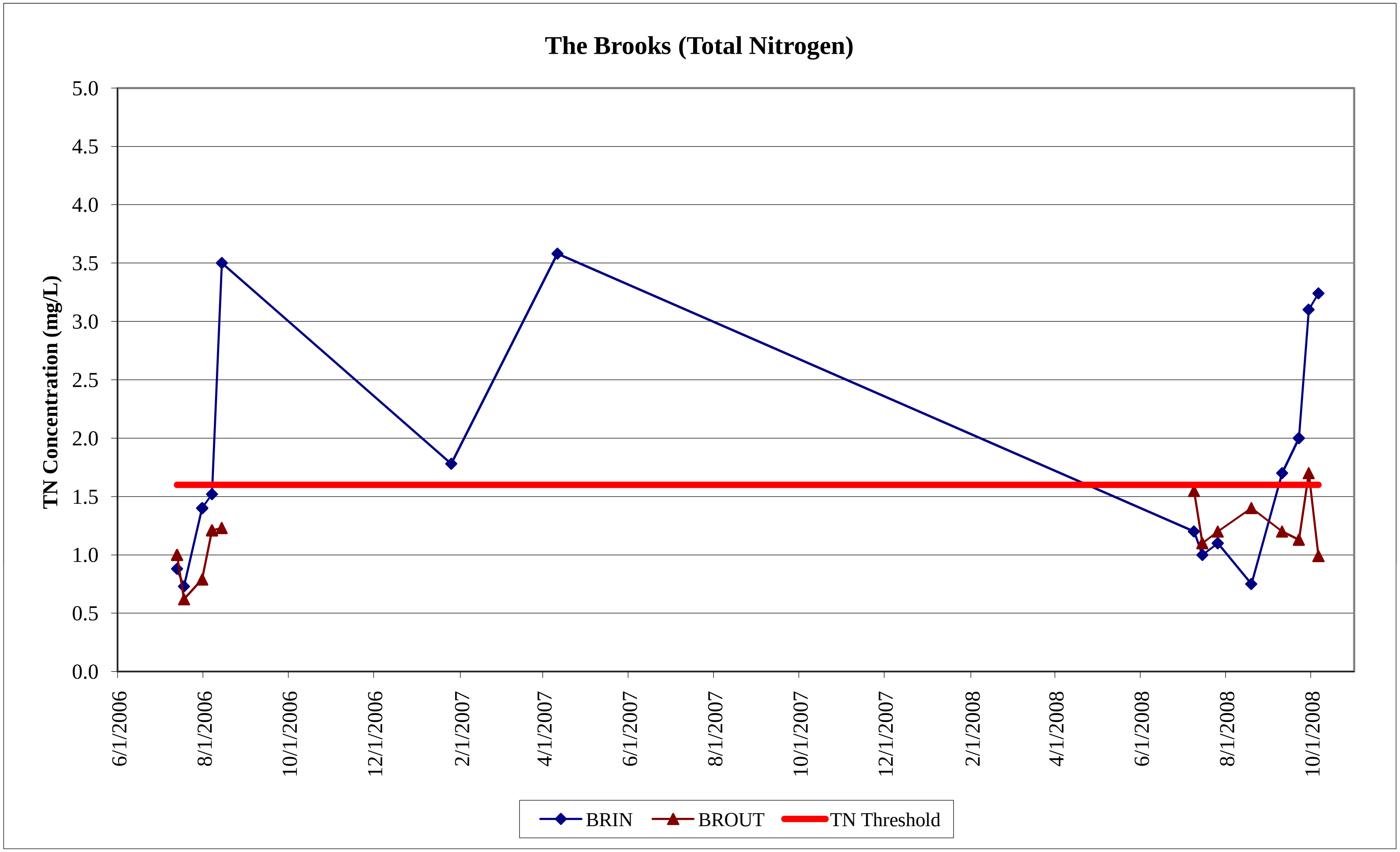
SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		DCDUGL	CADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	14.4		0.5	mg/M3
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHN	1	U	1	µg/L
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		NOX	NITRATE + NITRITE	0.01	U	0.01	mg/L as N
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		TKN	Nitrogen, Kjeldahl, Total	1.2		0.05	mg/L as N
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		TN	Nitrogen, Total	1.2		0.05	mg/L as N
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		O-PO4	Phosphorus, Ortho	0.021	Q	0.004	mg/L as P
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		T-PO4	Phosphorus, Total	0.1		0.006	mg/L as P
AC31618	JEBMPBROUT	BROUT	JARED BLECHA	7/25/2008	23:40	7/28/2008		TSS	Total Suspended Solids	1.23	I	0.6	mg/L
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		NH3	AMMONIA, AUTOMATED PHENATE	0.071		0.014	mg/L as N
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		DCDUGL	CADMIUM, DISSOLVED, AA FURNACE	0.4	U	0.4	µg/L
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	8.3		0.5	mg/M3
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHN	1	U	1	µg/L
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		NOX	NITRATE + NITRITE	0.07		0.01	mg/L as N
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		TKN	Nitrogen, Kjeldahl, Total	1		0.05	mg/L as N
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		$CHLOROA	Pheophytin	9.2		0.5	mg/M3
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		O-PO4	Phosphorus, Ortho	0.036	Q	0.004	mg/L as P
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		T-PO4	Phosphorus, Total	0.085		0.006	mg/L as P
AC31617	JEBMPBRIN	BRIN	JARED BLECHA	7/26/2008	3:44	7/28/2008		TSS	Total Suspended Solids	0.95	I	0.6	mg/L
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		NH3	AMMONIA, AUTOMATED PHENATE	0.062		0.014	mg/L as N
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	2.3		0.5	mg/M3
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHN	1	U	1	µg/L
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		NOX	NITRATE + NITRITE	0.28		0.01	mg/L as N
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		TKN	Nitrogen, Kjeldahl, Total	0.66		0.05	mg/L as N
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		TN	Nitrogen, Total	0.94		0.05	mg/L as N
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		$CHLOROA	Pheophytin	0.5	U	0.5	mg/M3
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		O-PO4	Phosphorus, Ortho	0.105		0.004	mg/L as P
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		T-PO4	Phosphorus, Total	0.15		0.006	mg/L as P
AC32084	JEBMPLLIN1	LLIN1	JARED BLECHA	8/5/2008	16:43	8/6/2008		TSS	Total Suspended Solids	4.27		0.6	mg/L
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		NH3	AMMONIA, AUTOMATED PHENATE	0.092		0.014	mg/L as N
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	10.7		0.5	mg/M3
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHN	1	U	1	µg/L
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		NOX	NITRATE + NITRITE	0.17		0.01	mg/L as N
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		TKN	Nitrogen, Kjeldahl, Total	0.98		0.05	mg/L as N
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		O-PO4	Phosphorus, Ortho	0.052		0.004	mg/L as P
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		T-PO4	Phosphorus, Total	0.11		0.006	mg/L as P
AC32085	JEBMPLLIN2	LLIN2	JARED BLECHA	8/5/2008	23:08	8/6/2008		TSS	Total Suspended Solids	1.37	I	0.6	mg/L
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		NH3	AMMONIA, AUTOMATED PHENATE	0.114		0.014	mg/L as N
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	9		0.5	mg/M3
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		CUUGL	Copper, AA furnace technique	2.01	I	1	µg/L
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		CUUGLD	PER, DISSOLVED, AA FURNACE TECHN	1	U	1	µg/L
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		NOX	NITRATE + NITRITE	0.05		0.01	mg/L as N
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		TN	Nitrogen, Total	1.3		0.05	mg/L as N
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		$CHLOROA	Pheophytin	1.9	I	0.5	mg/M3
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		O-PO4	Phosphorus, Ortho	0.082		0.004	mg/L as P
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		T-PO4	Phosphorus, Total	0.17		0.006	mg/L as P
AC32086	JEBMPLLOUT	LLOUT	JARED BLECHA	8/6/2008	14:56	8/6/2008		TSS	Total Suspended Solids	2	I	0.6	mg/L
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		NH3	Ammonia, Automated Phenate	0.084		0.014	mg/L as N
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.2		0.5	mg/M3
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		CUUGL	Copper, AA furnace technique	3.24	I	1	µg/L
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.04	I	1	µg/L
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		NOX	Nitrate + Nitrite	0.11		0.01	mg/L as N
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	0.91	J4	0.05	mg/L as N
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		TN	Nitrogen, Total	1		0.05	mg/L as N
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		$CHLOROA	Pheophytin	1.1	I	0.5	mg/M3
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		O-PO4	Phosphorus, Ortho	0.051		0.004	mg/L as P
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		T-PO4	Phosphorus, Total	0.12		0.006	mg/L as P
AC32302	JEBMPLLIN1	LLIN1	BLECHA & GUINN	8/12/2008	13:45	8/12/2008		TSS	Total Suspended Solids	3.52		0.6	mg/L
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L

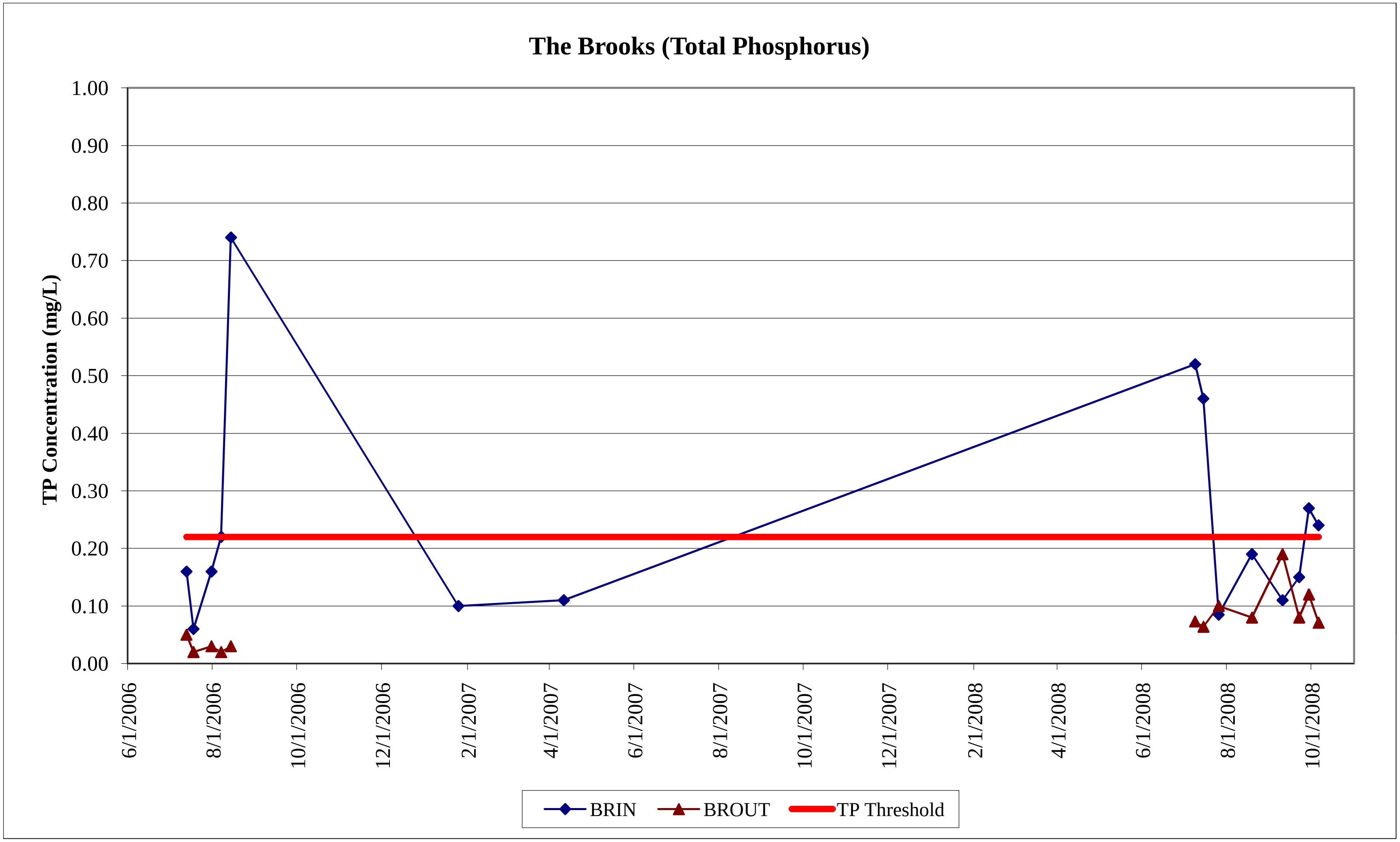
SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	9.8		0.5	mg/M3
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		NOX	Nitrate + Nitrite	0.15		0.01	mg/L as N
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	0.99		0.05	mg/L as N
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		O-PO4	Phosphorus, Ortho	0.037		0.004	mg/L as P
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		T-PO4	Phosphorus, Total	0.12		0.006	mg/L as P
AC32303	JEBMPLLIN2	LLIN2	BLECHA & GUINN	8/12/2008	14:14	8/12/2008		TSS	Total Suspended Solids	4.35		0.6	mg/L
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	11.4		0.5	mg/M3
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		CUUGL	Copper, AA furnace technique	3.57	I	1	µg/L
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		TN	Nitrogen, Total	1.3		0.05	mg/L as N
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		$CHLOROA	Pheophytin	3.8		0.5	mg/M3
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		O-PO4	Phosphorus, Ortho	0.07		0.004	mg/L as P
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		T-PO4	Phosphorus, Total	0.15		0.006	mg/L as P
AC32304	JEBMPLLOUT	LLOUT	BLECHA & GUINN	8/12/2008	14:40	8/12/2008		TSS	Total Suspended Solids	3.95		0.6	mg/L
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		NH3	Ammonia, Automated Phenate	0.025	I	0.014	mg/L as N
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.528	I	0.3	µg/L
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	6		0.5	mg/M3
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		NOX	Nitrate + Nitrite	0.05		0.01	mg/L as N
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	0.75		0.05	mg/L as N
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		TN	Nitrogen, Total	0.8		0.05	mg/L as N
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		$CHLOROA	Pheophytin	3.1		0.5	mg/M3
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		T-PO4	Phosphorus, Total	0.062		0.006	mg/L as P
AC32305	JEBMPWMIN1	WMIN1	JOHN GUINN	8/12/2008	09:56	8/12/2008		TSS	Total Suspended Solids	7.15		0.6	mg/L
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.9		0.5	mg/M3
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		CUUGL	Copper, AA furnace technique	1.07	I	1	µg/L
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		NOX	Nitrate + Nitrite	0.04	I	0.01	mg/L as N
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	1		0.05	mg/L as N
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		$CHLOROA	Pheophytin	0.8	I	0.5	mg/M3
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		O-PO4	Phosphorus, Ortho	0.005	I	0.004	mg/L as P
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		T-PO4	Phosphorus, Total	0.12		0.006	mg/L as P
AC32306	JEBMPWMIN2	WMIN2	JOHN GUINN	8/12/2008	15:42	8/12/2008		TSS	Total Suspended Solids	7.55		0.6	mg/L
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		NH3	Ammonia, Automated Phenate	0.02	I	0.014	mg/L as N
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	8.2		0.5	mg/M3
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		TKN	Nitrogen, Kjeldahl, Total	0.76		0.05	mg/L as N
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		TN	Nitrogen, Total	0.77		0.05	mg/L as N
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		$CHLOROA	Pheophytin	2.4		0.5	mg/M3
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		T-PO4	Phosphorus, Total	0.028		0.006	mg/L as P
AC32307	JEBMPWMOUT	WMOUT	JOHN GUINN	8/12/2008	16:16	8/12/2008		TSS	Total Suspended Solids	0.8	I	0.6	mg/L
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.7		0.5	mg/M3
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		NOX	Nitrate + Nitrite	0.16		0.01	mg/L as N
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		TKN	Nitrogen, Kjeldahl, Total	0.59		0.05	mg/L as N
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		TN	Nitrogen, Total	0.75		0.05	mg/L as N
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		$CHLOROA	Pheophytin	5.7		0.5	mg/M3
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		O-PO4	Phosphorus, Ortho	0.171	Q	0.004	mg/L as P
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		T-PO4	Phosphorus, Total	0.19		0.006	mg/L as P
AC32565	JEBMPBRIN	BRIN	JONATHAN GUINN	8/19/2008	00:08	8/21/2008		TSS	Total Suspended Solids	4.48		0.6	mg/L
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		NH3	Ammonia, Automated Phenate	0.023	I	0.014	mg/L as N
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L

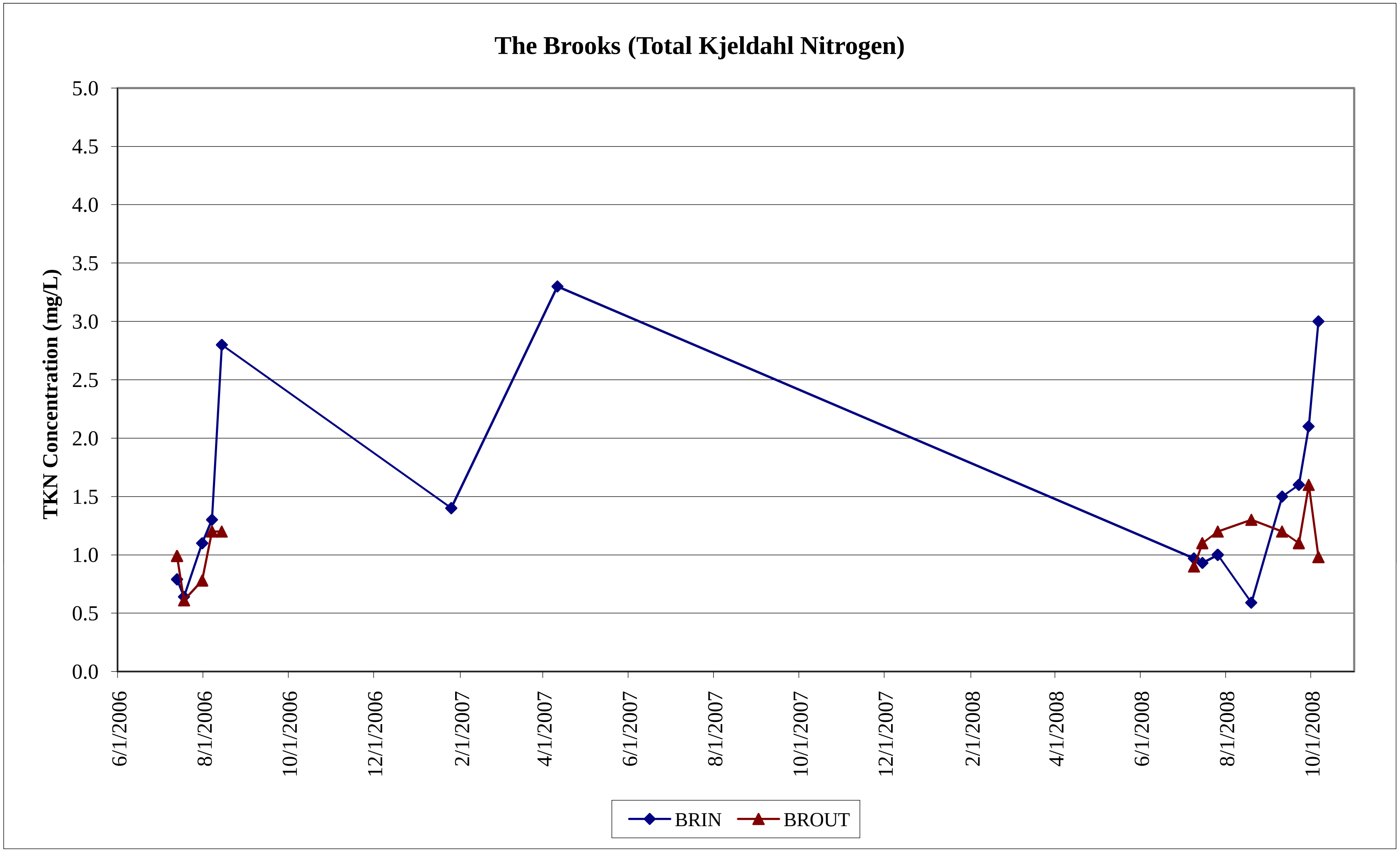
SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U J4	0.4	µg/L
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	10.4		0.5	mg/M3
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		CUUGL	Copper, AA furnace technique	1.7	I	1	µg/L
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.09	I	1	µg/L
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		NOX	Nitrate + Nitrite	0.16		0.01	mg/L as N
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		TKN	Nitrogen, Kjeldahl, Total	1.3		0.05	mg/L as N
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		TN	Nitrogen, Total	1.4		0.05	mg/L as N
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		$CHLOROA	Pheophytin	2.5		0.5	mg/M3
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		O-PO4	Phosphorus, Ortho	0.004	I Q	0.004	mg/L as P
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		T-PO4	Phosphorus, Total	0.08		0.006	mg/L as P
AC32566	JEBMPBROUT	BROUT	JONATHAN GUINN	8/19/2008	05:07	8/21/2008		TSS	Total Suspended Solids	3.95		0.6	mg/L
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		CDUGL	Cadmium, AA furnace technique	0.3	U J4	0.3	µg/L
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	5.2		0.5	mg/M3
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		CUUGL	Copper, AA furnace technique	2.67	I	1	µg/L
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		TKN	Nitrogen, Kjeldahl, Total	0.64		0.05	mg/L as N
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		TN	Nitrogen, Total	0.66		0.05	mg/L as N
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		$CHLOROA	Pheophytin	3.7		0.5	mg/M3
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		O-PO4	Phosphorus, Ortho	0.004	I Q	0.004	mg/L as P
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		T-PO4	Phosphorus, Total	0.087		0.006	mg/L as P
AC32538	JEBMPWMIN1	WMIN1	LEE WERST	8/19/2008	00:39	8/20/2008		TSS	Total Suspended Solids	1	I	0.6	mg/L
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		CDUGL	Cadmium, AA furnace technique	0.468	I	0.3	µg/L
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	6		0.5	mg/M3
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		CUUGL	Copper, AA furnace technique	7.66		1	µg/L
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		NOX	Nitrate + Nitrite	0.09		0.01	mg/L as N
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		TKN	Nitrogen, Kjeldahl, Total	0.72		0.05	mg/L as N
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		TN	Nitrogen, Total	0.81		0.05	mg/L as N
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		$CHLOROA	Pheophytin	4.8		0.5	mg/M3
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		O-PO4	Phosphorus, Ortho	0.052	Q	0.004	mg/L as P
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		T-PO4	Phosphorus, Total	0.13		0.006	mg/L as P
AC32539	JEBMPWMIN2	WMIN2	LEE WERST	8/19/2008	06:56	8/20/2008		TSS	Total Suspended Solids	0.6	U	0.6	mg/L
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	3.1		0.5	mg/M3
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		CUUGL	Copper, AA furnace technique	1	U	1	µg/L
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1	U	1	µg/L
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		NOX	Nitrate + Nitrite	0.02	I	0.01	mg/L as N
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		TKN	Nitrogen, Kjeldahl, Total	0.31		0.05	mg/L as N
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		TN	Nitrogen, Total	0.33		0.05	mg/L as N
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		$CHLOROA	Pheophytin	1.3	I	0.5	mg/M3
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		O-PO4	Phosphorus, Ortho	0.007	I Q	0.004	mg/L as P
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		T-PO4	Phosphorus, Total	0.028		0.006	mg/L as P
AC32540	JEBMPWMOUT	WMOUT	LEE WERST	8/19/2008	09:03	8/20/2008		TSS	Total Suspended Solids	9		0.6	mg/L
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		NH3	Ammonia, Automated Phenate	0.236		0.014	mg/L as N
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	22.4		0.5	mg/M3
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		CUUGL	Copper, AA furnace technique	1.0	U	1	µg/L
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.0	U	1	µg/L
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		NOX	Nitrate + Nitrite	0.14		0.01	mg/L as N
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		TKN	Nitrogen, Kjeldahl, Total	1.5		0.05	mg/L as N
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		TN	Nitrogen, Total	1.7		0.05	mg/L as N
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		$CHLOROA	Pheophytin	11.5		0.5	mg/M3
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		O-PO4	Phosphorus, Ortho	0.004	I	0.004	mg/L as P
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		T-PO4	Phosphorus, Total	0.11		0.006	mg/L as P
AC33455	JEBMPBRIN	BRIN	JONATHAN GUINN	9/10/2008	02:00	9/10/2008		TSS	Total Suspended Solids	3.72		0.6	mg/L
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		NH3	Ammonia, Automated Phenate	0.071		0.014	mg/L as N
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	13.9		0.5	mg/M3
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		CUUGL	Copper, AA furnace technique	1.28	I	1	µg/L
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.0	U	1	µg/L
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		TKN	Nitrogen, Kjeldahl, Total	1.2		0.05	mg/L as N
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		TN	Nitrogen, Total	1.2		0.05	mg/L as N
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		$CHLOROA	Pheophytin	4.8		0.5	mg/M3
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		O-PO4	Phosphorus, Ortho	0.006	I	0.004	mg/L as P
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		T-PO4	Phosphorus, Total	0.19		0.006	mg/L as P
AC33456	JEBMPBROUT	BROUT	JONATHAN GUINN	9/10/2008	06:40	9/10/2008		TSS	Total Suspended Solids	5.58		0.6	mg/L
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		NH3	Ammonia, Automated Phenate	0.315		0.014	mg/L as N
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		CDUGL	Cadmium, AA furnace technique	0.717	I	0.3	µg/L

SAMPLE_ID	LOCATION_CODE	LOCATION	SAMPLE_COLLECTOR	COLLECTION_DATE	COLLECTION_TIME	SUBMIT_DATE	COMMENT	ANALYSIS_CODE	ANALYTE_NAME	RESULT	QUALIFIER	ANALYTE_MDL	ANALYSIS_UNIT
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.518	I	0.4	µg/L
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	15.3		0.5	mg/M3
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		CUUGL	Copper, AA furnace technique	1.29	I	1	µg/L
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.43	I	1	µg/L
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		NOX	Nitrate + Nitrite	0.34		0.01	mg/L as N
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		TKN	Nitrogen, Kjeldahl, Total	1.6		0.05	mg/L as N
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		TN	Nitrogen, Total	2.0		0.05	mg/L as N
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		$CHLOROA	Pheophytin	10.6		0.5	mg/M3
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		O-PO4	Phosphorus, Ortho	0.073		0.004	mg/L as P
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		T-PO4	Phosphorus, Total	0.15		0.006	mg/L as P
AC33924	JEBMPBRIN	BRIN	JARED BLECHA	9/22/2008	19:00	9/23/2008		TSS	Total Suspended Solids	6.55		0.6	mg/L
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		NH3	Ammonia, Automated Phenate	0.049	I	0.014	mg/L as N
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	18.3		0.5	mg/M3
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		CUUGL	Copper, AA furnace technique	1.31	I	1	µg/L
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.0	U	1	µg/L
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		NOX	Nitrate + Nitrite	0.03	I	0.01	mg/L as N
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		TKN	Nitrogen, Kjeldahl, Total	1.1		0.05	mg/L as N
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		TN	Nitrogen, Total	1.1		0.05	mg/L as N
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		$CHLOROA	Pheophytin	4.4		0.5	mg/M3
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		O-PO4	Phosphorus, Ortho	0.013	I	0.004	mg/L as P
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		T-PO4	Phosphorus, Total	0.080		0.006	mg/L as P
AC33925	JEBMPBROUT	BROUT	JARED BLECHA	9/23/2008	13:38	9/23/2008		TSS	Total Suspended Solids	2.97		0.6	mg/L
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		NH3	Ammonia, Automated Phenate	0.747		0.014	mg/L as N
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		CDUGL	Cadmium, AA furnace technique	0.408	I	0.3	µg/L
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		DCDUGL	Cadmium, dissolved, AA furnace	0.4	U	0.4	µg/L
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	10.4		0.5	mg/M3
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		CUUGL	Copper, AA furnace technique	1.50	I	1	µg/L
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.73	I	1	µg/L
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		NOX	Nitrate + Nitrite	0.96		0.01	mg/L as N
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		TKN	Nitrogen, Kjeldahl, Total	2.1		0.05	mg/L as N
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		TN	Nitrogen, Total	3.1		0.05	mg/L as N
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		$CHLOROA	Pheophytin	9.5		0.5	mg/M3
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		O-PO4	Phosphorus, Ortho	0.207		0.004	mg/L as P
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		T-PO4	Phosphorus, Total	0.27		0.006	mg/L as P
AC34242	JEBMPBRIN	BRIN	JONATHAN GUINN	9/29/2008	19:11	9/30/2008		TSS	Total Suspended Solids	19.0		0.6	mg/L
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		NH3	Ammonia, Automated Phenate	0.189		0.014	mg/L as N
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	18.4		0.5	mg/M3
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		CUUGL	Copper, AA furnace technique	1.0	U	1	µg/L
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		NOX	Nitrate + Nitrite	0.08		0.01	mg/L as N
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		TKN	Nitrogen, Kjeldahl, Total	1.6		0.05	mg/L as N
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		TN	Nitrogen, Total	1.7		0.05	mg/L as N
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		$CHLOROA	Pheophytin	8.9		0.5	mg/M3
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		O-PO4	Phosphorus, Ortho	0.043		0.004	mg/L as P
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		T-PO4	Phosphorus, Total	0.12		0.006	mg/L as P
AC34243	JEBMPBROUT	BROUT	JONATHAN GUINN	9/30/2008	11:11	9/30/2008		TSS	Total Suspended Solids	5.25		0.6	mg/L
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		NH3	Ammonia, Automated Phenate	0.114		0.014	mg/L as N
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	16.3		0.5	mg/M3
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		CUUGL	Copper, AA furnace technique	63.3		1	µg/L
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		CUUGLD	Copper, Dissolved, AA furnace technique	47.5		1	µg/L
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		NOX	Nitrate + Nitrite	0.24		0.01	mg/L as N
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		TKN	Nitrogen, Kjeldahl, Total	3.0		0.05	mg/L as N
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		TN	Nitrogen, Total	3.2		0.05	mg/L as N
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		$CHLOROA	Pheophytin	7.6		0.5	mg/M3
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		O-PO4	Phosphorus, Ortho	0.045		0.004	mg/L as P
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		T-PO4	Phosphorus, Total	0.24		0.006	mg/L as P
AC34574	JEBMPBRIN	BRIN	JARED BLECHA	10/6/2008	22:09	10/7/2008		TSS	Total Suspended Solids	5.13		0.6	mg/L
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		NH3	Ammonia, Automated Phenate	0.014	U	0.014	mg/L as N
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		CDUGL	Cadmium, AA furnace technique	0.3	U	0.3	µg/L
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		$CHLOROA	Chlorophyll a - corrected for Pheophytin	17.6		0.5	mg/M3
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		CUUGL	Copper, AA furnace technique	1.13	I	1	µg/L
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		CUUGLD	Copper, Dissolved, AA furnace technique	1.09	I	1	µg/L
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		NOX	Nitrate + Nitrite	0.01	I	0.01	mg/L as N
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		TKN	Nitrogen, Kjeldahl, Total	0.98		0.05	mg/L as N
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		TN	Nitrogen, Total	0.99		0.05	mg/L as N
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		$CHLOROA	Pheophytin	7.4		0.5	mg/M3
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		O-PO4	Phosphorus, Ortho	0.004	U	0.004	mg/L as P
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		T-PO4	Phosphorus, Total	0.071		0.006	mg/L as P
AC34575	JEBMPBROUT	BROUT	JARED BLECHA	10/7/2008	00:57	10/7/2008		TSS	Total Suspended Solids	2.55		0.6	mg/L

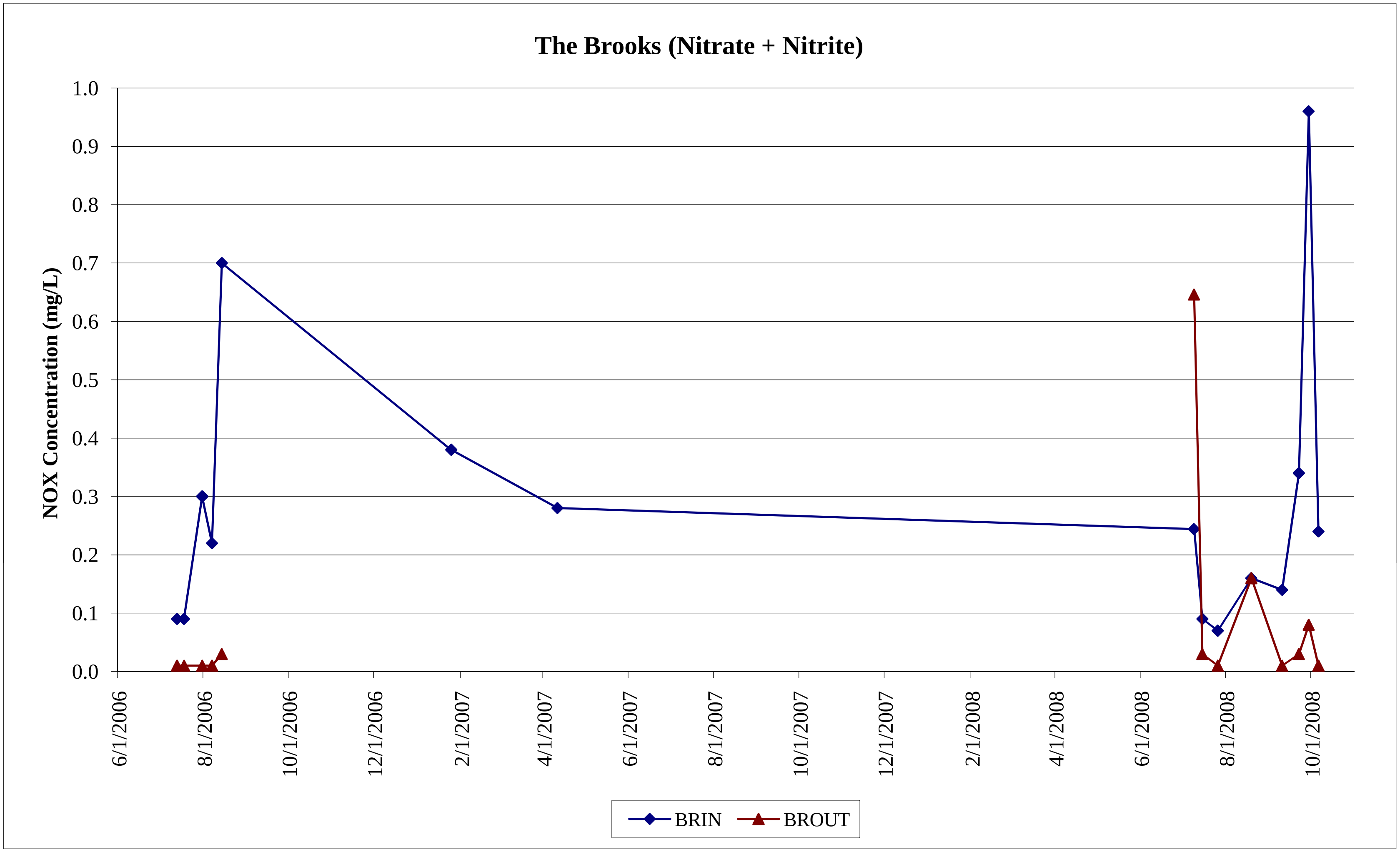
APPENDIX G - LABORATORY DATA GRAPHS


The Brooks (Total Nitrogen)
TN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT
TN Threshold

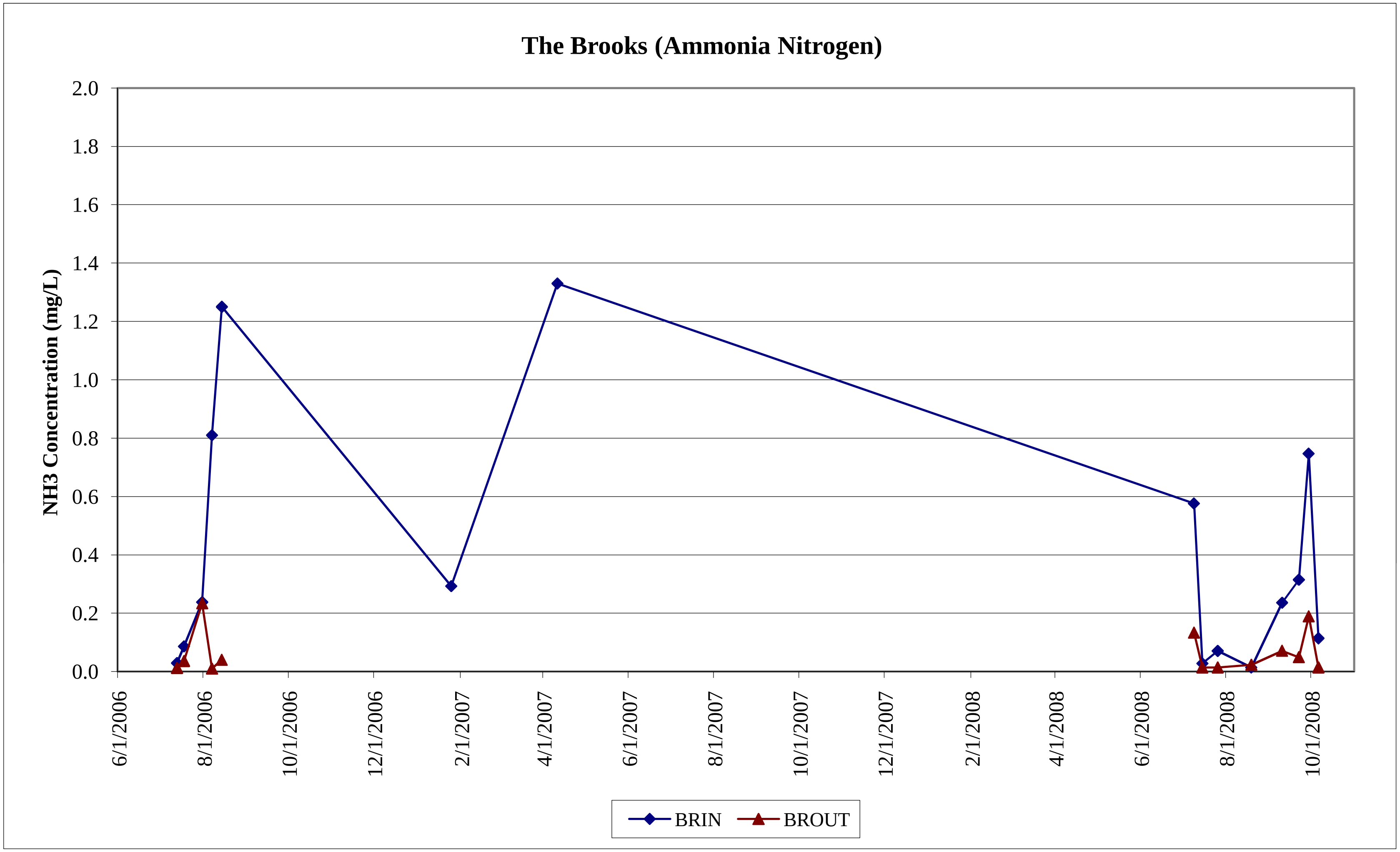

The Brooks (Total Phosphorus)
TP Concentration (mg/L)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT
TP Threshold



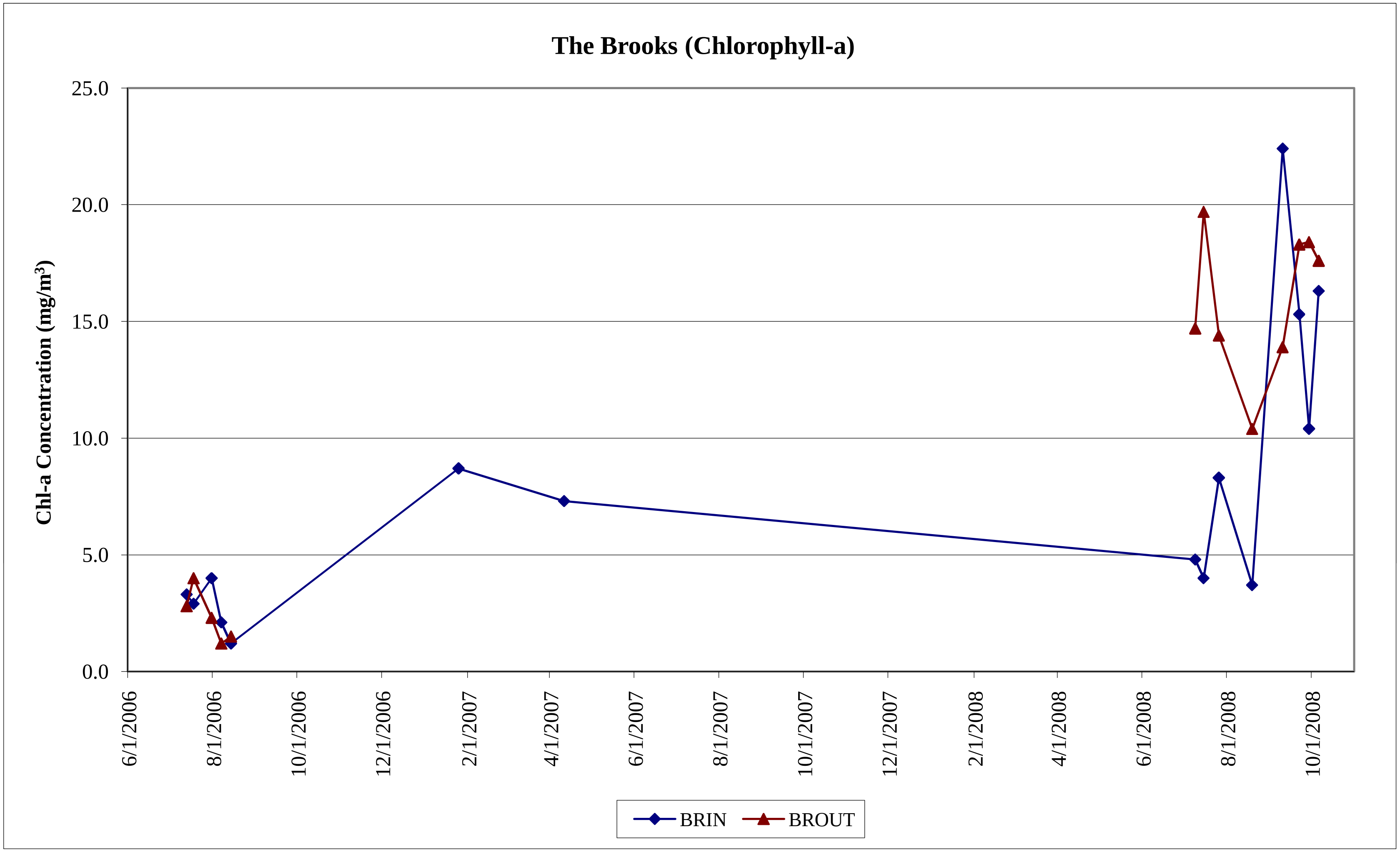
The Brooks (Total Kjeldahl Nitrogen)
TKN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

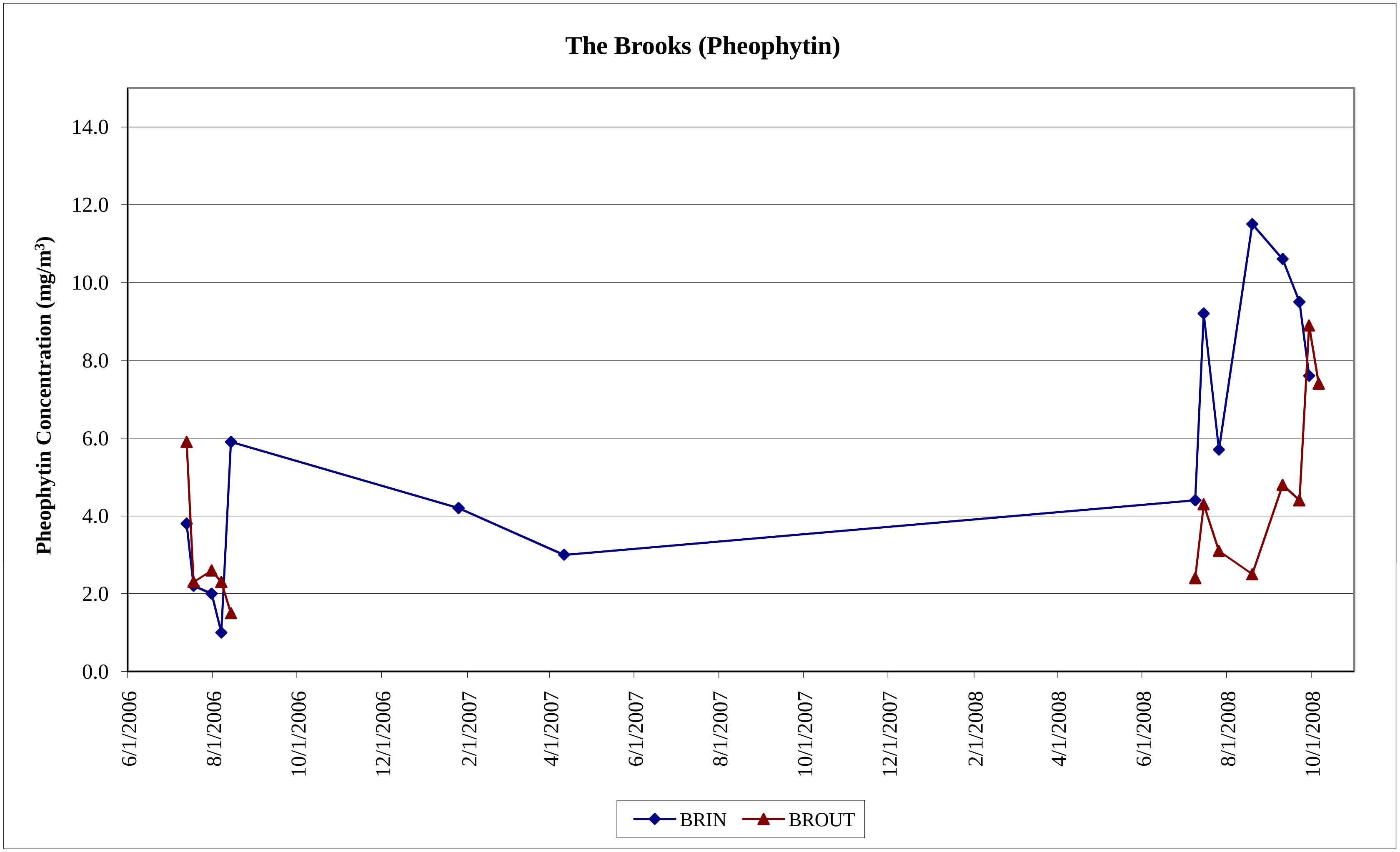


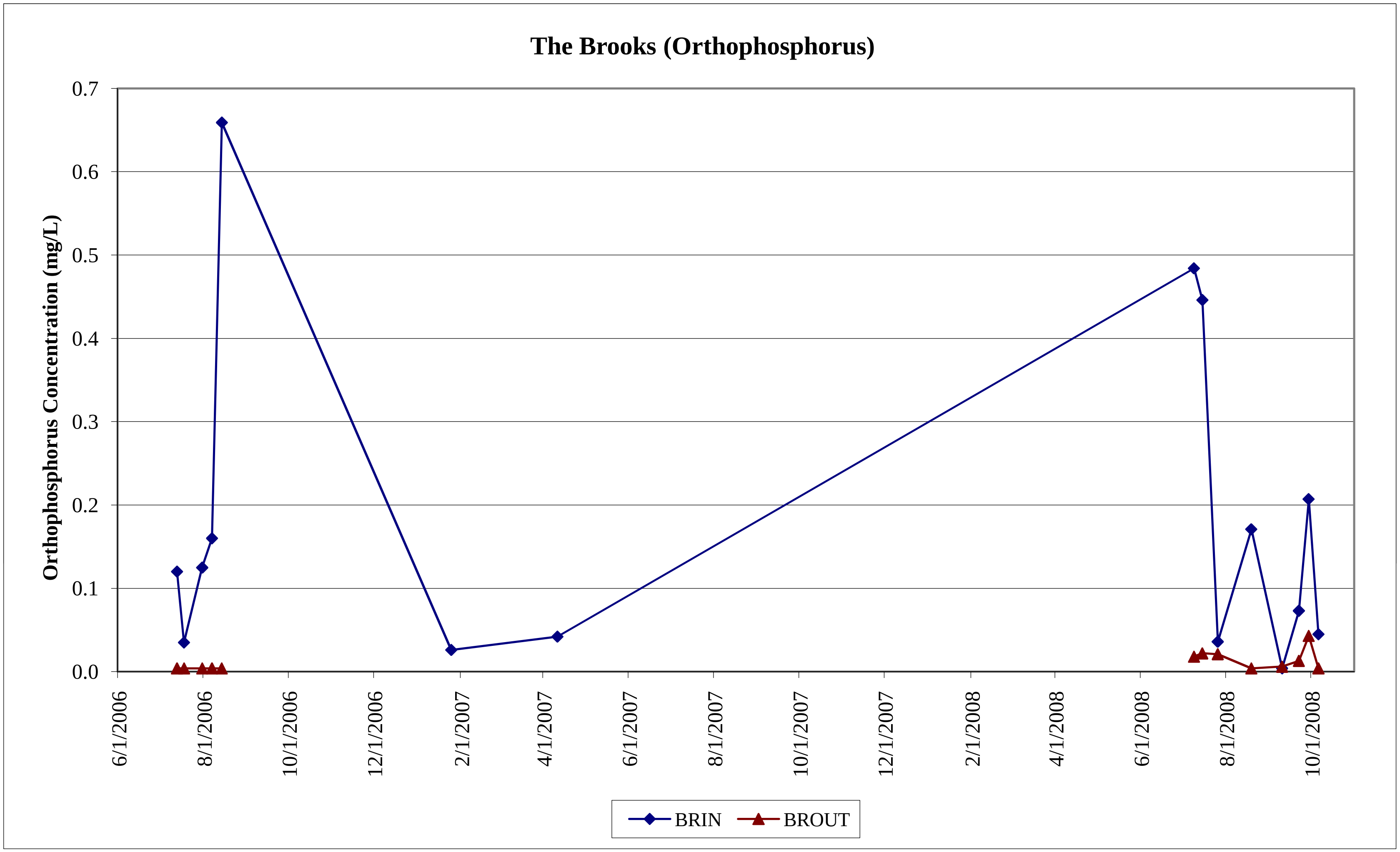
The Brooks (Nitrate + Nitrite)
NOX Concentration (mg/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT



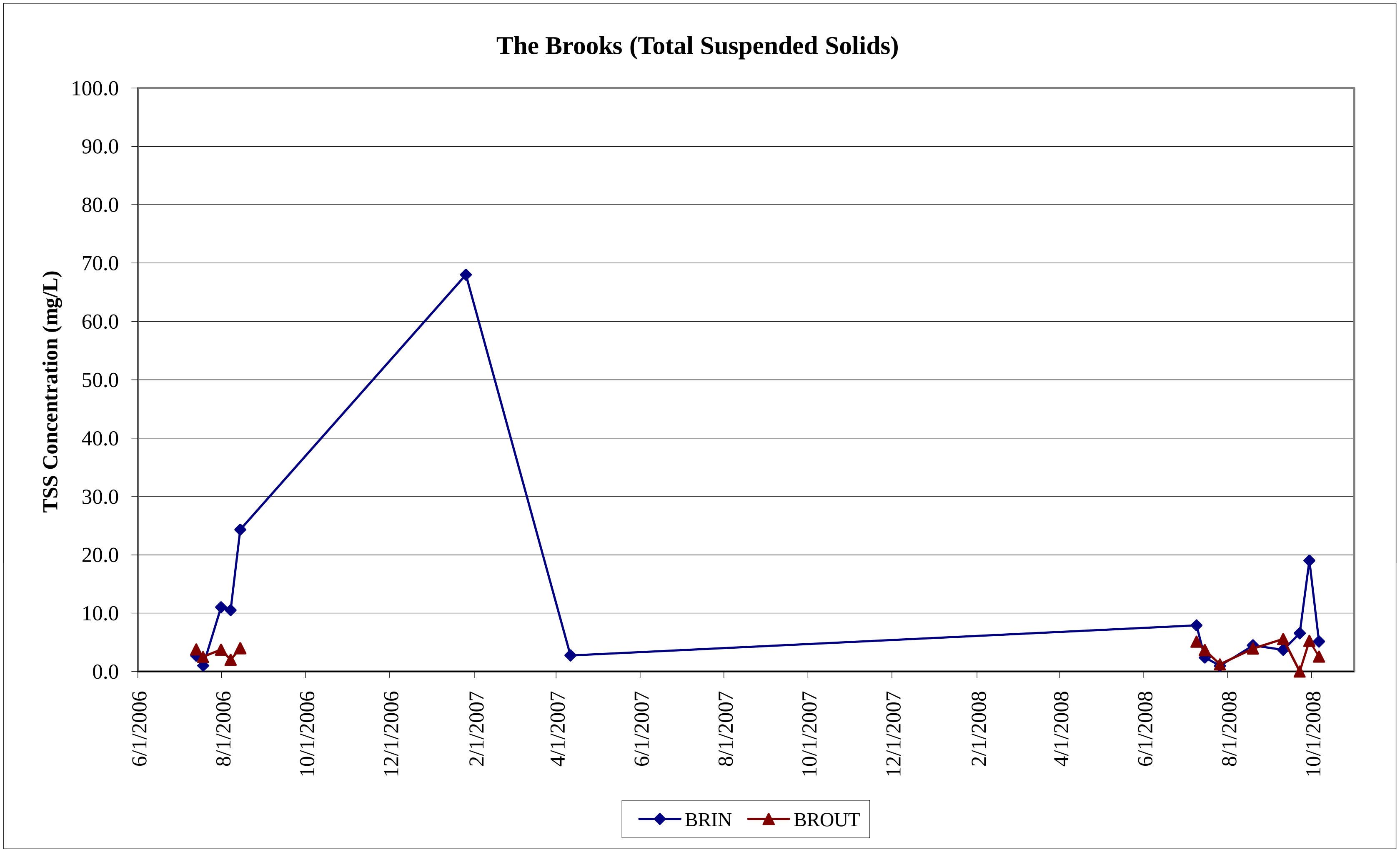
The Brooks (Ammonia Nitrogen)
NH3 Concentration (mg/L)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

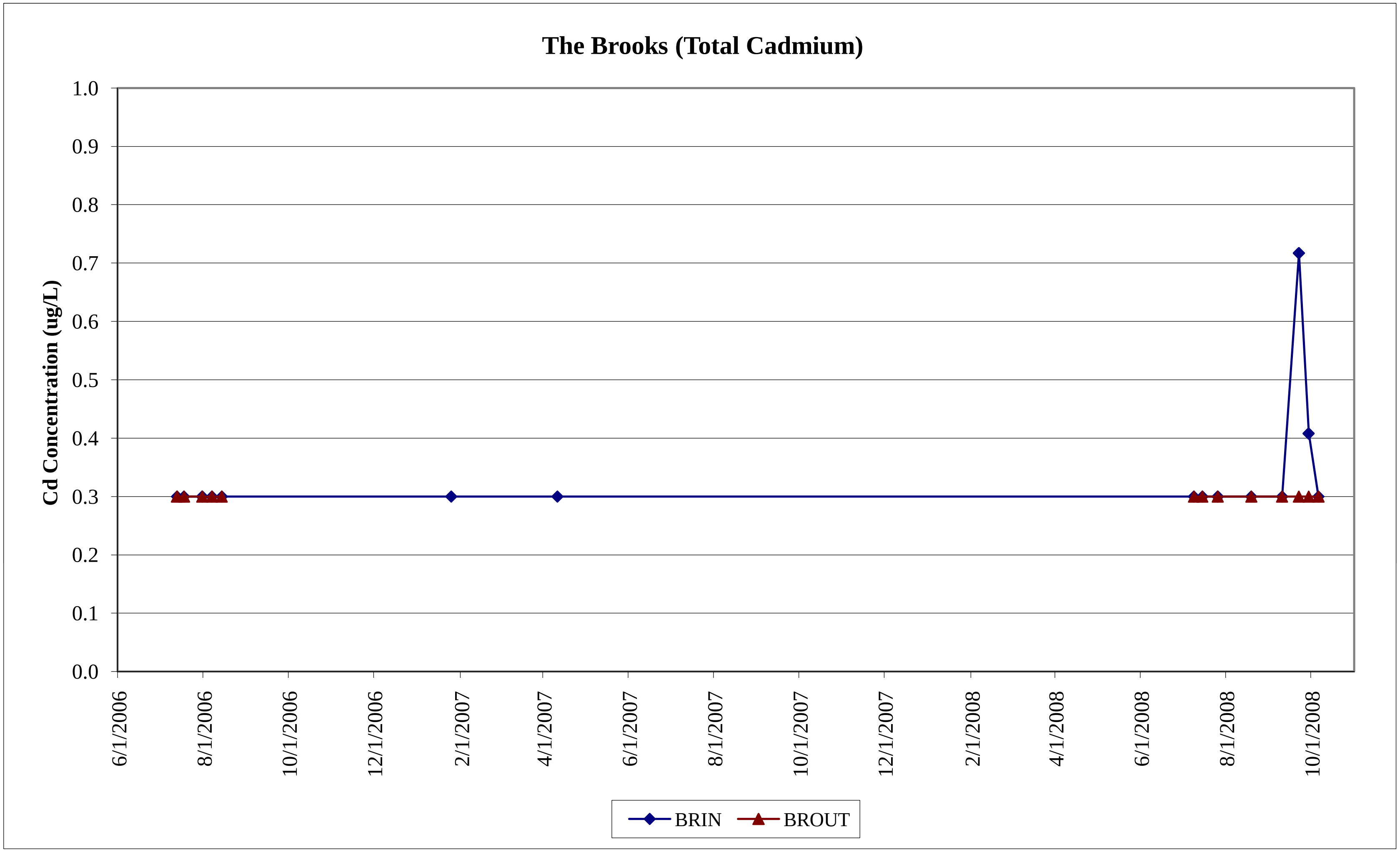

The Brooks (Chlorophyll-a)
Chl-a Concentration (mg/m³)
25.0
20.0
15.0
10.0
5.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

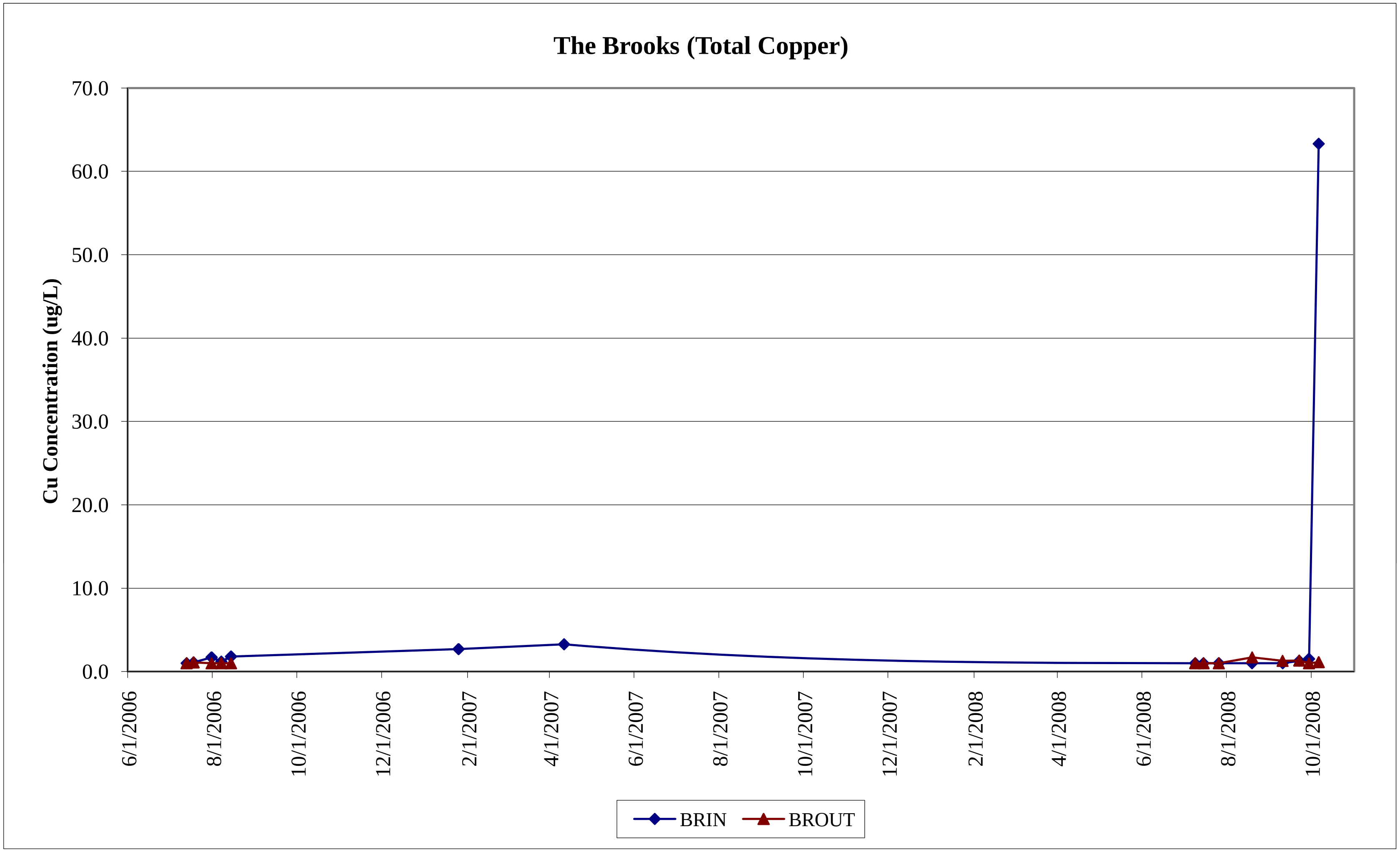

The Brooks (Pheophytin)
Pheophytin Concentration (mg/m3)
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

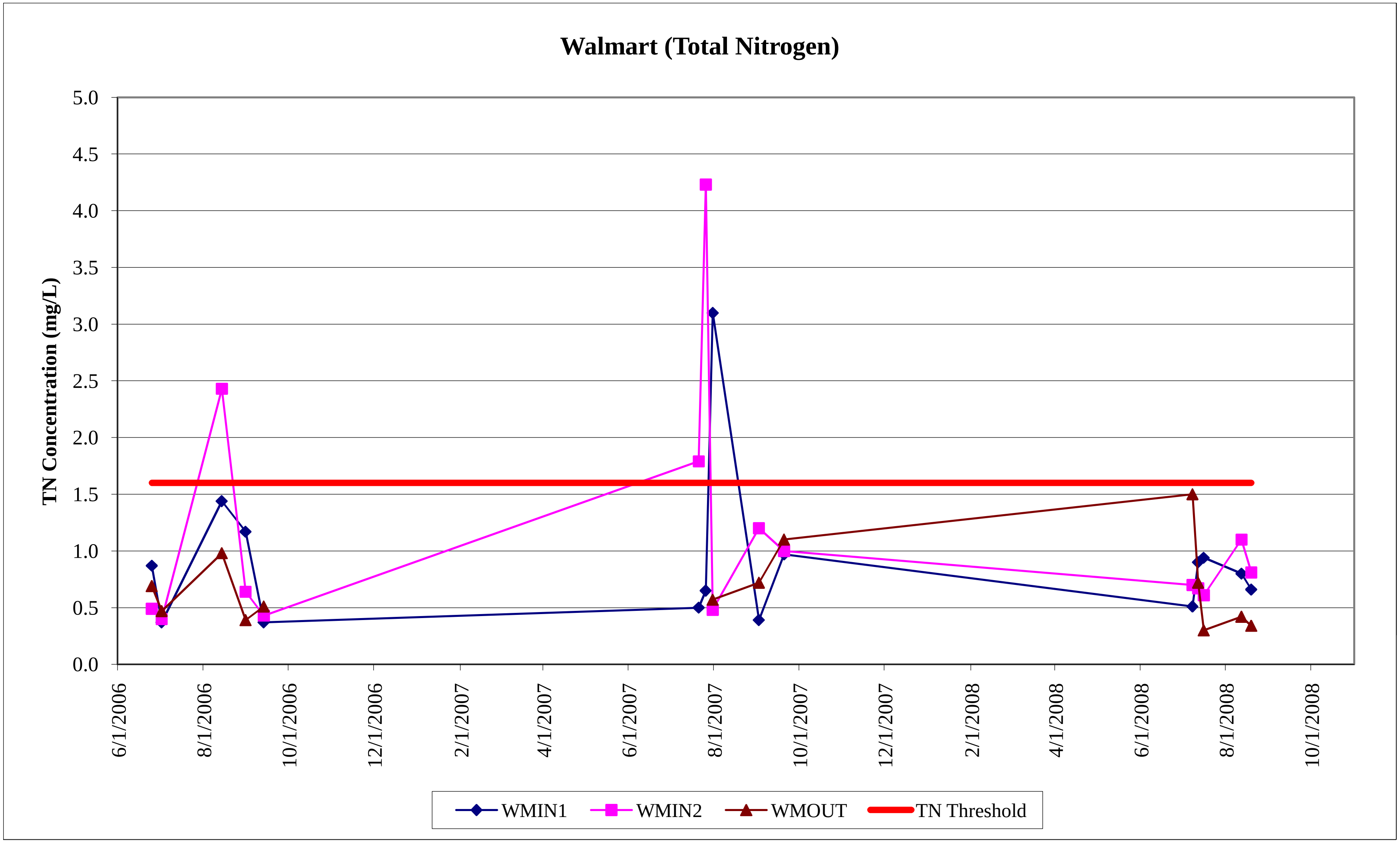


The Brooks (Orthophosphorus)
Orthophosphorus Concentration (mg/L)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

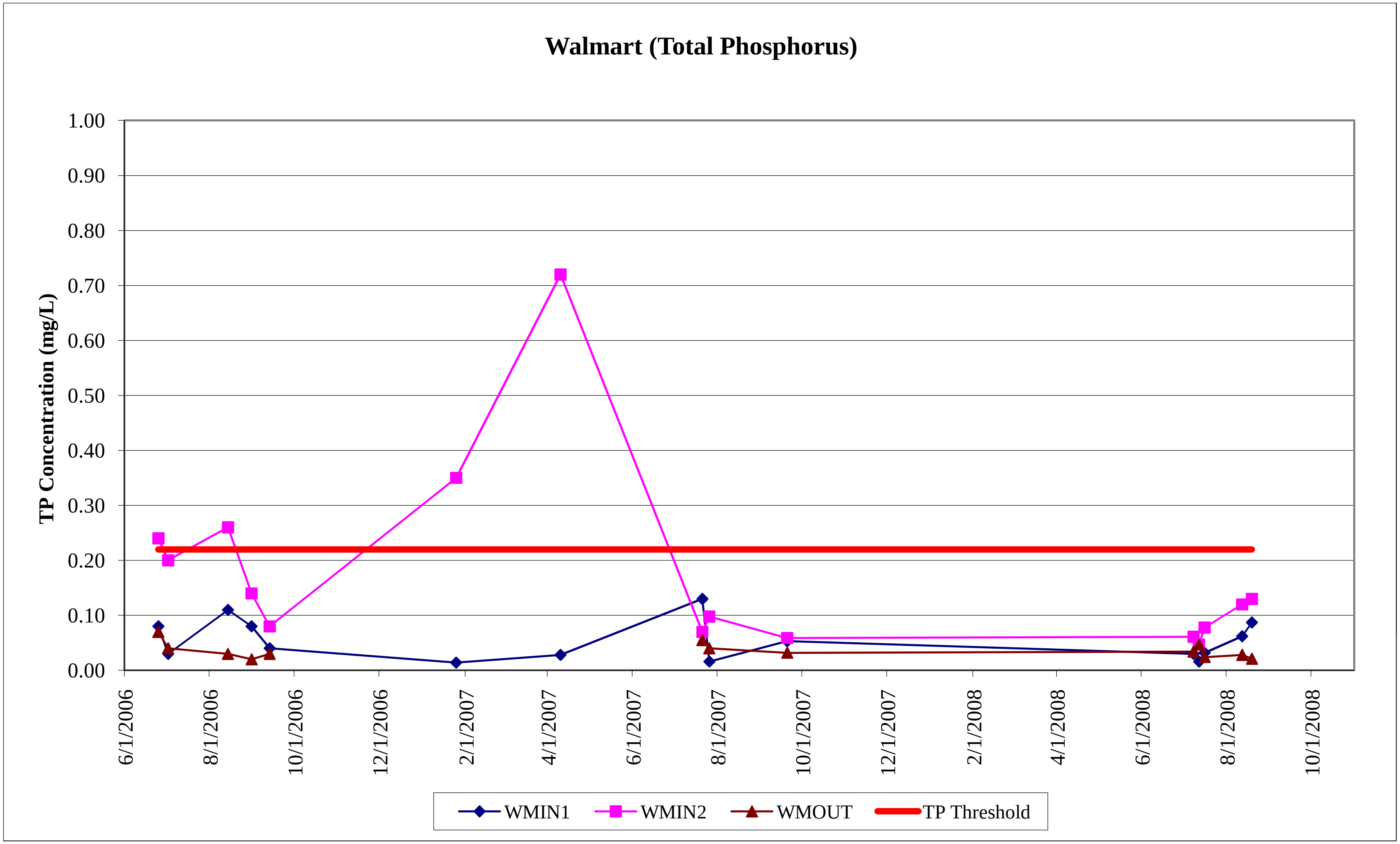

The Brooks (Total Suspended Solids)
TSS Concentration (mg/L)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

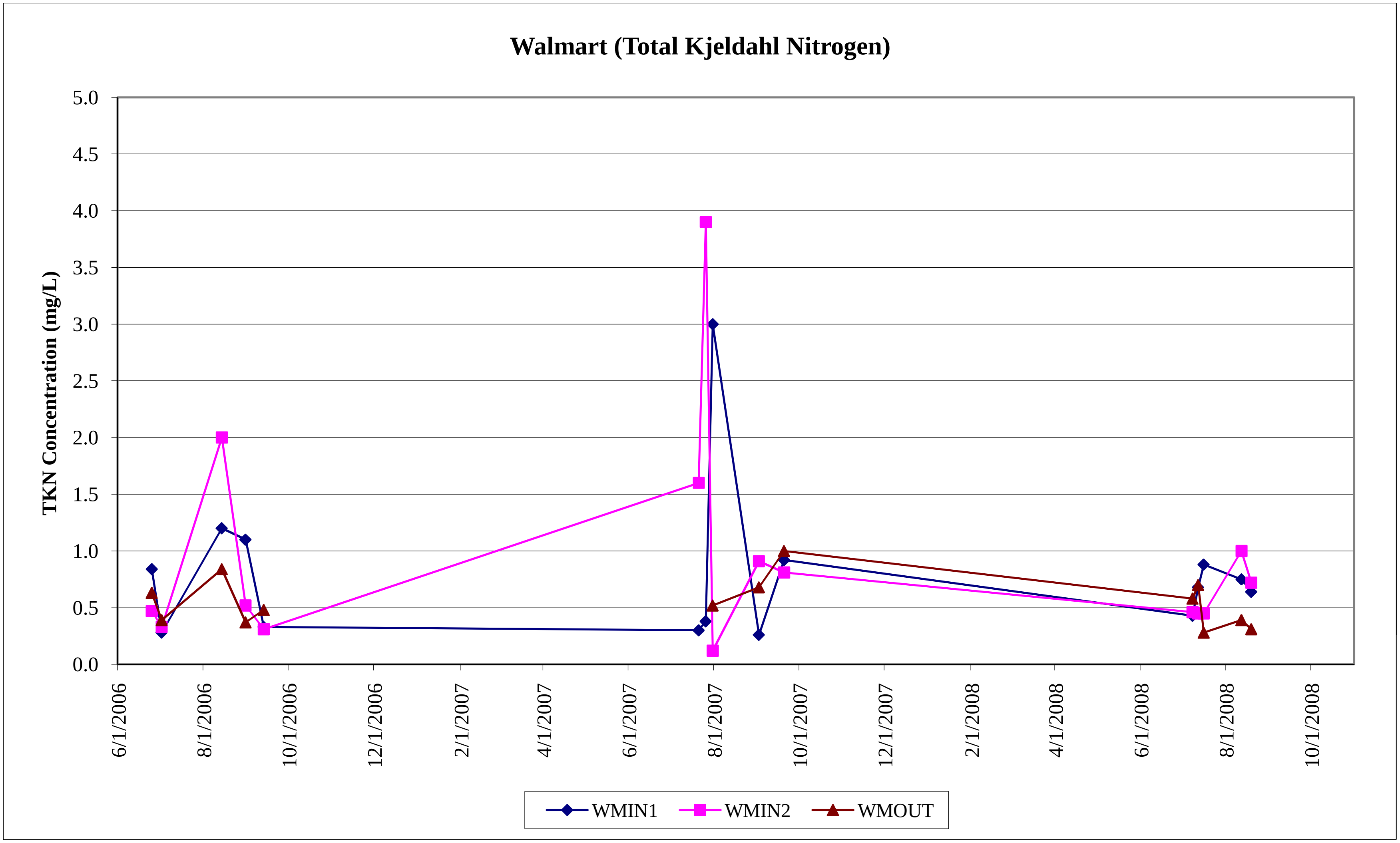

The Brooks (Total Cadmium)
Cd Concentration (ug/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT


The Brooks (Total Copper)
Cu Concentration (ug/L)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
BRIN
BROUT

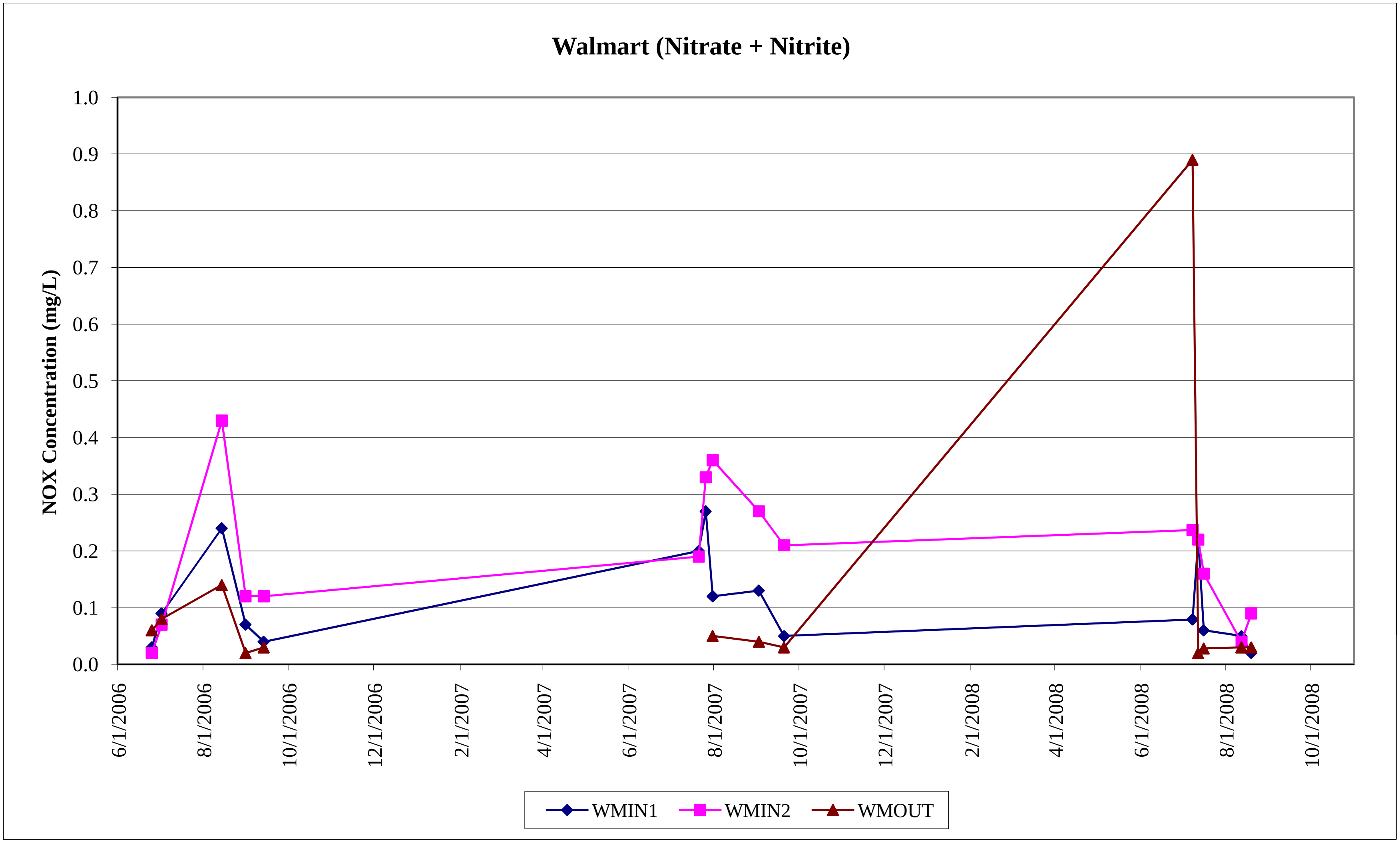


Walmart (Total Nitrogen)
TN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT
TN Threshold

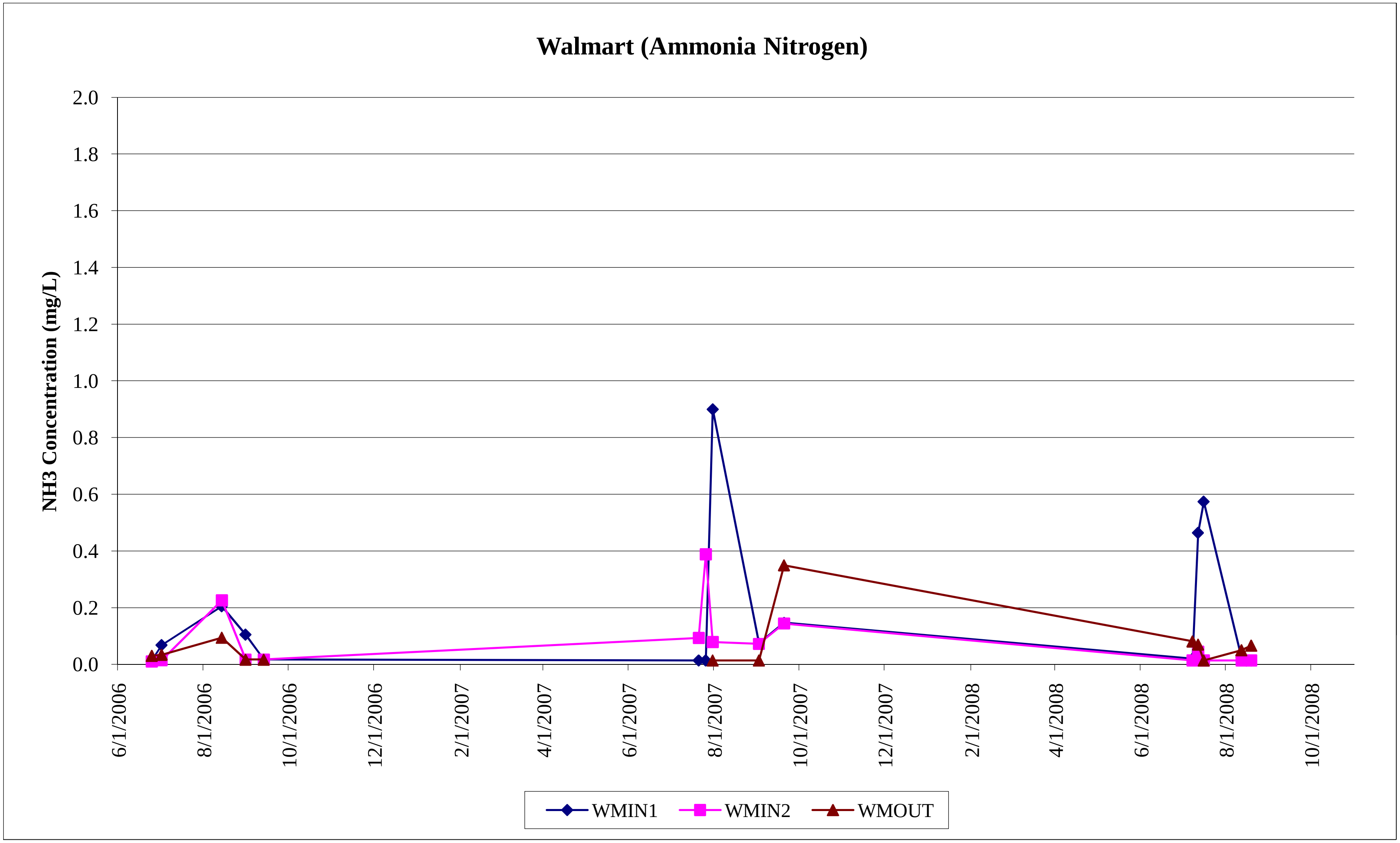

Walmart (Total Phosphorus)
TP Concentration (mg/L)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT
TP Threshold



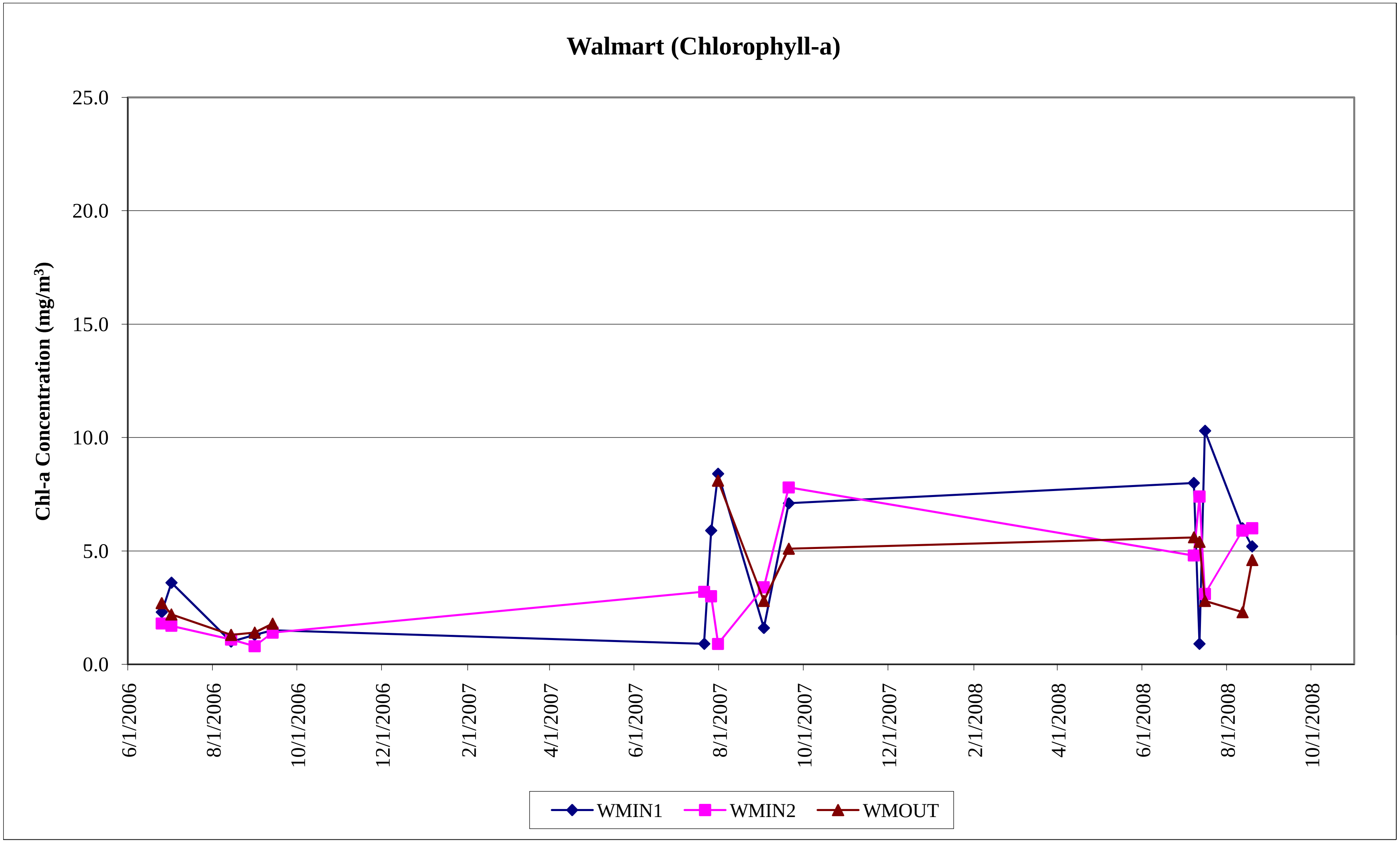
Walmart (Total Kjeldahl Nitrogen)
TKN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT

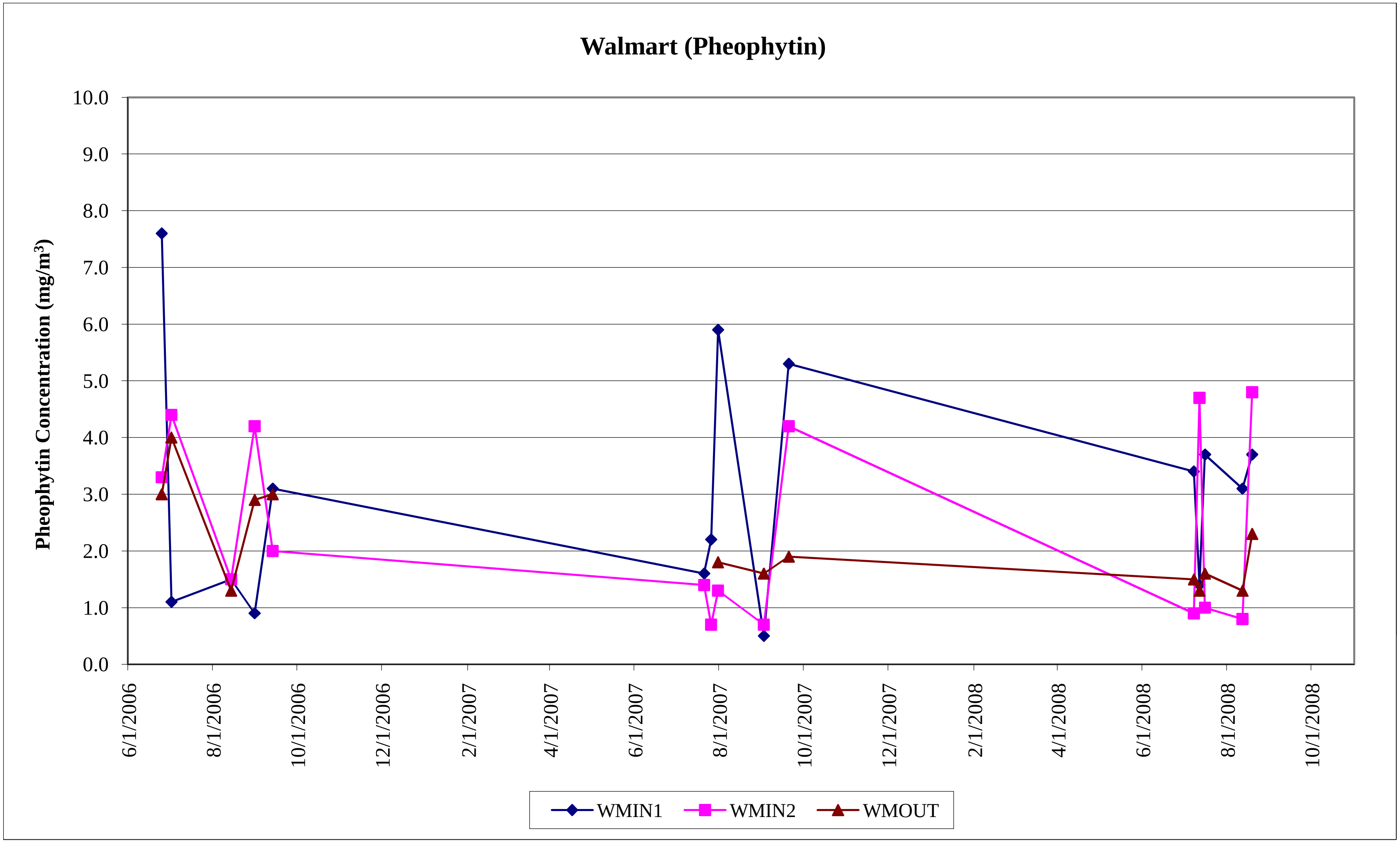


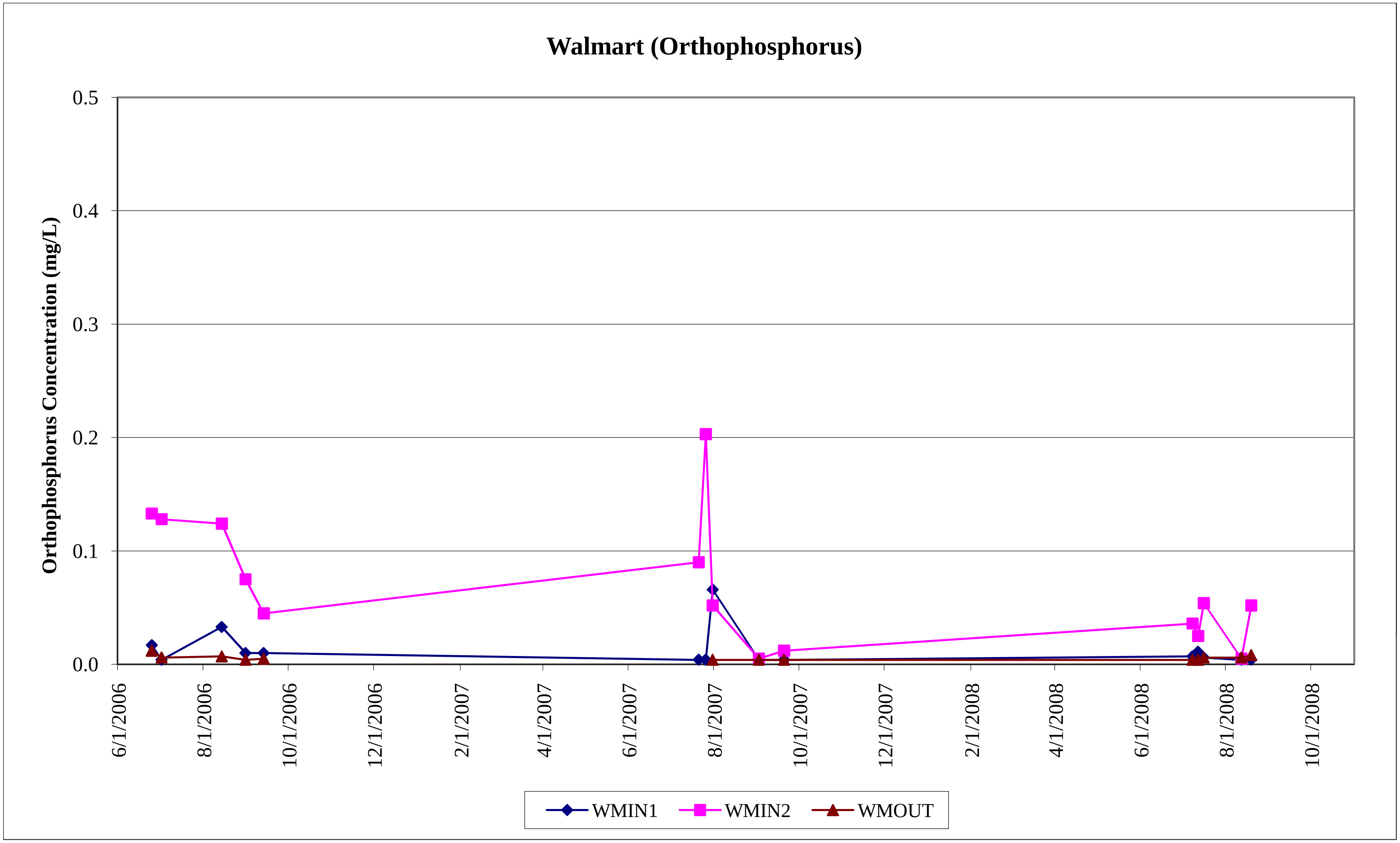
Walmart (Nitrate + Nitrite)
NOX Concentration (mg/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT



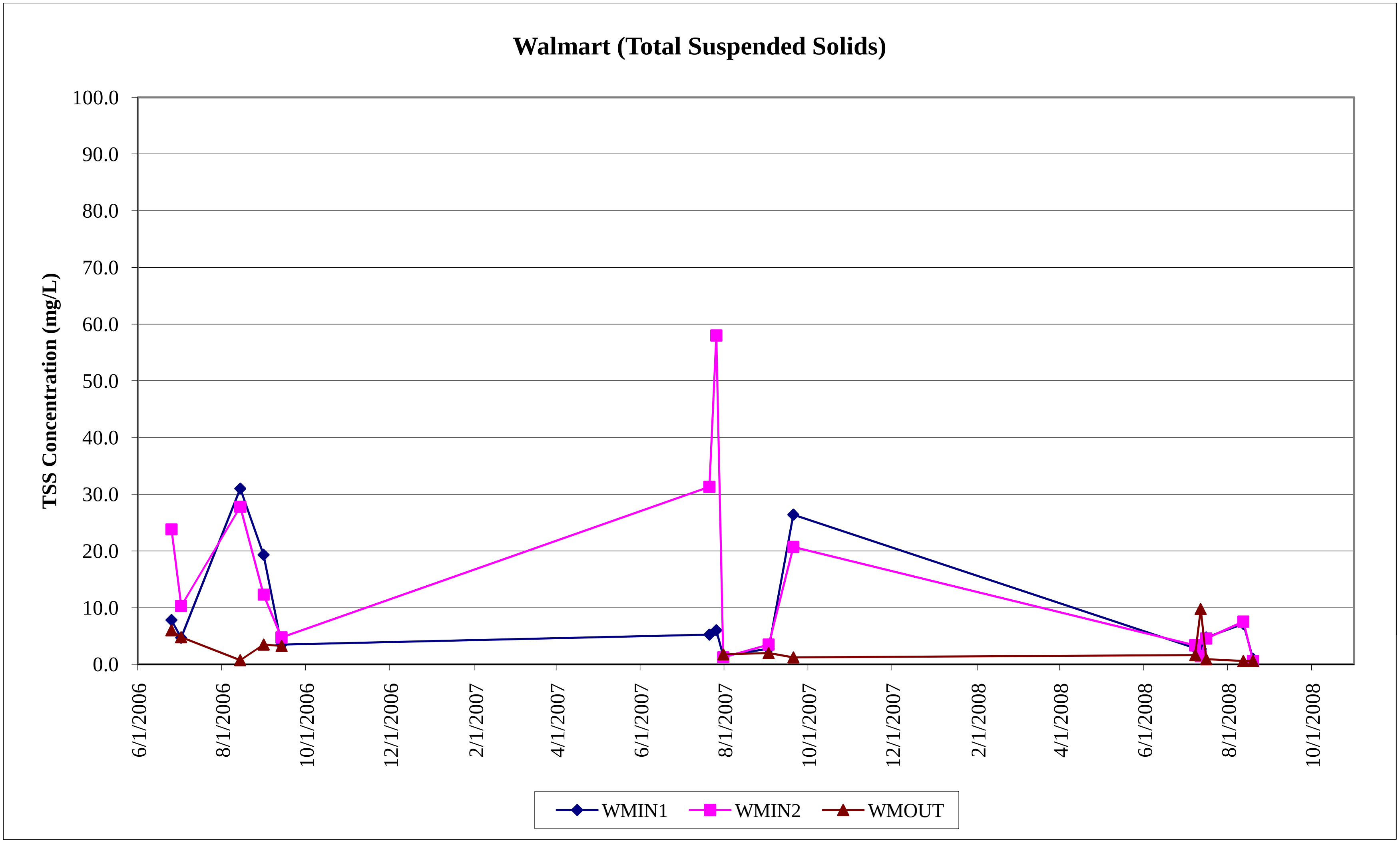
Walmart (Ammonia Nitrogen)
NH3 Concentration (mg/L)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT


Walmart (Chlorophyll-a)
Chl-a Concentration (mg/m³)
25.0
20.0
15.0
10.0
5.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT

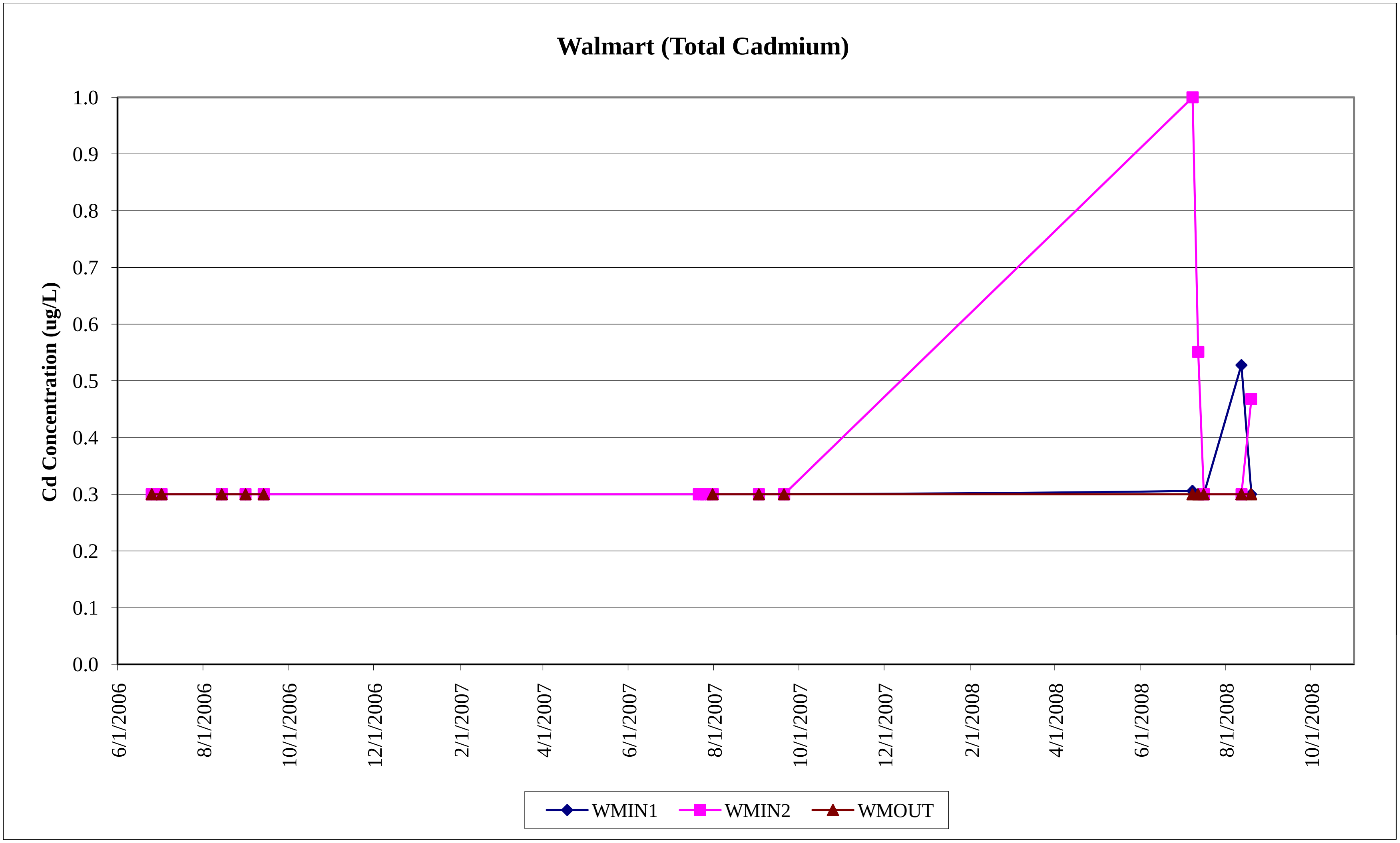

Walmart (Pheophytin)
Pheophytin Concentration (mg/m³)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT



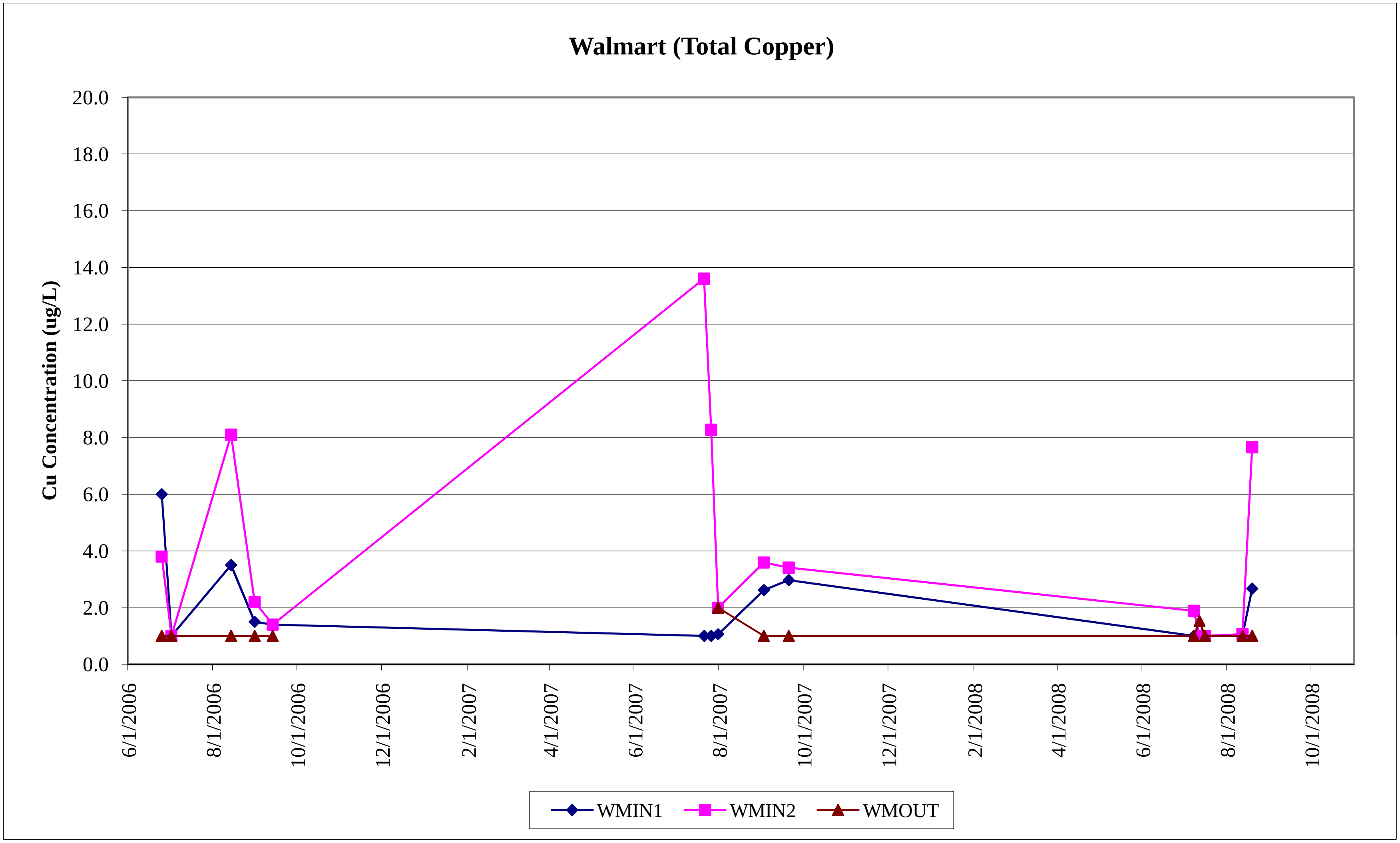
Walmart (Orthophosphorus)
Orthophosphorus Concentration (mg/L)
0.0
0.1
0.2
0.3
0.4
0.5
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT



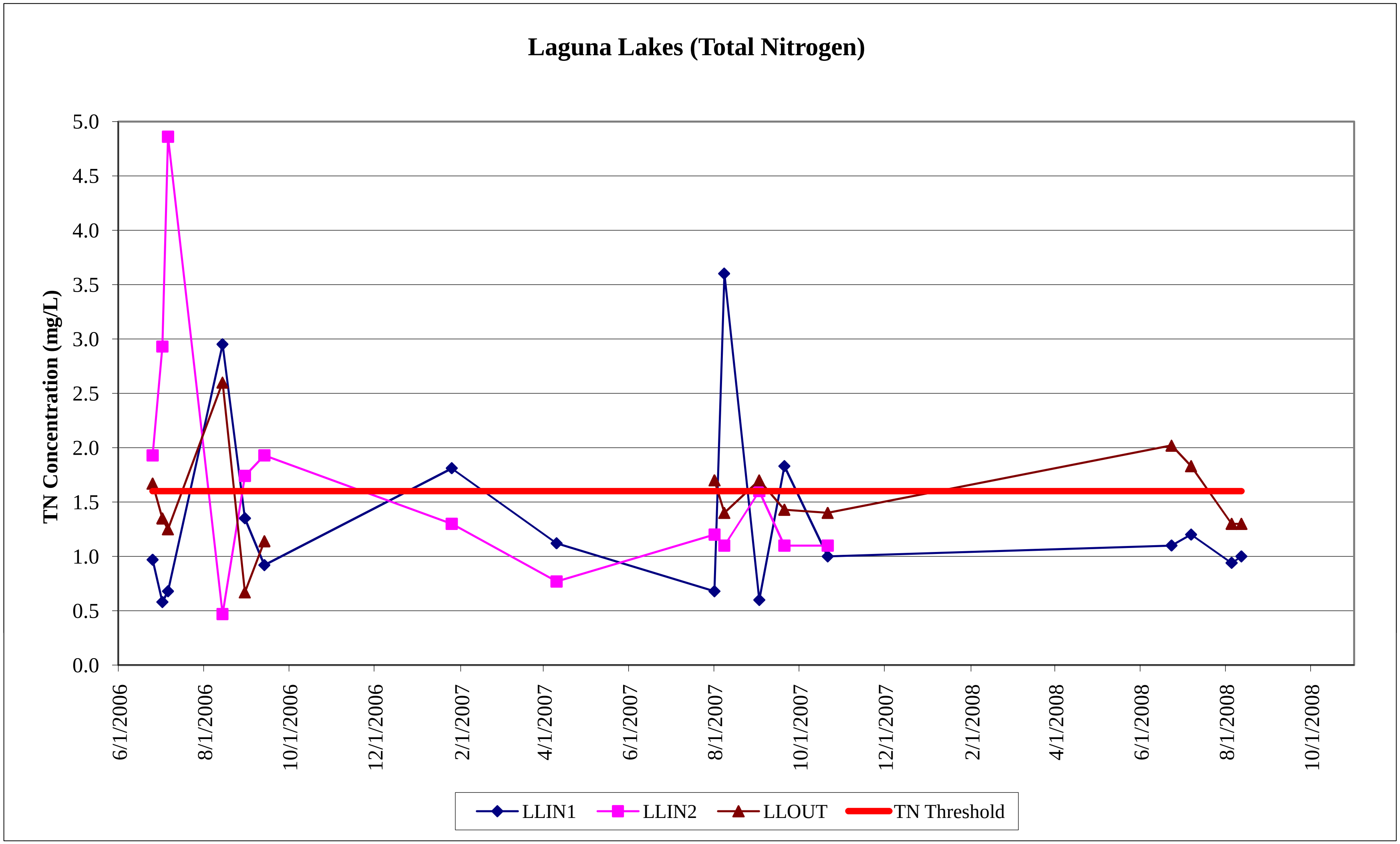
Walmart (Total Suspended Solids)
TSS Concentration (mg/L)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT

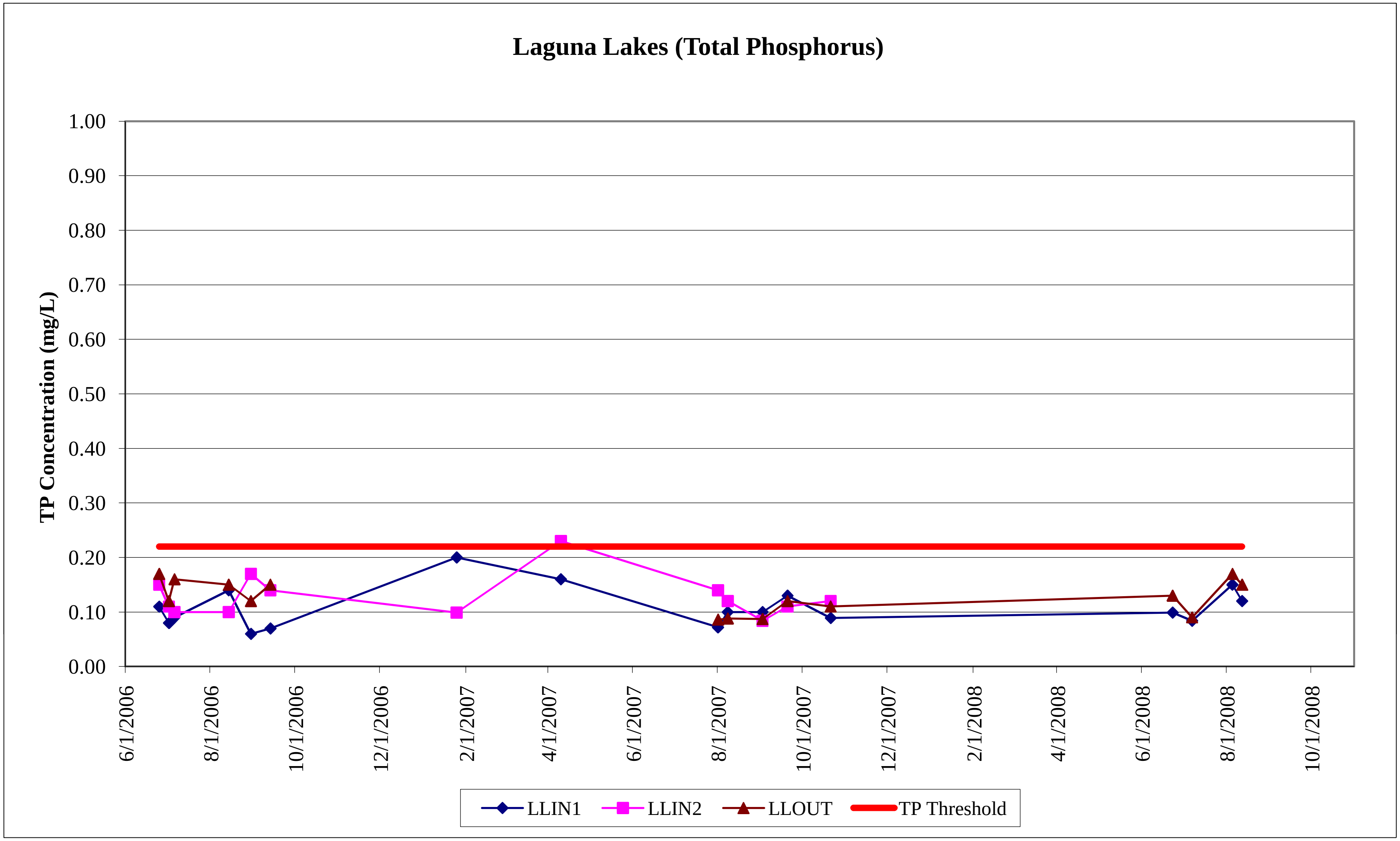


Walmart (Total Cadmium)
Cd Concentration (ug/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT

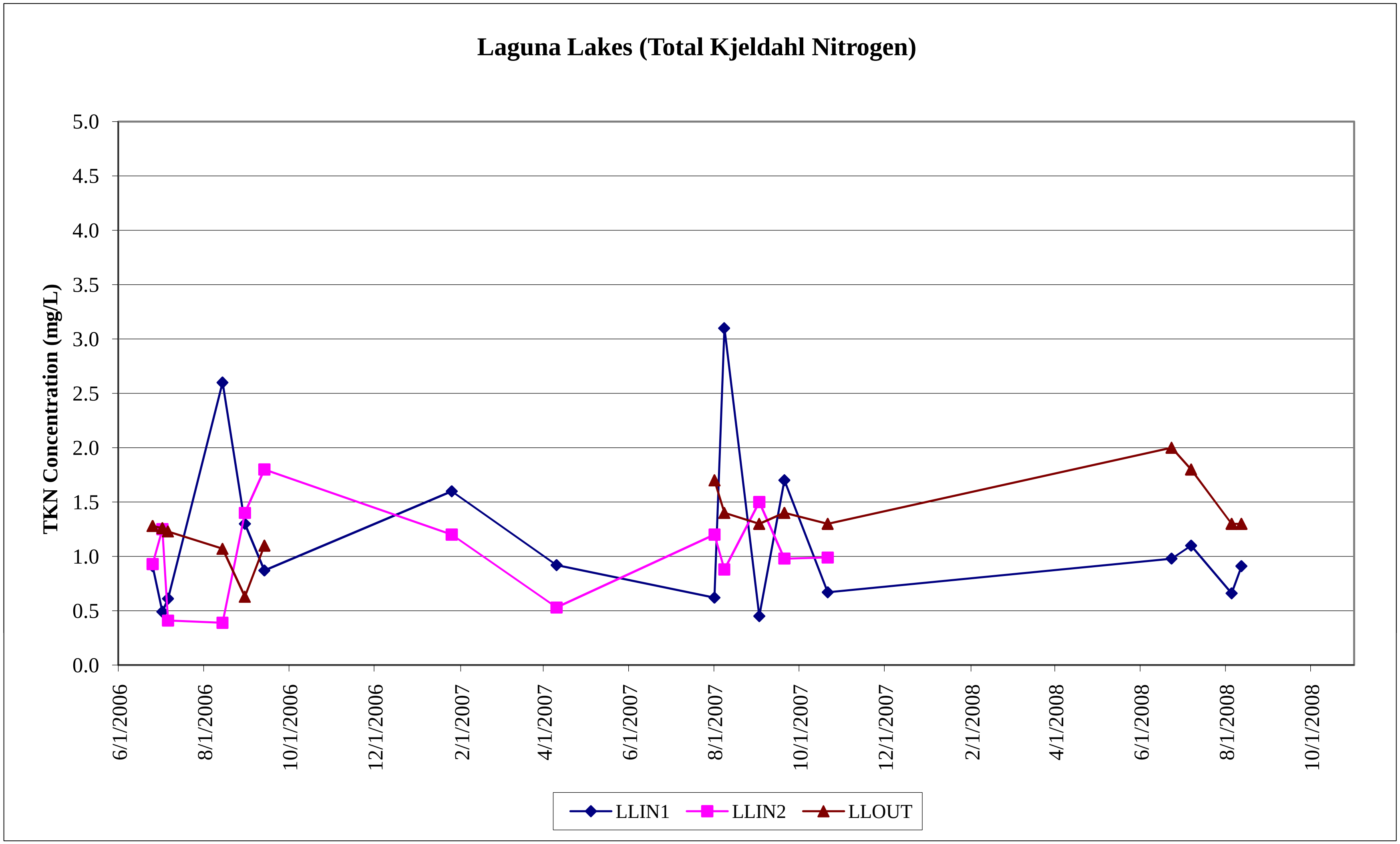


Walmart (Total Copper)
Cu Concentration (ug/L)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
WMIN1
WMIN2
WMOUT

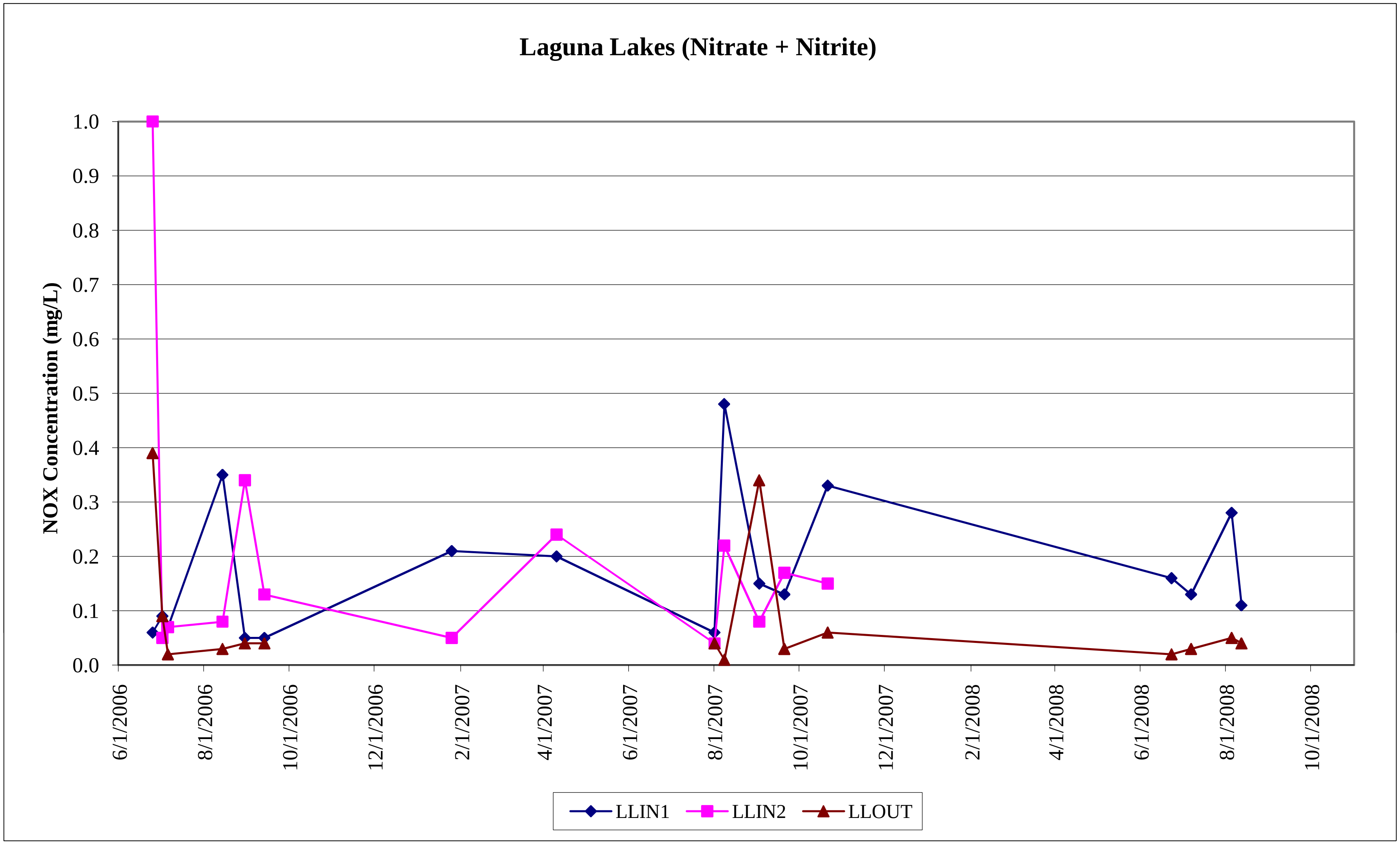

Laguna Lakes (Total Nitrogen)
TN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT
TN Threshold

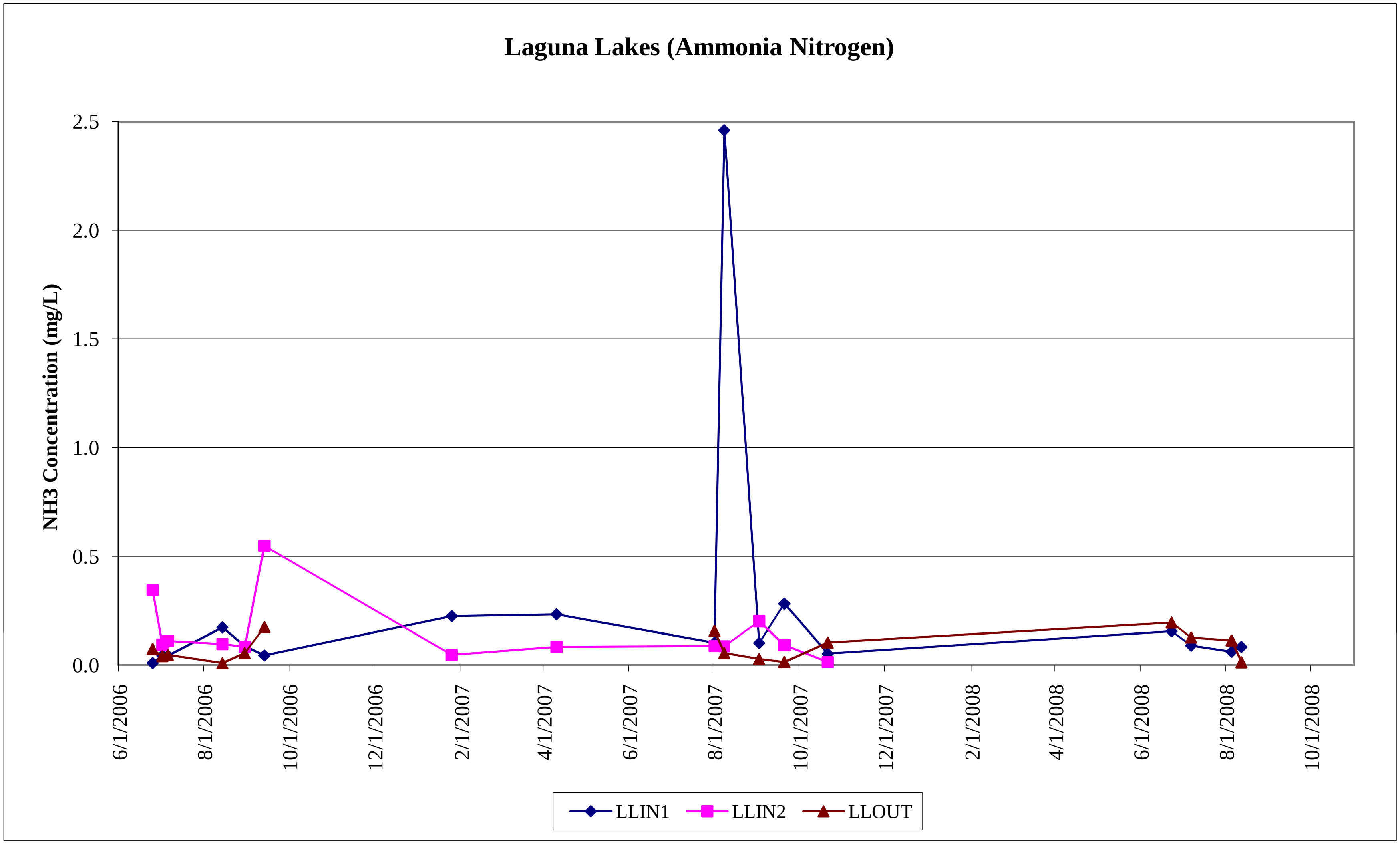


Laguna Lakes (Total Phosphorus)
TP Concentration (mg/L)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT
TP Threshold

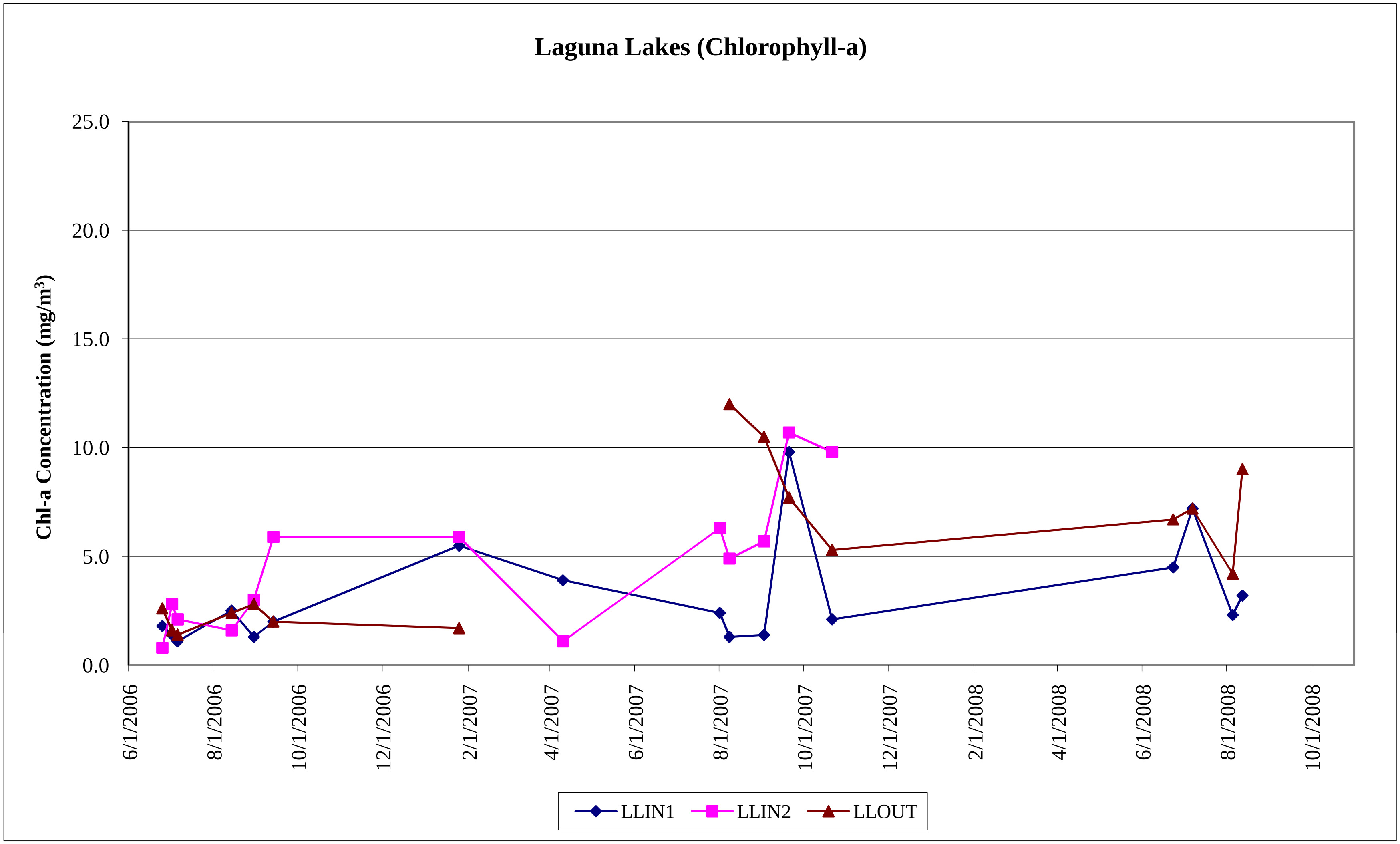


Laguna Lakes (Total Kjeldahl Nitrogen)
TKN Concentration (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT

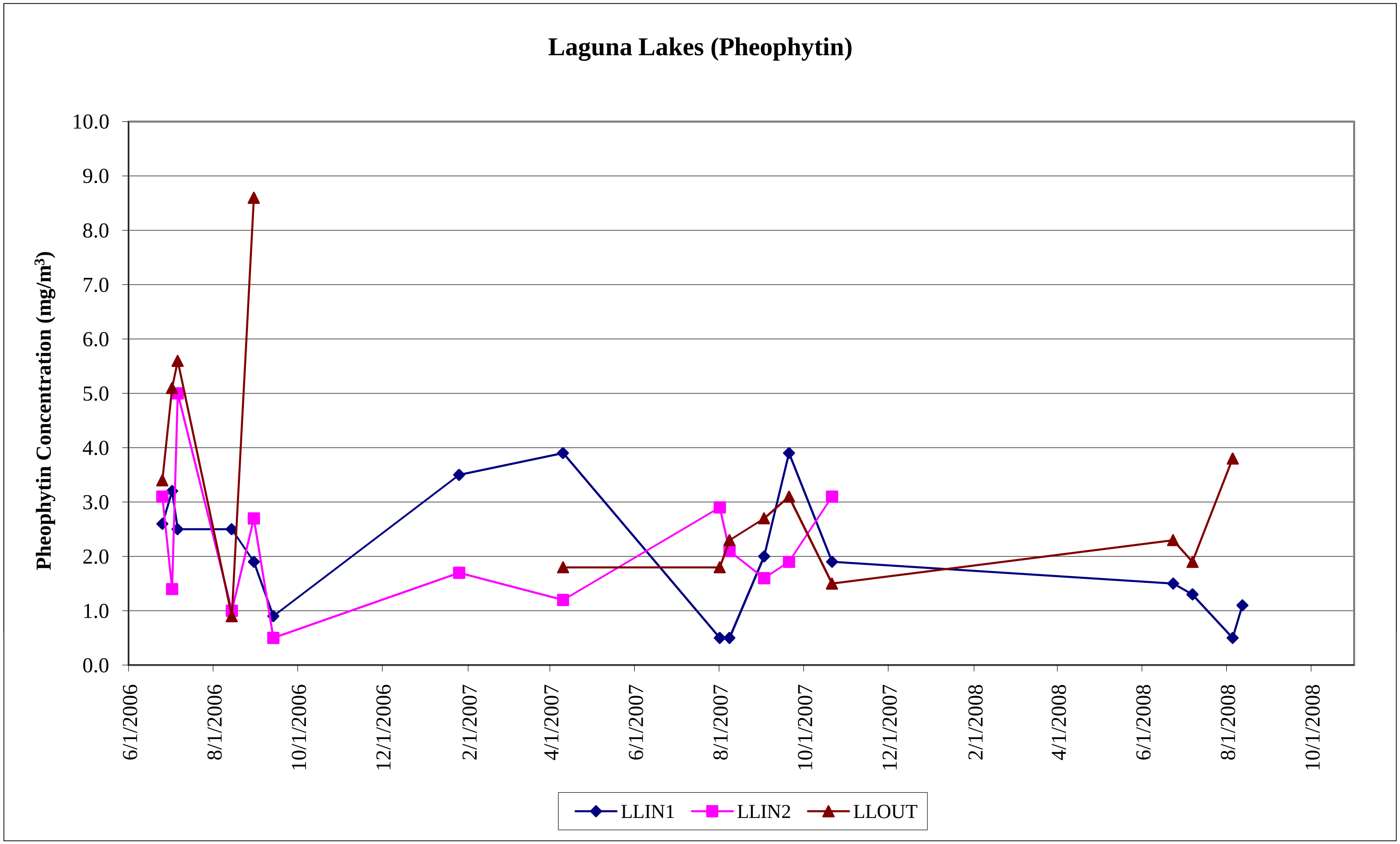

Laguna Lakes (Nitrate + Nitrite)
NOX Concentration (mg/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT



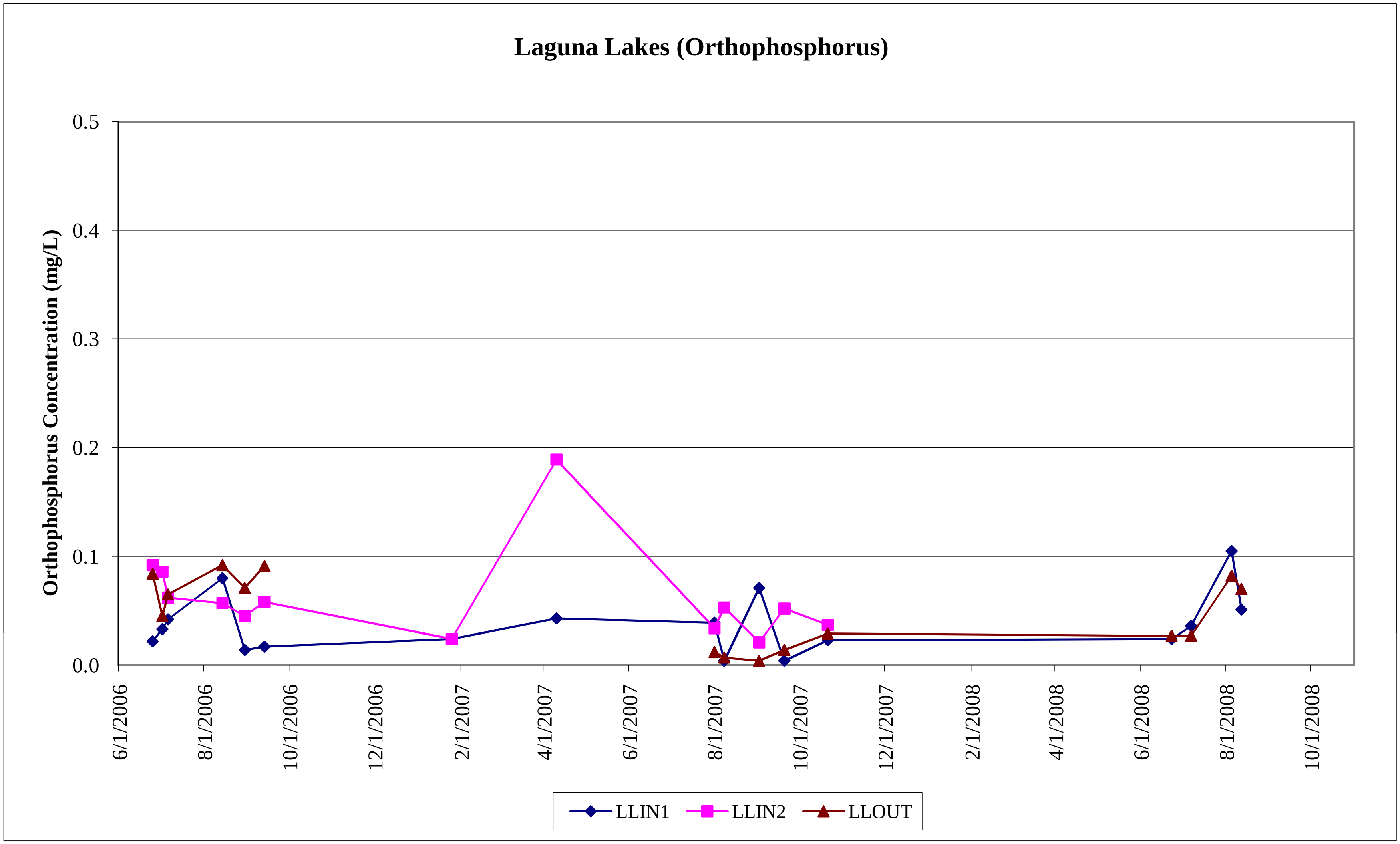
Laguna Lakes (Ammonia Nitrogen)
NH3 Concentration (mg/L)
2.5
2.0
1.5
1.0
0.5
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT



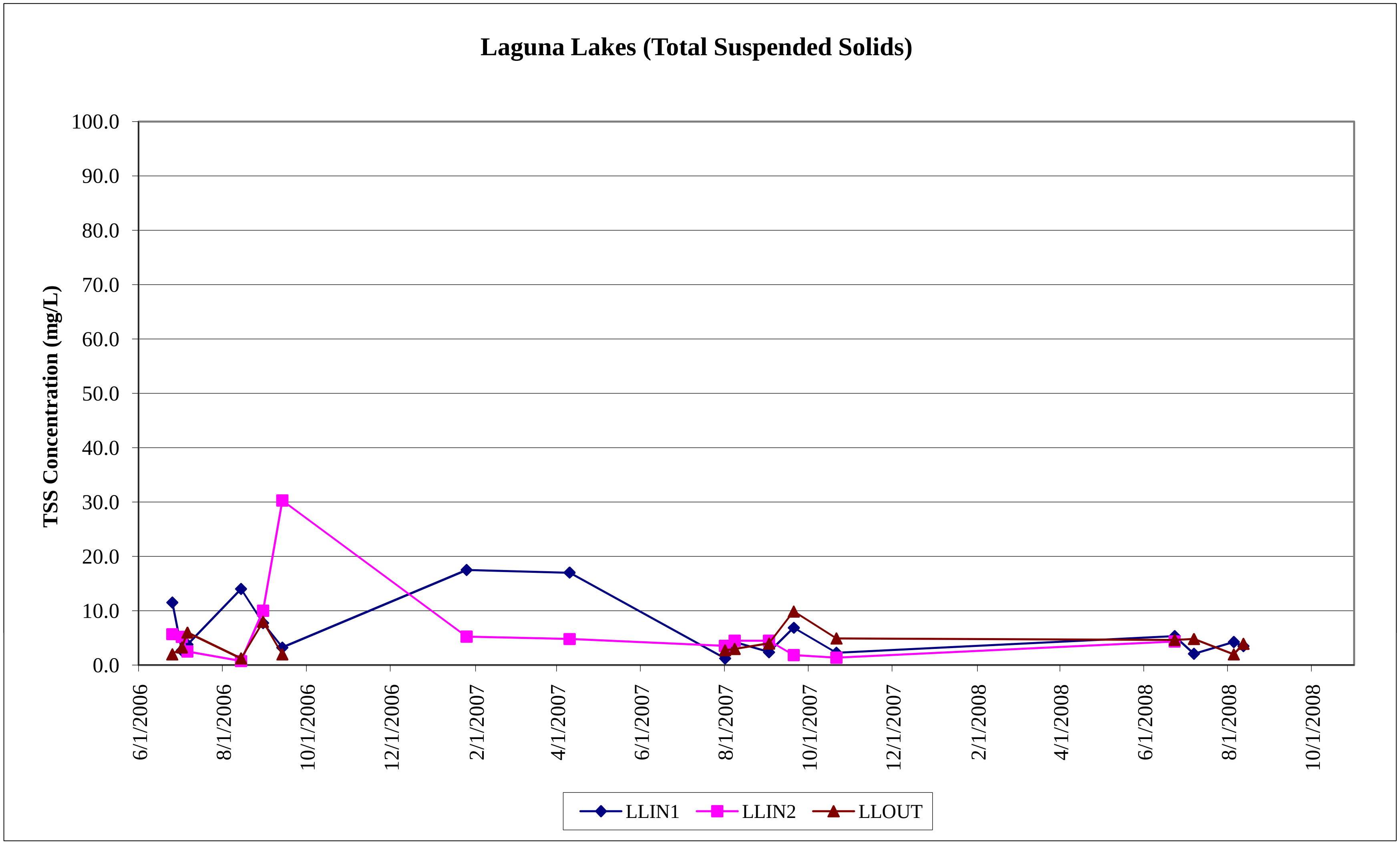
Laguna Lakes (Chlorophyll-a)
Chl-a Concentration (mg/m3)
25.0
20.0
15.0
10.0
5.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT



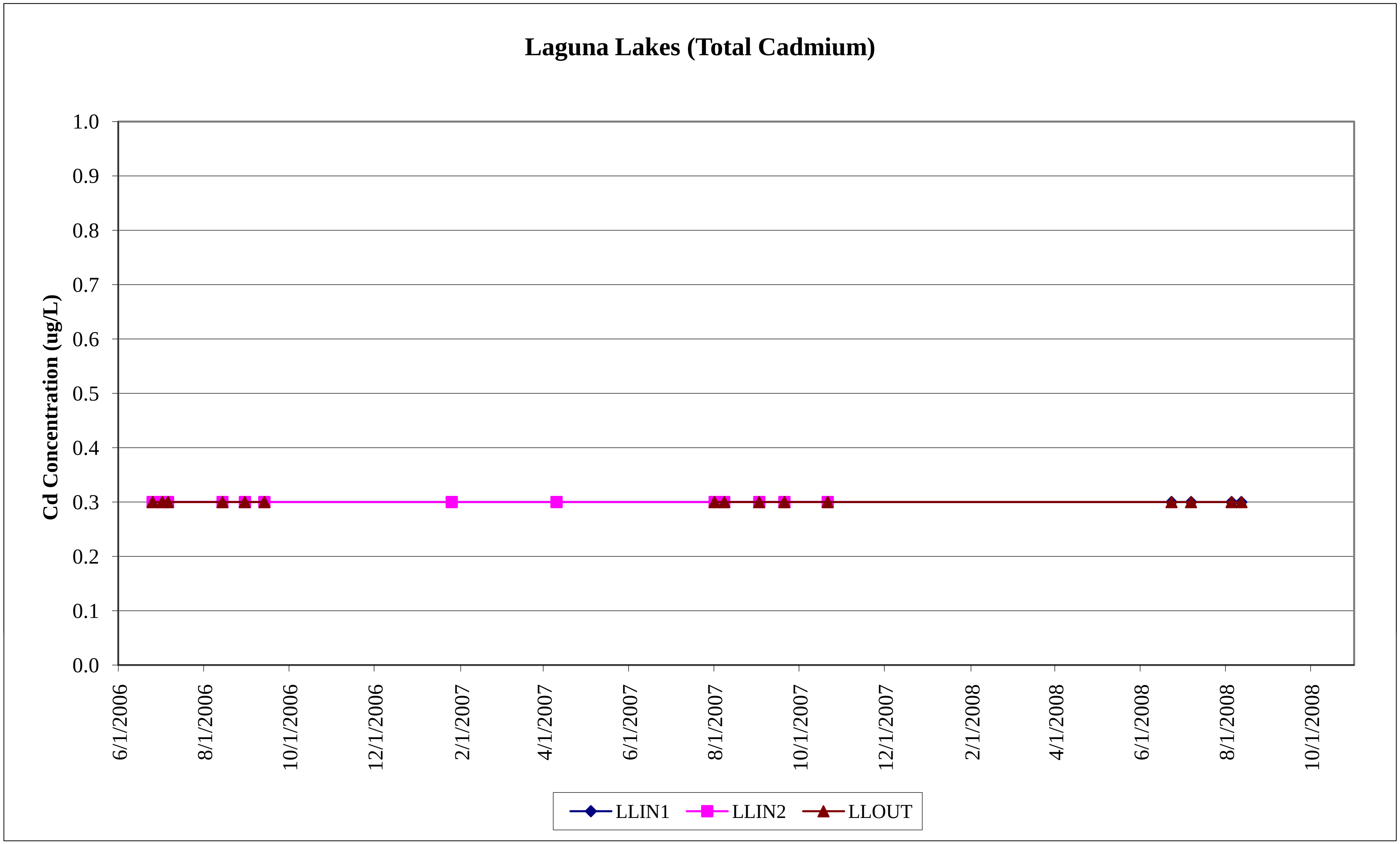
Laguna Lakes (Pheophytin)
Pheophytin Concentration (mg/m3)
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT

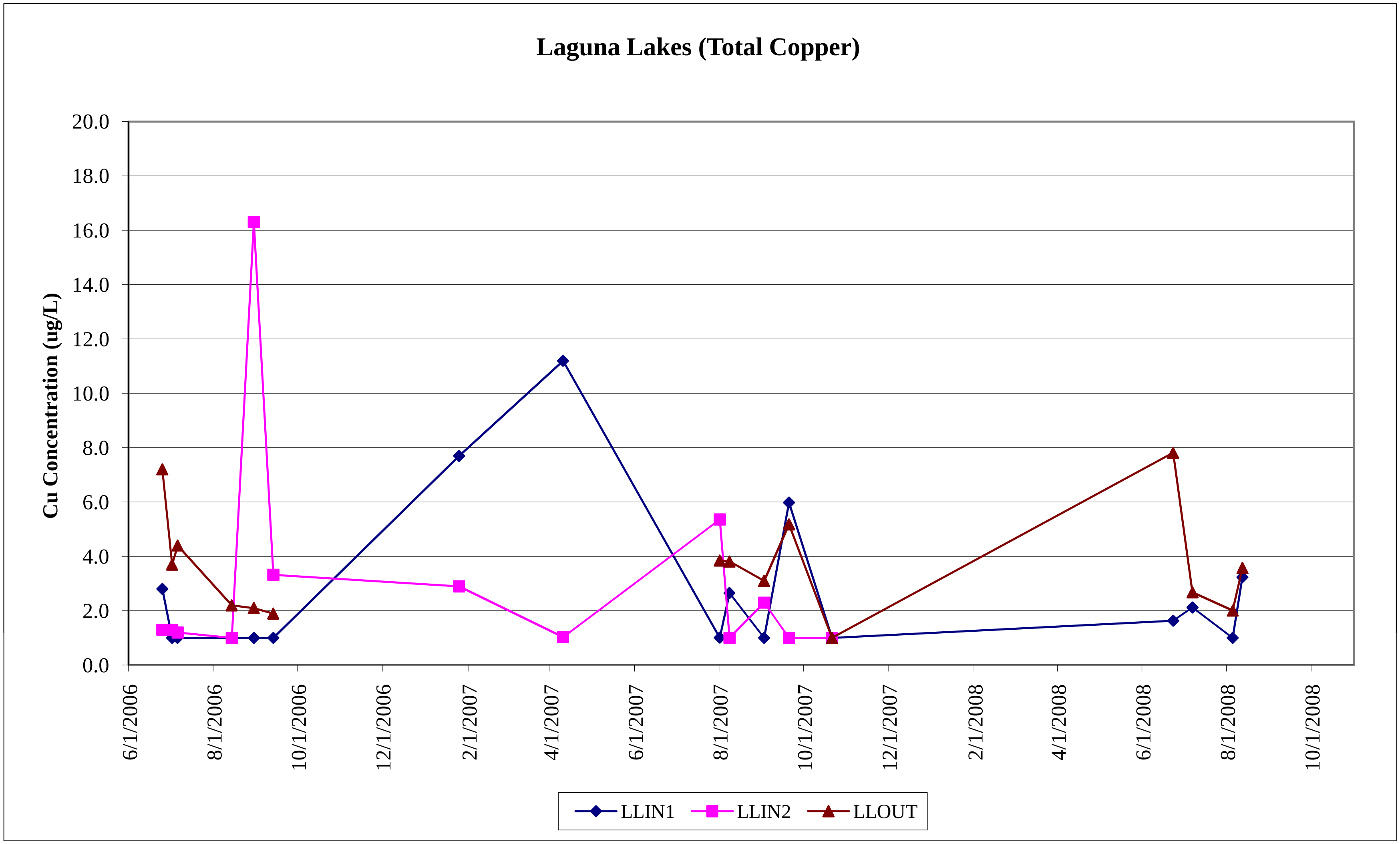


Laguna Lakes (Orthophosphorus)
Orthophosphorus Concentration (mg/L)
0.0
0.1
0.2
0.3
0.4
0.5
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT



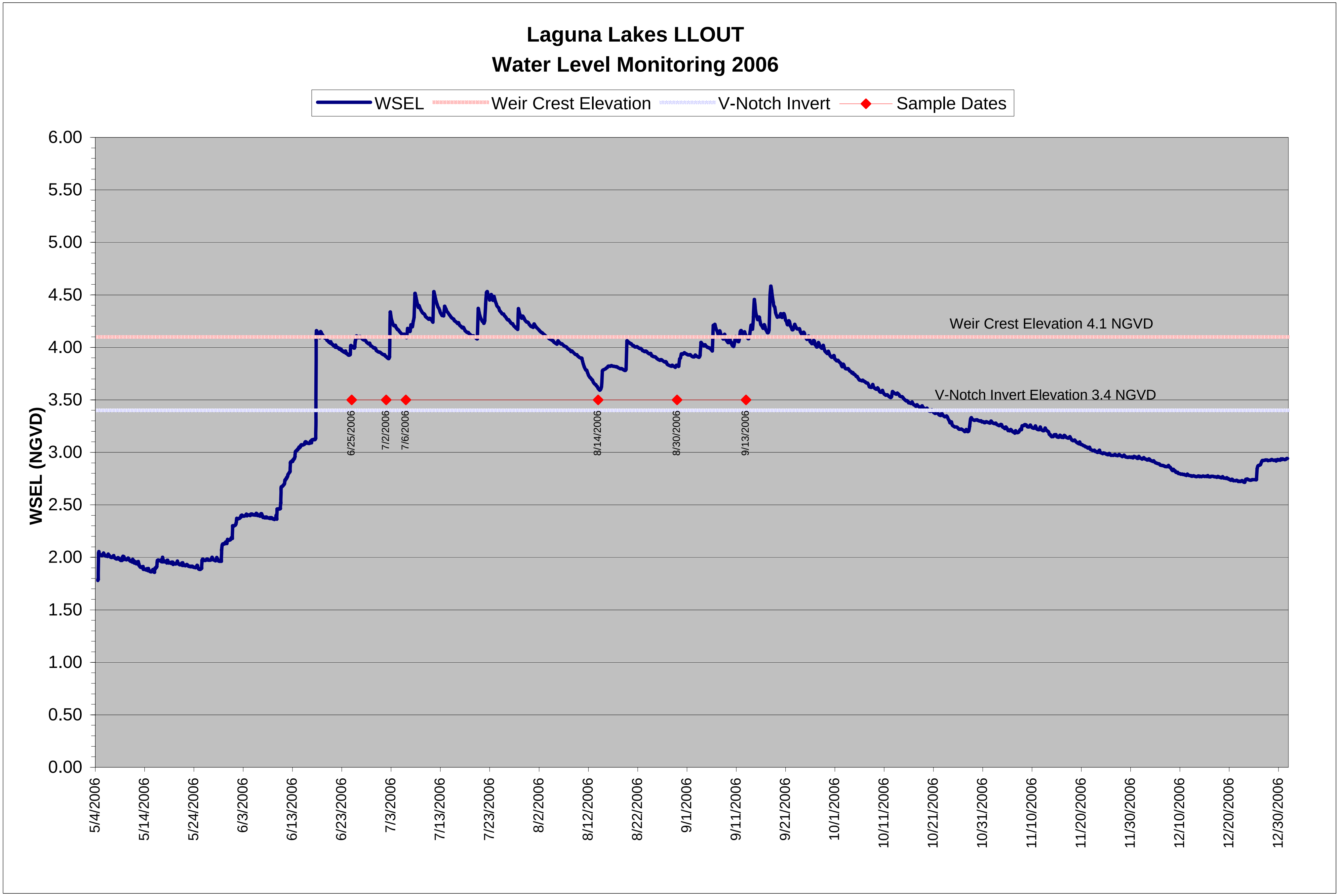
Laguna Lakes (Total Suspended Solids)
TSS Concentration (mg/L)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT


Laguna Lakes (Total Cadmium)
Cd Concentration (ug/L)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT



Laguna Lakes (Total Copper)
Cu Concentration (ug/L)
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
6/1/2006
8/1/2006
10/1/2006
12/1/2006
2/1/2007
4/1/2007
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
LLIN1
LLIN2
LLOUT

APPENDIX H - WATER LEVEL CHARTS



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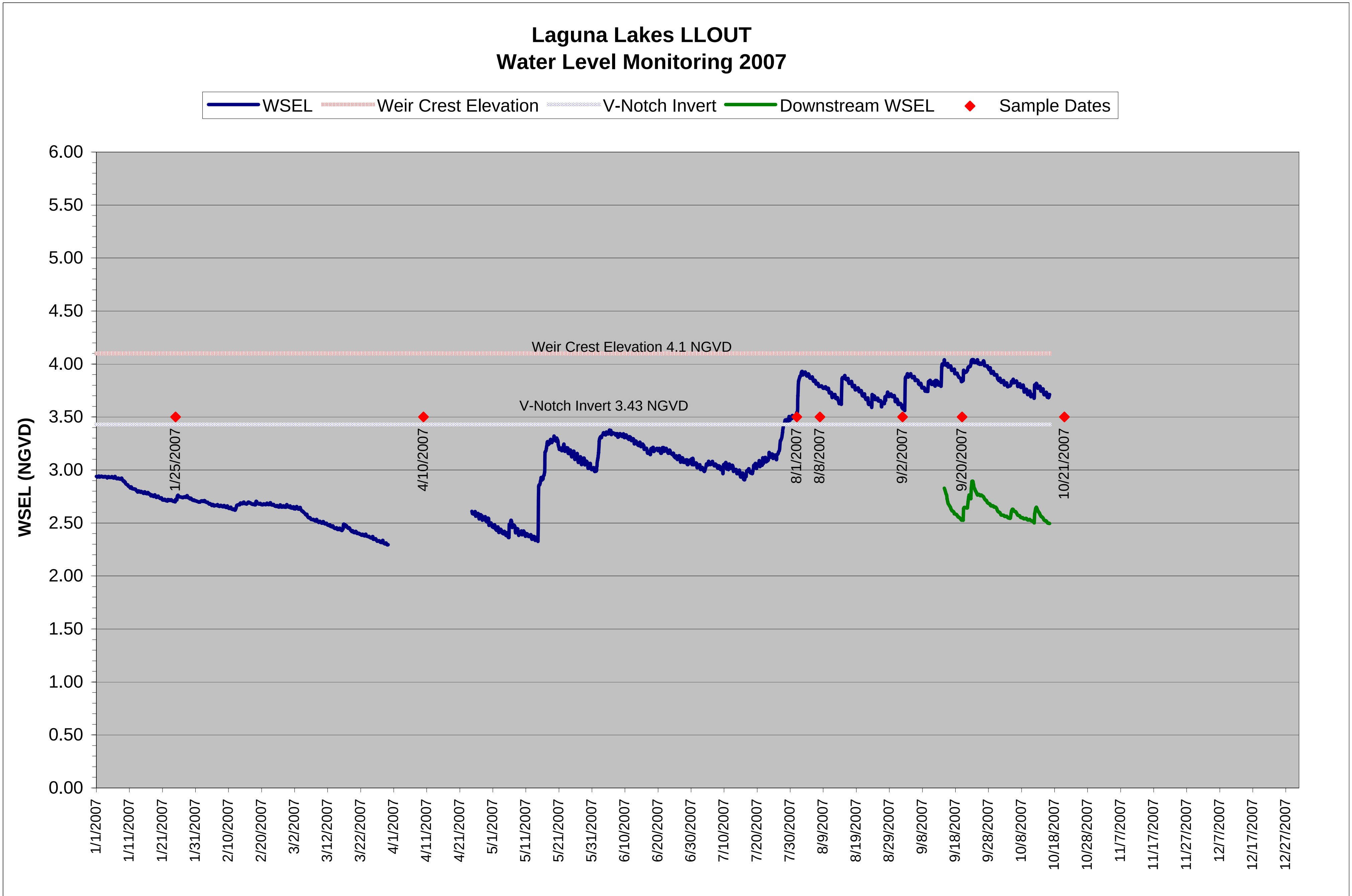

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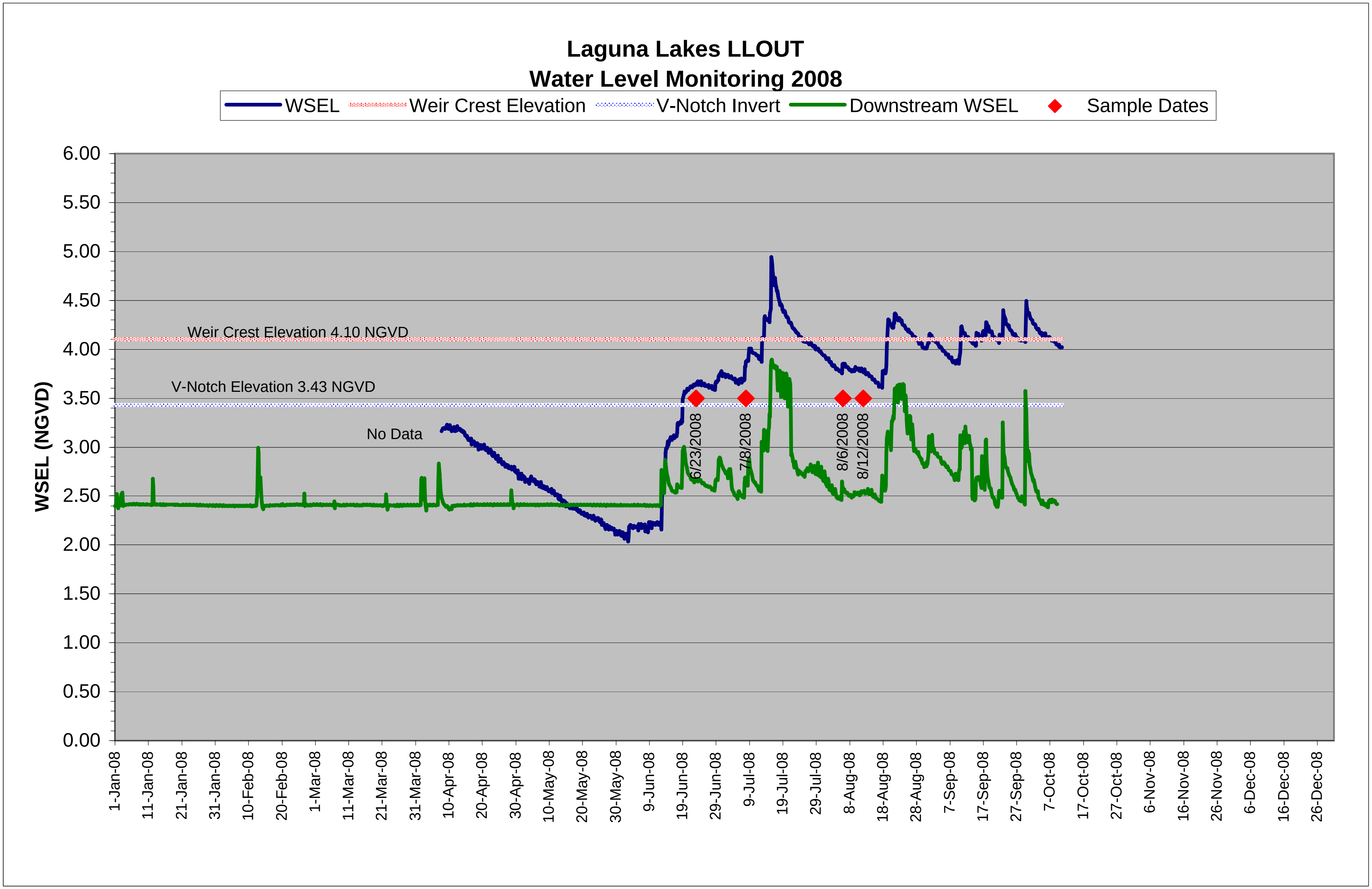

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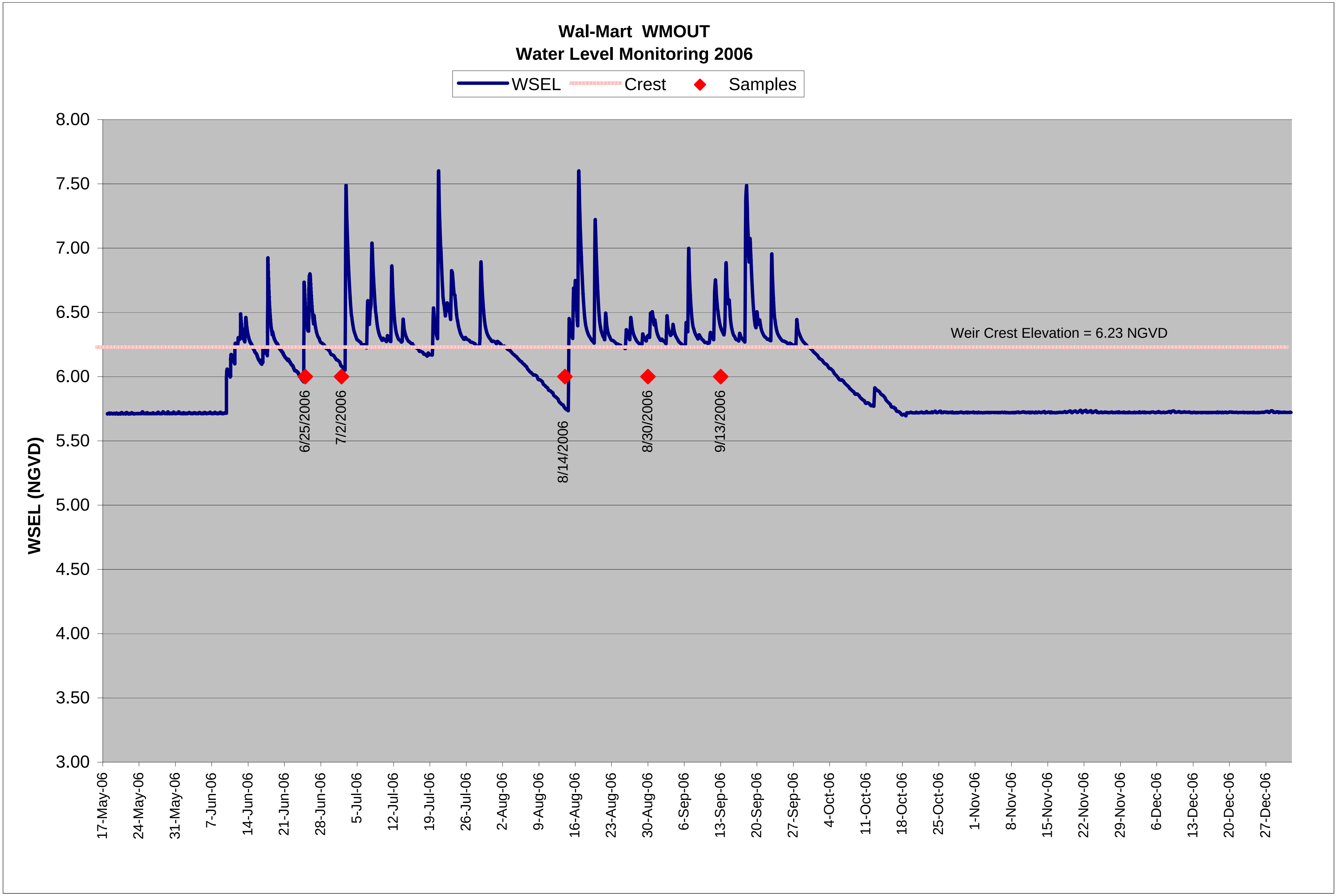

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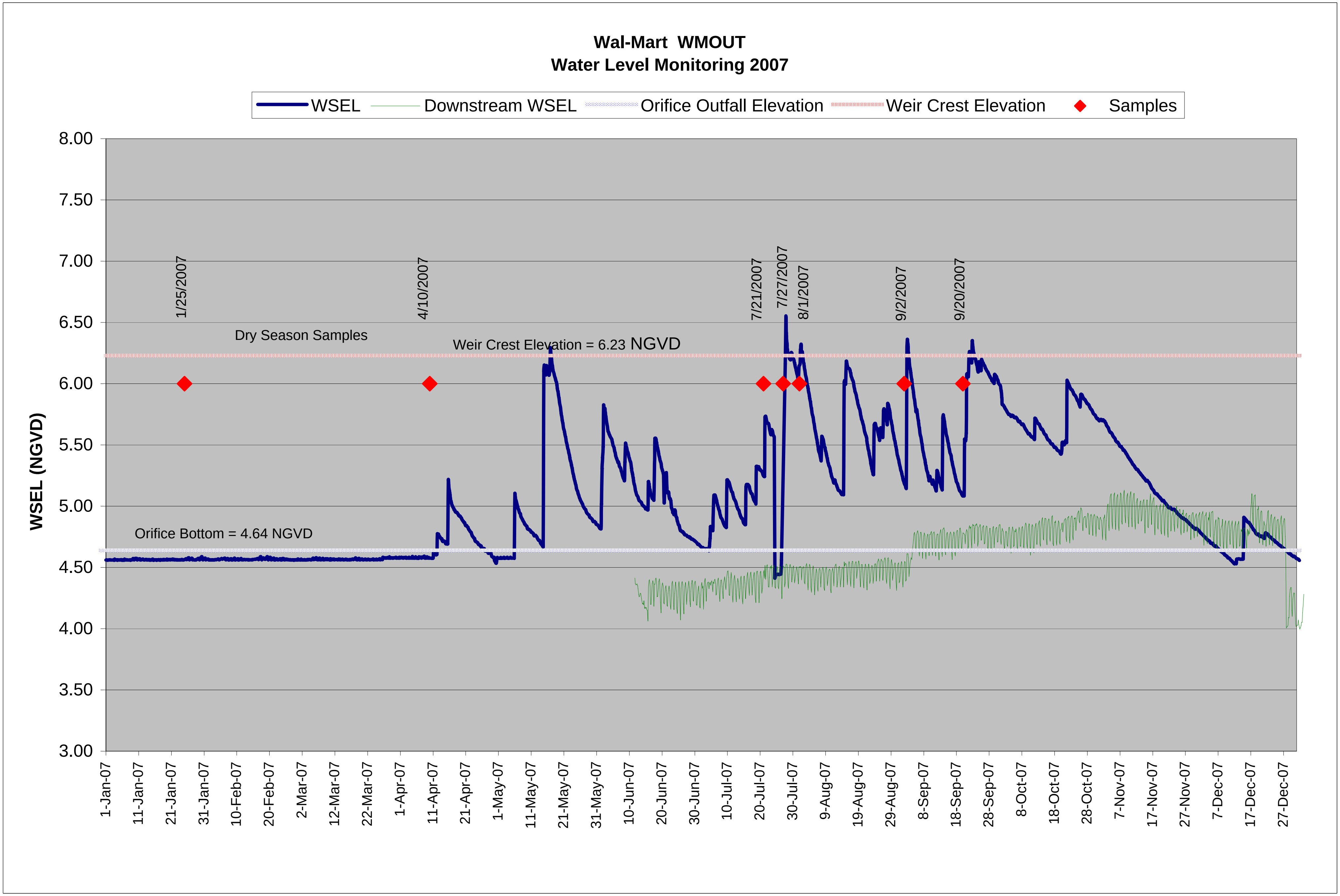

Wal-Mart WMOUT
Water Level Monitoring 2007
WSEL
Downstream WSEL
Orifice Outfall Elevation
Weir Crest Elevation
Samples
WSEL (NGVD)
8.00
7.50
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
1/25/2007
4/10/2007
7/21/2007
7/27/2007
8/1/2007
9/2/2007
9/20/2007
Dry Season Samples
Weir Crest Elevation = 6.23 NGVD
Orifice Bottom = 4.64 NGVD
1-Jan-07
11-Jan-07
21-Jan-07
31-Jan-07
10-Feb-07
20-Feb-07
2-Mar-07
12-Mar-07
22-Mar-07
1-Apr-07
11-Apr-07
21-Apr-07
1-May-07
11-May-07
21-May-07
31-May-07
10-Jun-07
20-Jun-07
30-Jun-07
10-Jul-07
20-Jul-07
30-Jul-07
9-Aug-07
19-Aug-07
29-Aug-07
8-Sep-07
18-Sep-07
28-Sep-07
8-Oct-07
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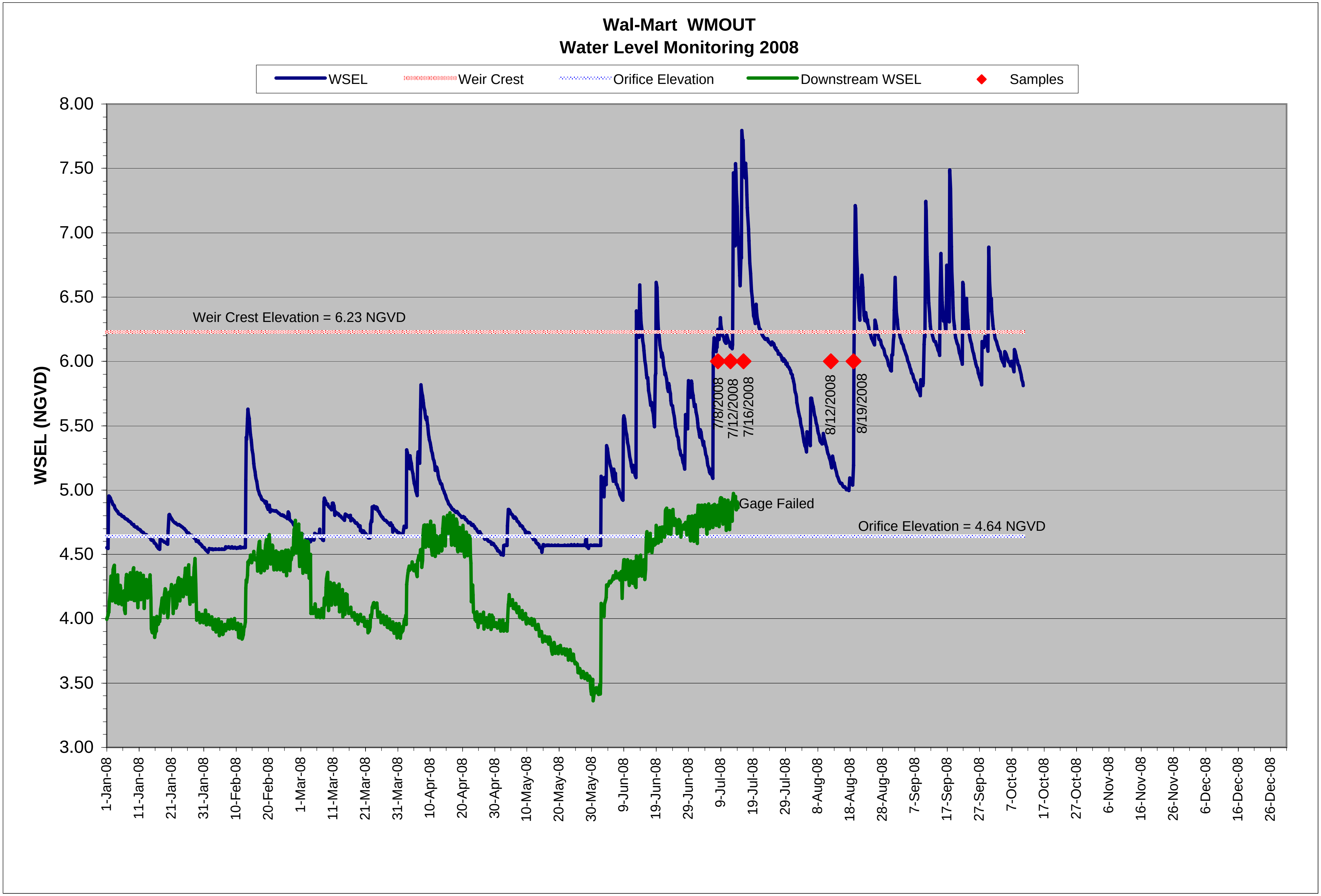
17-Dec-07
27-Dec-07



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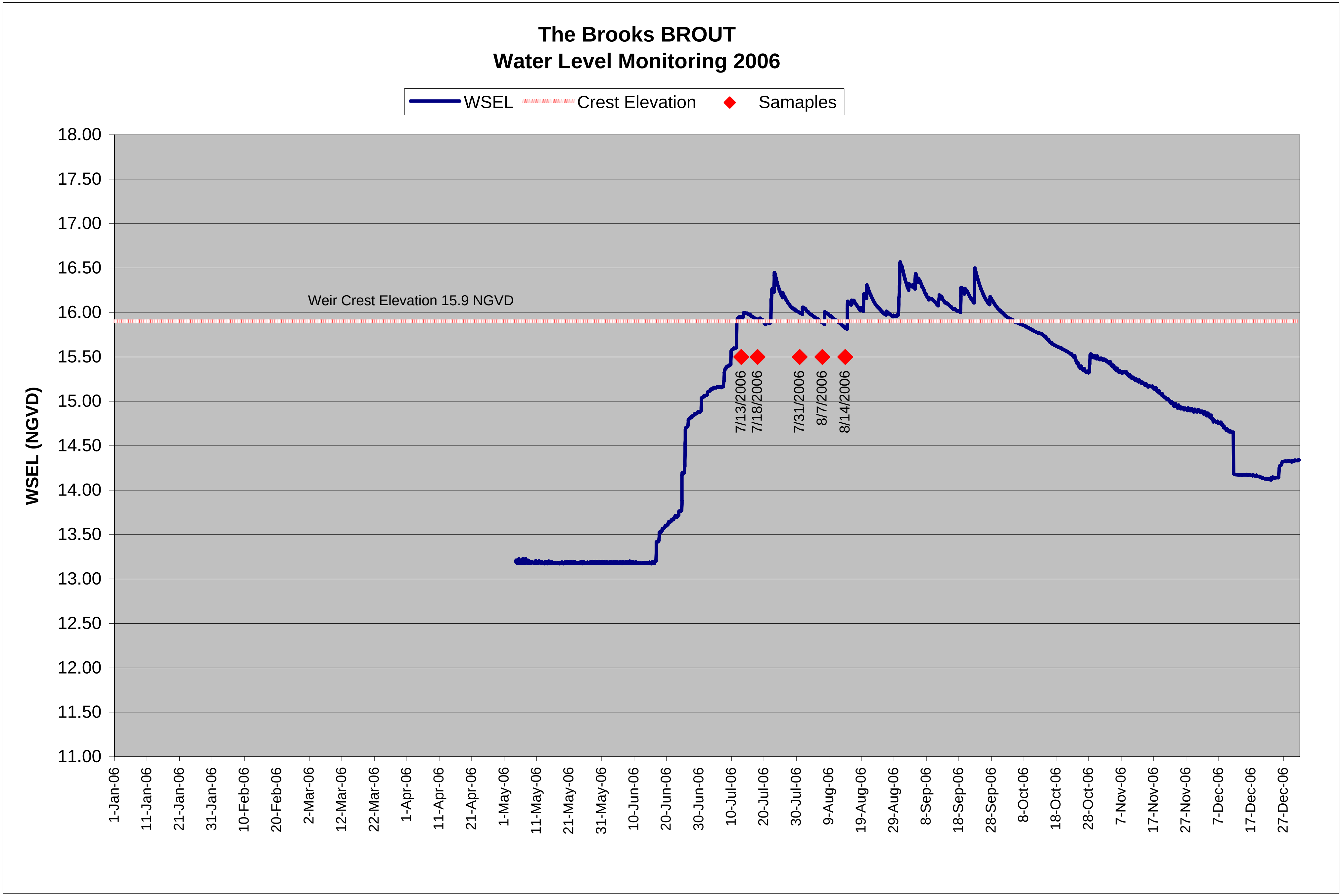

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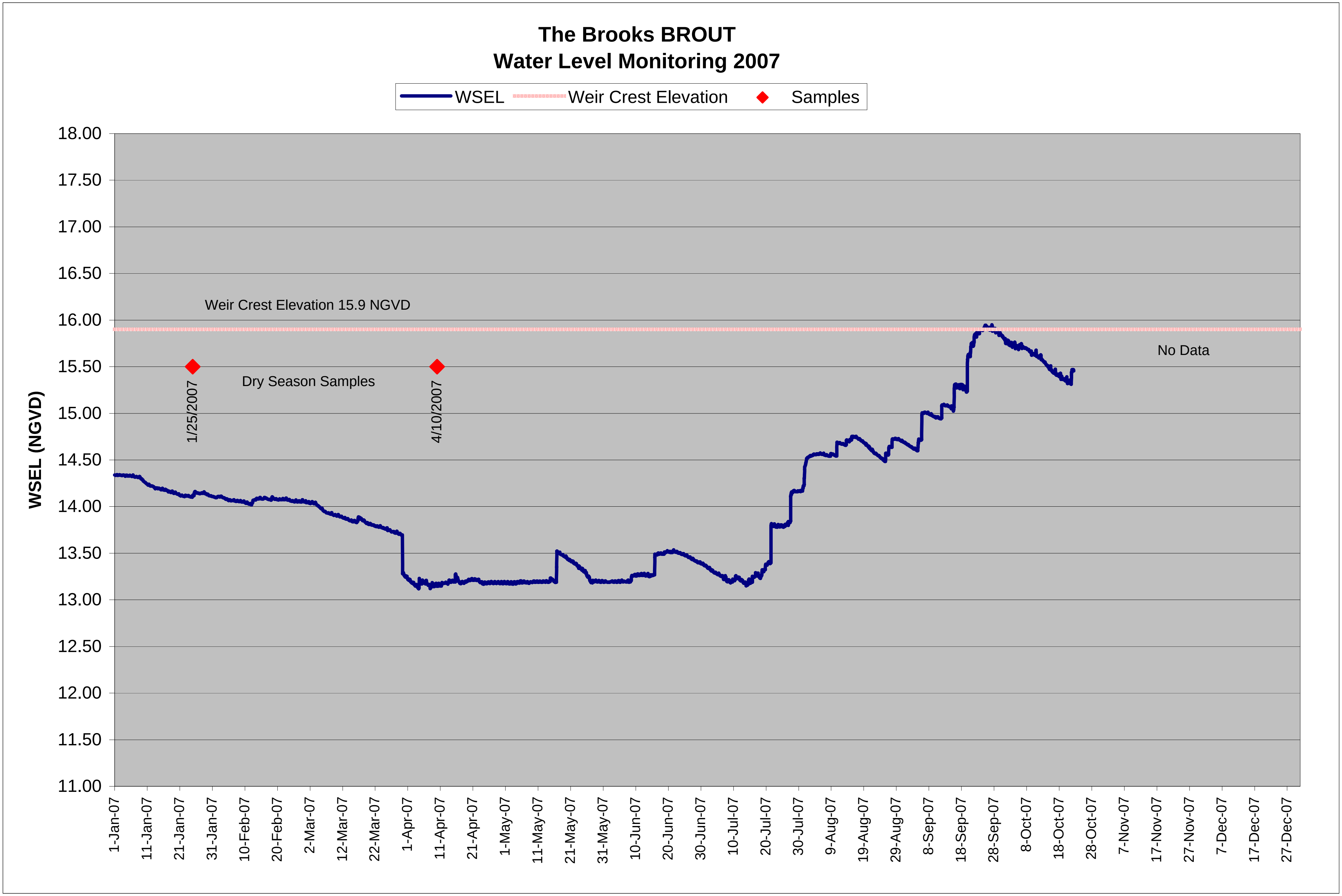

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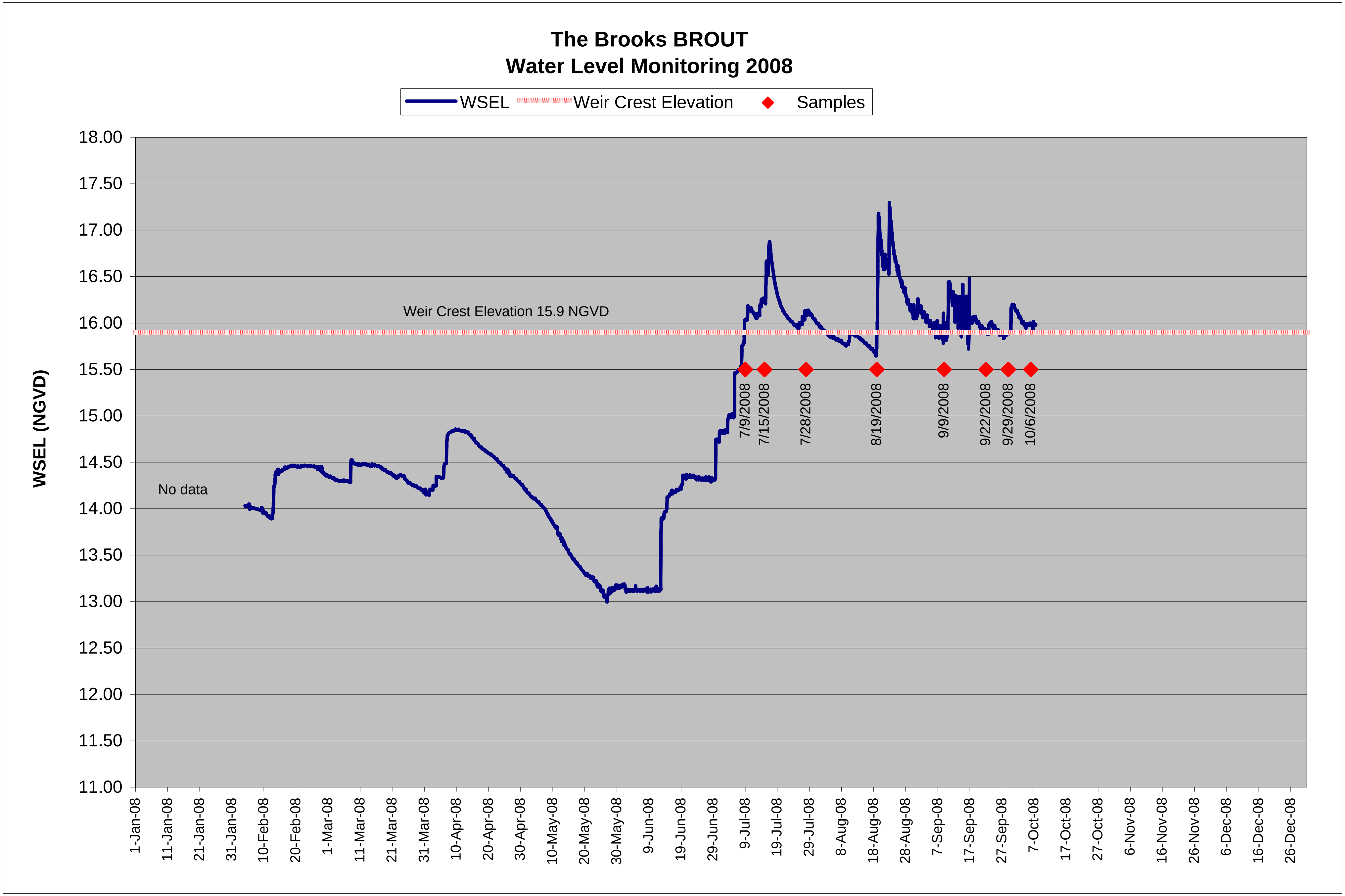
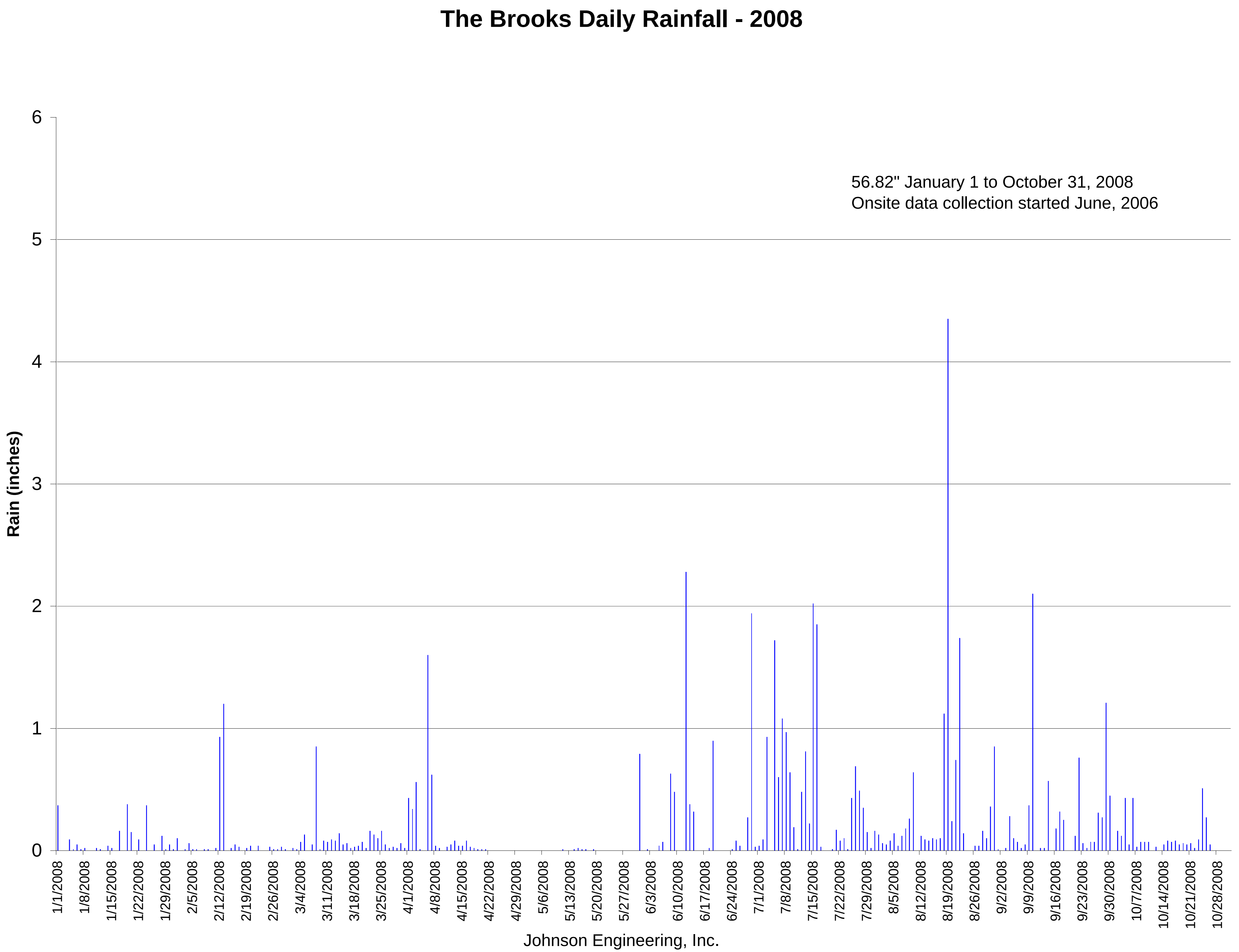
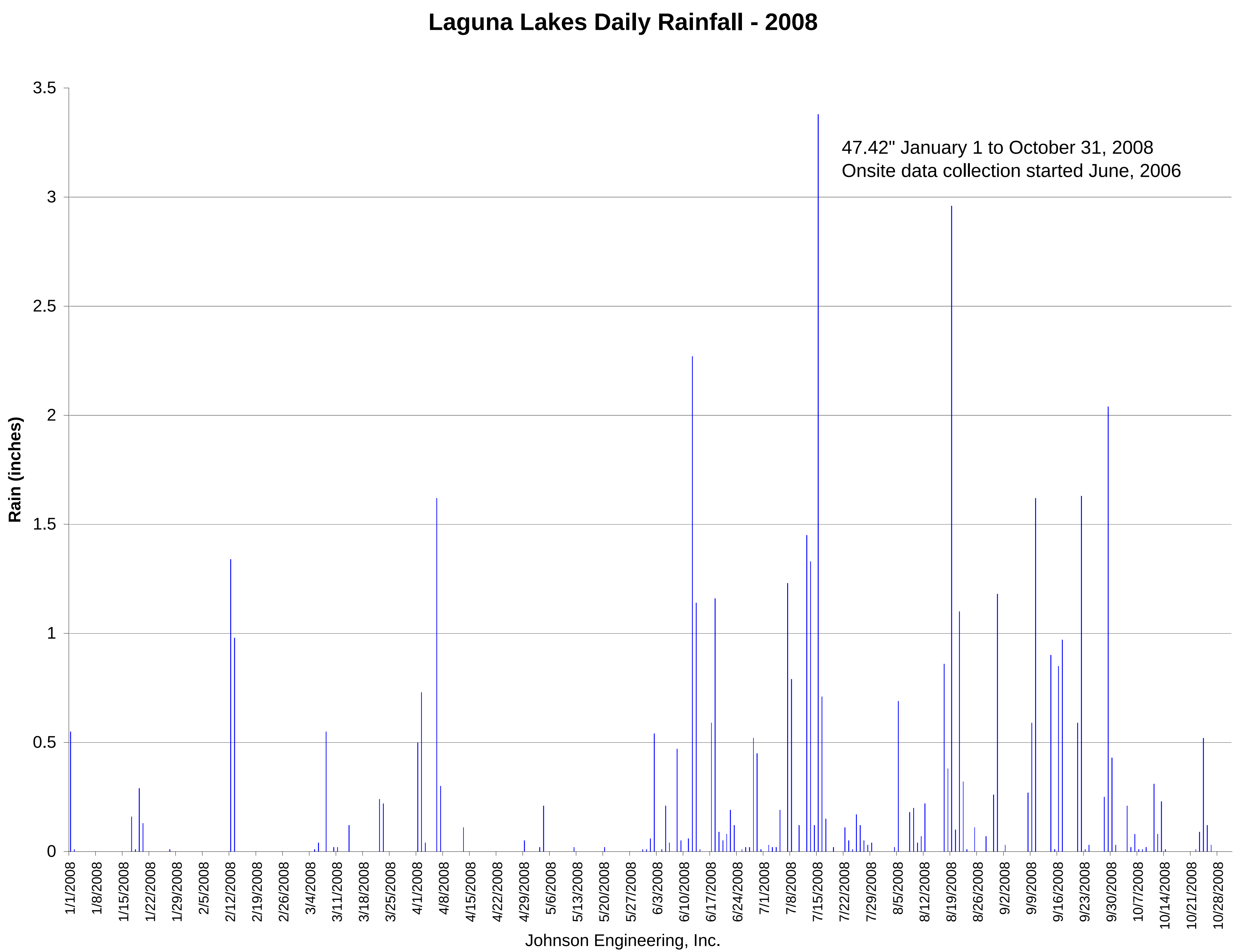


The Brooks BROUT
Water Level Monitoring 2008
WSEL
Weir Crest Elevation
Samples
WSEL (NGVD)
18.00
17.50
17.00
16.50
16.00
15.50
15.00
14.50
14.00
13.50
13.00
12.50
12.00
11.50
11.00
Weir Crest Elevation 15.9 NGVD
No data
7/9/2008
7/15/2008
7/28/2008
8/19/2008
9/9/2008
9/22/2008
9/29/2008
10/6/2008
1-Jan-08
11-Jan-08
21-Jan-08
31-Jan-08
10-Feb-08
20-Feb-08
1-Mar-08
11-Mar-08
21-Mar-08
31-Mar-08
10-Apr-08
20-Apr-08
30-Apr-08
10-May-08
20-May-08
30-May-08
9-Jun-08
19-Jun-08
29-Jun-08
9-Jul-08
19-Jul-08
29-Jul-08
8-Aug-08
18-Aug-08
28-Aug-08
7-Sep-08
17-Sep-08
27-Sep-08
7-Oct-08
17-Oct-08
27-Oct-08
6-Nov-08
16-Nov-08
26-Nov-08
6-Dec-08
16-Dec-08
26-Dec-08

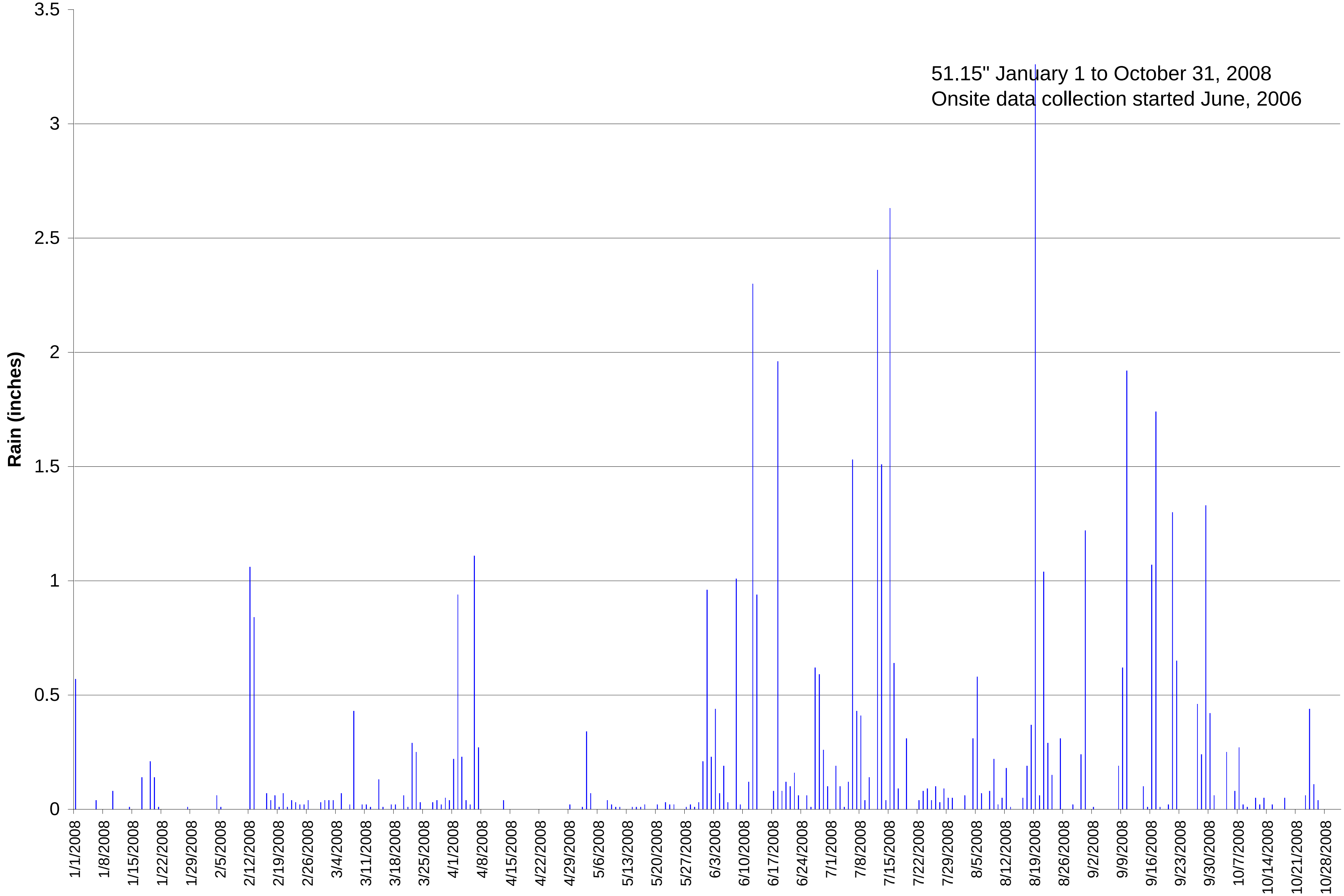
APPENDIX I - RAINFALL DATA

Lee County Effectiveness of BMPs in SW Florida - Rain Event Statistics														
		The Brooks				Laguna Lakes				Wal-Mart				
		Rain	Duration	Average	Max	Rain	Duration	Average	Max	Rain	Duration	Average	Max	
Event #	Date	(in)	(hours)	(in/hour)	(in/hour)	(in)	(hours)	(in/hour)	(in/hour)	(in)	(hours)	(in/hour)	(in/hour)	
1	6/25/2006					0.42	1.50	0.28	1.12	0.79	2.75	0.29	1.00	
2	7/2/2006					2.31	1.50	1.54	4.64	2.57	1.50	1.71	4.44	
3	7/6/2006					0.40	1.00	0.40	0.92					
4	7/13/2006	0.30	0.75	0.40	0.80									
5	7/18/2006	0.30	2.50	0.12	0.84									
6	7/31/2006	0.50	0.50	1.00	1.64									
7	8/7/2006	0.73	1.00	0.73	2.04									
8	8/14/2006	1.43	1.50	0.95	3.72	0.66	0.75	0.88	1.72	1.13	1.50	0.75	2.16	
9	8/30/2006					0.49	4.25	0.12	0.40	0.41	3.50	0.12	0.24	
10	9/13/2006					0.63	1.25	0.50	1.48	1.02	2.00	0.51	2.40	
11	1/25/2007	0.33	2.25	0.15	0.32	0.20	0.75	0.27	0.56	0.21	1.50	0.14	0.28	
12	4/10/2007	0.54	6.25	0.09	0.88	0.71	7.25	0.10	0.76	0.67	7.75	0.09	0.84	
13	7/21/2007									1.24	1.00	1.24	2.52	
14	7/26/2007									0.84	4.00	0.21	0.84	
15	8/1/2007					1.58	15.75	0.10	1.52	0.98	19.50	0.05	0.68	
16	8/8/2007					0.17	2.00	0.09	0.28					
17	9/2/2007					1.55	1.25	1.24	3.20	1.78	1.25	1.42	3.56	
18	9/20/2007					0.66	2.00	0.33	1.60	0.68	1.75	0.39	1.72	
19	10/21/2007					0.25	1.75	0.14	0.44					
20	6/23/2008					0.13	1.25	0.10	0.24					
21	7/8/2008					0.38	2.75	0.14	0.68	0.40	4.00	0.10	0.60	
22	7/9/2008	0.64	3.75	0.17	1.16									
23	7/12/2008									2.36	4.50	0.52	2.52	
24	7/15/2008	1.90	8.50	0.22	1.32									
25	7/16/2008									0.64	8.75	0.07	0.68	
26	7/28/2008	0.35	2.00	0.18	0.52									
27	8/6/2008					0.62	1.50	0.41	1.24					
28	8/12/2008					0.19	0.50	0.38	0.76	0.15	1.25	0.12	0.44	
29	8/19/2008	5.47	20.25	0.27	2.24					3.52	22.75	0.15	0.92	
30	9/9/2008	0.37	10.75	0.03	0.48									
31	9/22/2008	0.76	3.50	0.22	0.80									
32	9/29/2008	1.21	3.25	0.37	1.92									
33	10/6/2008	0.43	1.45	0.30	1.32									


The Brooks Daily Rainfall - 2008
56.82" January 1 to October 31, 2008
Onsite data collection started June, 2006
Rain (inches)
0
1
2
3
4
5
6
1/1/2008
1/8/2008
1/15/2008
1/22/2008
1/29/2008
2/5/2008
2/12/2008
2/19/2008
2/26/2008
3/4/2008
3/11/2008
3/18/2008
3/25/2008
4/1/2008
4/8/2008
4/15/2008
4/22/2008
4/29/2008
5/6/2008
5/13/2008
5/20/2008
5/27/2008
6/3/2008
6/10/2008
6/17/2008
6/24/2008
7/1/2008
7/8/2008
7/15/2008
7/22/2008
7/29/2008
8/5/2008
8/12/2008
8/19/2008
8/26/2008
9/2/2008
9/9/2008
9/16/2008
9/23/2008
9/30/2008
10/7/2008
10/14/2008
10/21/2008
10/28/2008
Johnson Engineering, Inc.

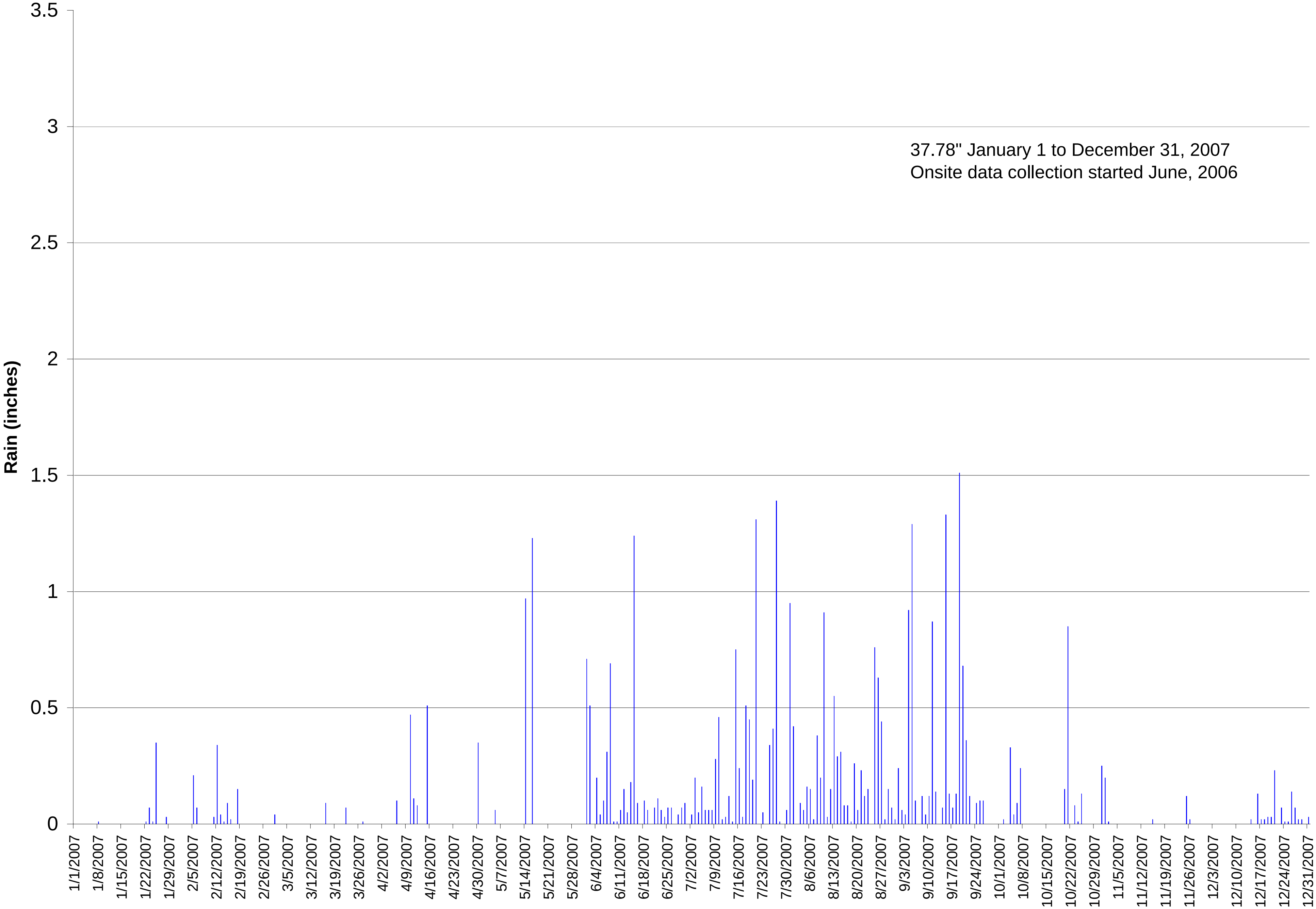

Laguna Lakes Daily Rainfall - 2008
47.42" January 1 to October 31, 2008
Onsite data collection started June, 2006
Rain (inches)
3.5
3
2.5
2
1.5
1
0.5
0
1/1/2008
1/8/2008
1/15/2008
1/22/2008
1/29/2008
2/5/2008
2/12/2008
2/19/2008
2/26/2008
3/4/2008
3/11/2008
3/18/2008
3/25/2008
4/1/2008
4/8/2008
4/15/2008
4/22/2008
4/29/2008
5/6/2008
5/13/2008
5/20/2008
5/27/2008
6/3/2008
6/10/2008
6/17/2008
6/24/2008
7/1/2008
7/8/2008
7/15/2008
7/22/2008
7/29/2008
8/5/2008
8/12/2008
8/19/2008
8/26/2008
9/2/2008
9/9/2008
9/16/2008
9/23/2008
9/30/2008
10/7/2008
10/14/2008
10/21/2008
10/28/2008
Johnson Engineering, Inc.

Wal-Mart Daily Rainfall - 2008



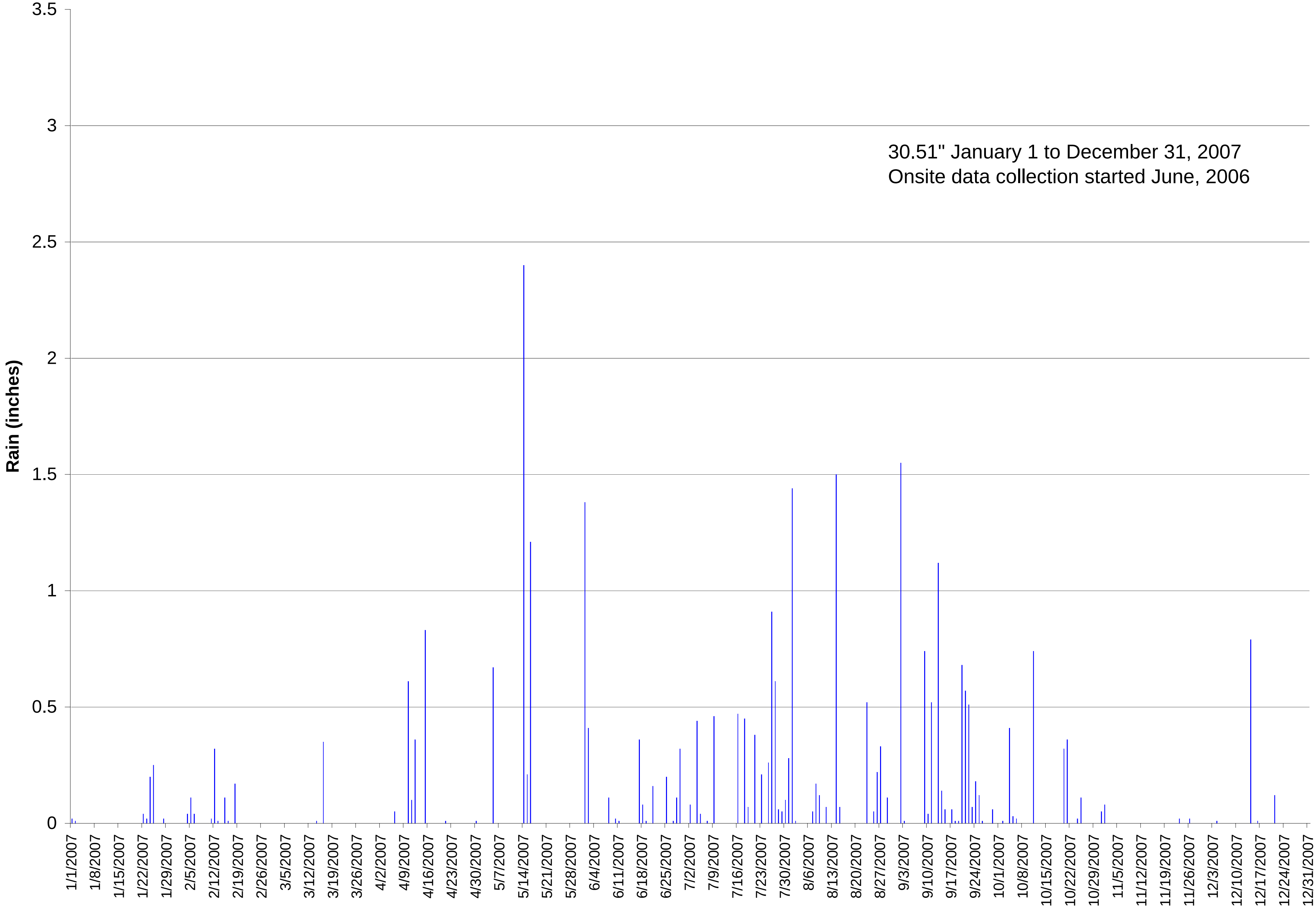
Johnson Engineering, Inc.

The Brooks Daily Rainfall - 2007

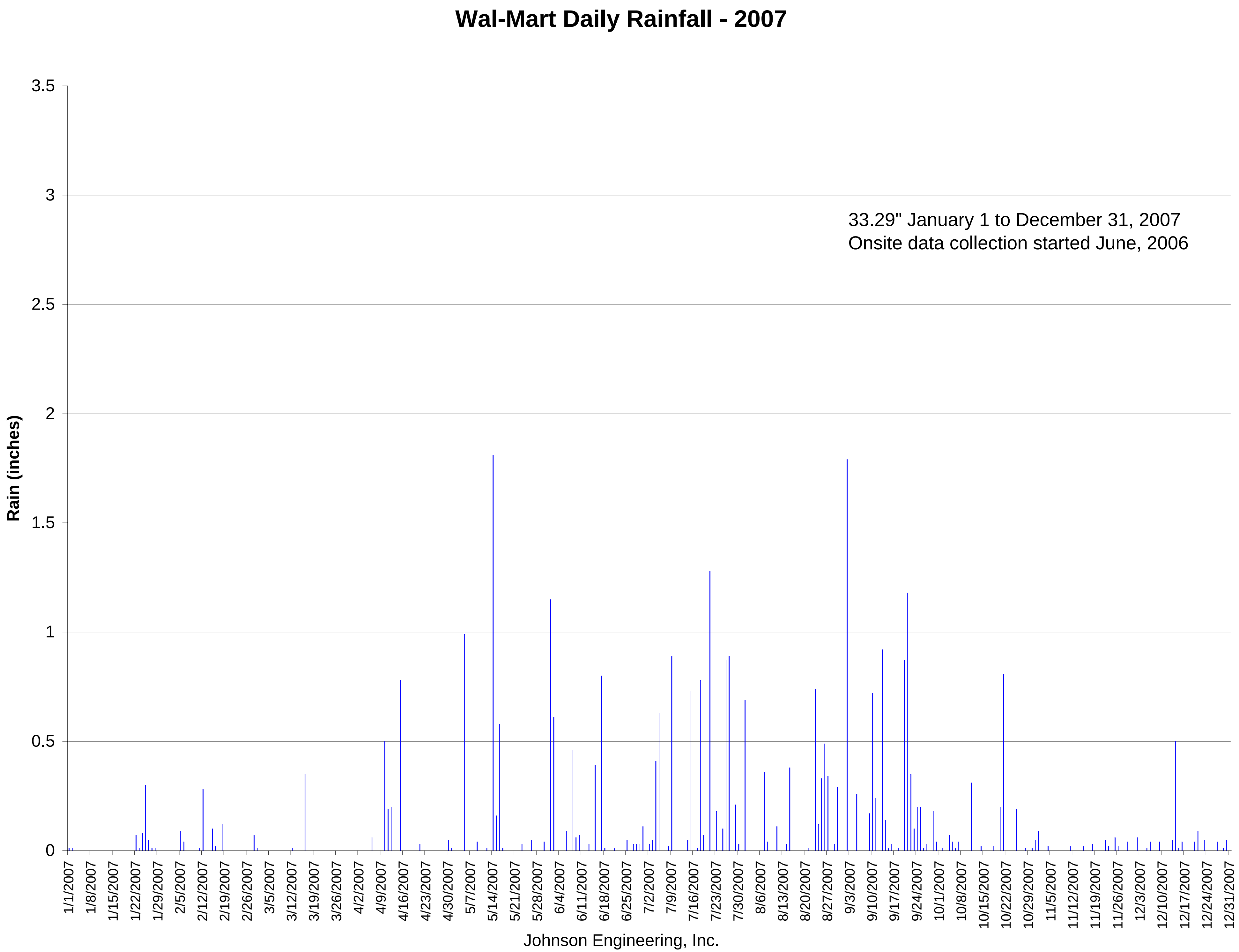


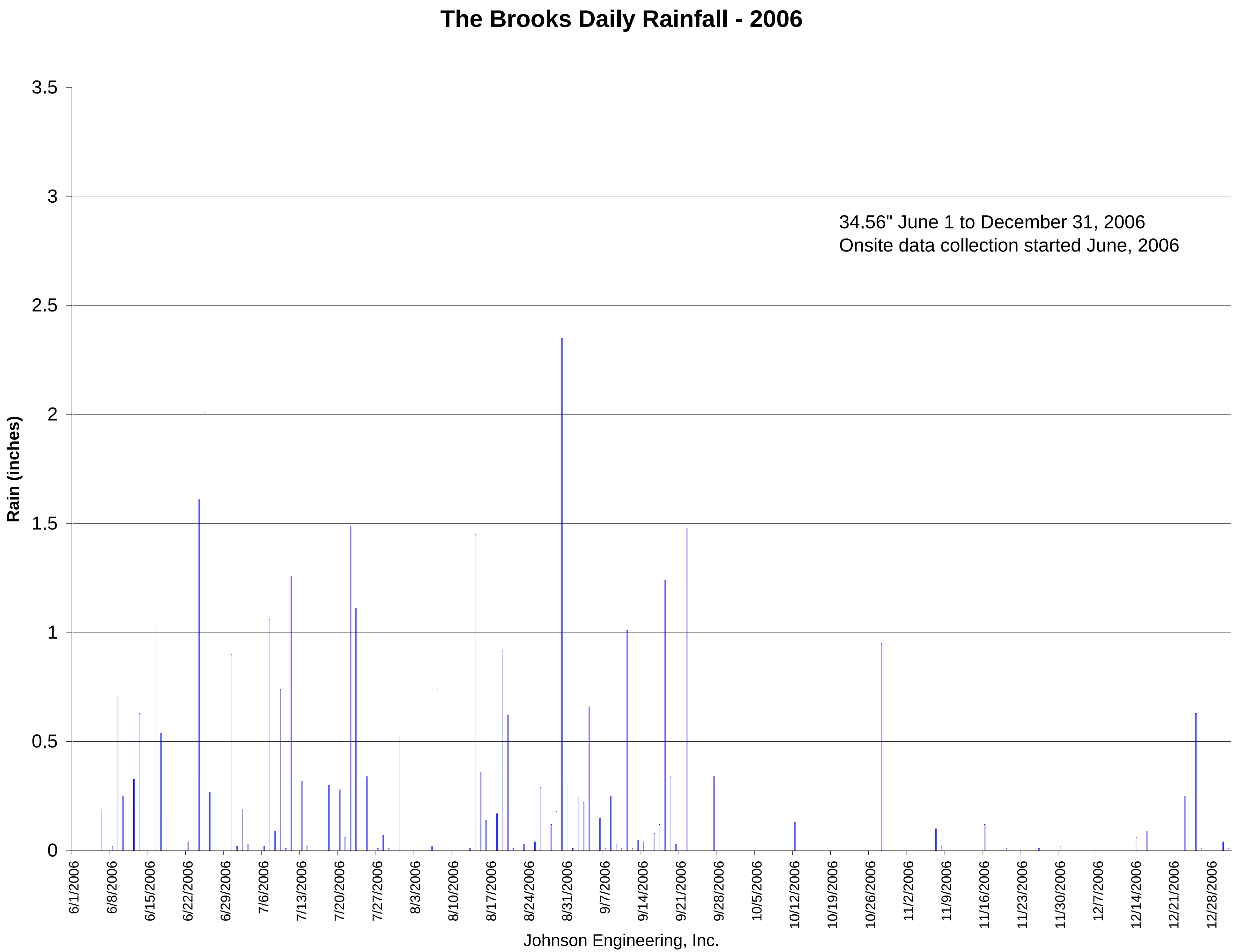
Johnson Engineering, Inc.

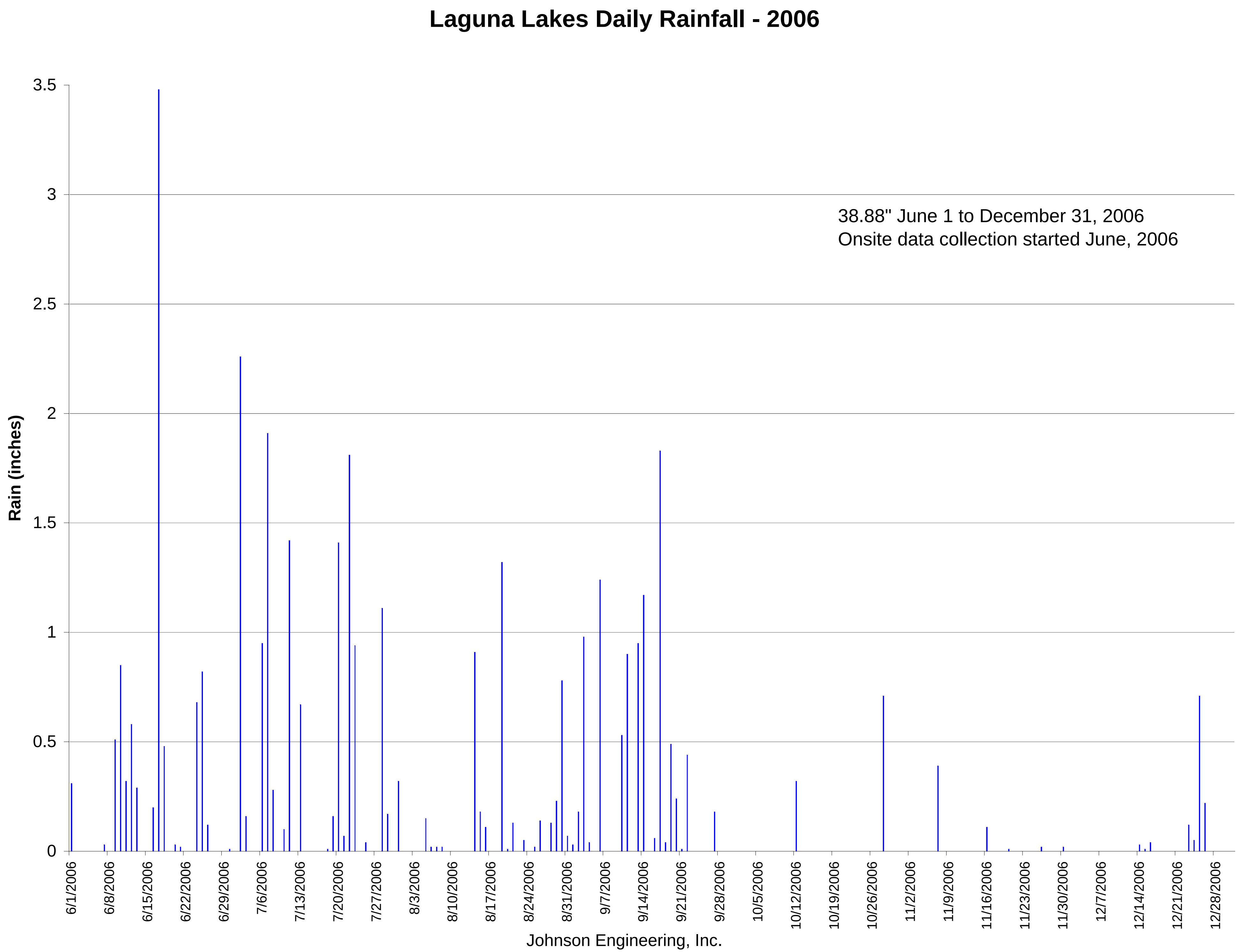
Laguna Lakes Daily Rainfall - 2007



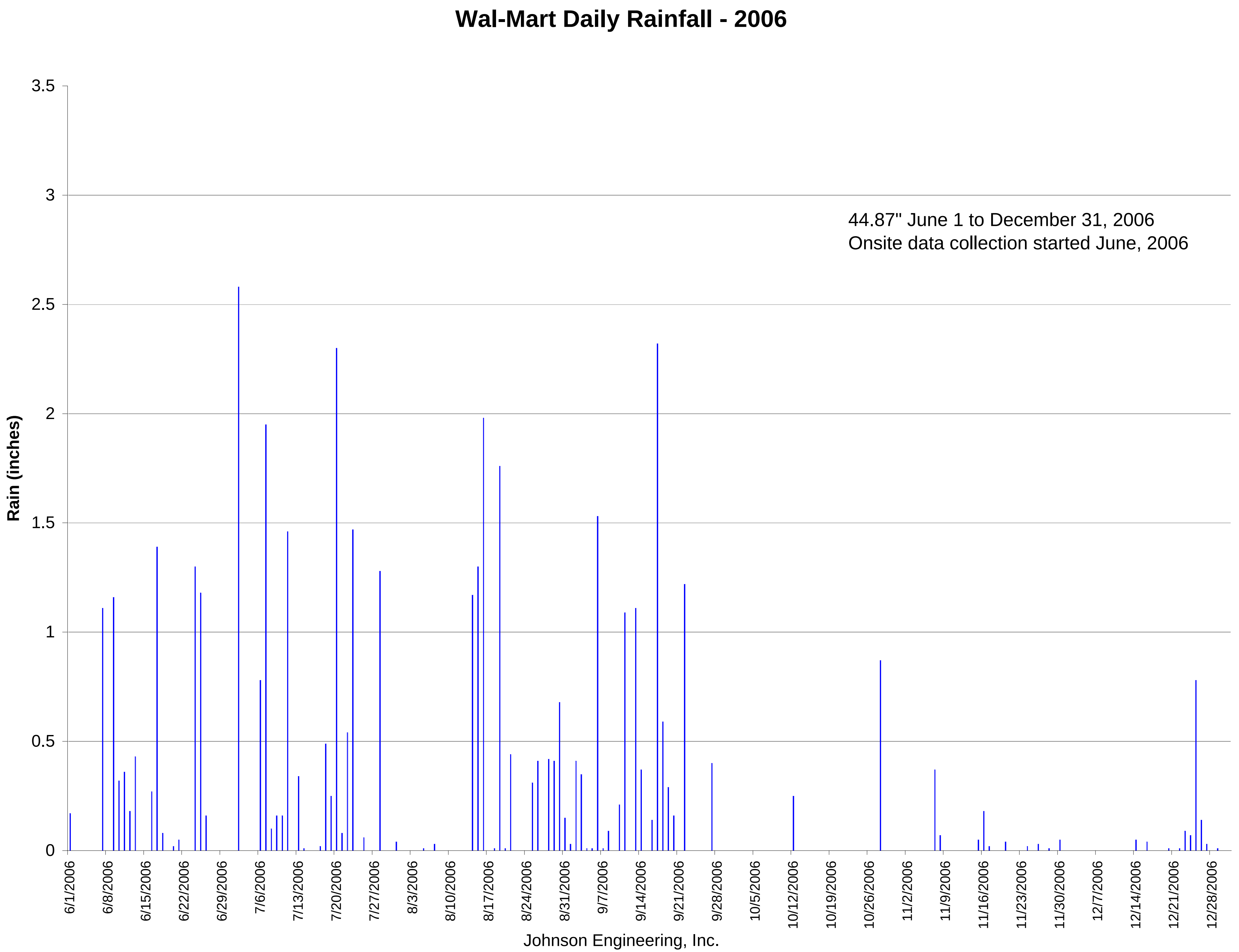
Johnson Engineering, Inc.


Wal-Mart Daily Rainfall - 2007
Rain (inches)
3.5
3
2.5
2
1.5
1
0.5
0
33.29" January 1 to December 31, 2007
Onsite data collection started June, 2006
1/1/2007
1/8/2007
1/15/2007
1/22/2007
1/29/2007
2/5/2007
2/12/2007
2/19/2007
2/26/2007
3/5/2007
3/12/2007
3/19/2007
3/26/2007
4/2/2007
4/9/2007
4/16/2007
4/23/2007
4/30/2007
5/7/2007
5/14/2007
5/21/2007
5/28/2007
6/4/2007
6/11/2007
6/18/2007
6/25/2007
7/2/2007
7/9/2007
7/16/2007
7/23/2007
7/30/2007
8/6/2007
8/13/2007
8/20/2007
8/27/2007
9/3/2007
9/10/2007
9/17/2007
9/24/2007
10/1/2007
10/8/2007
10/15/2007
10/22/2007
10/29/2007
11/5/2007
11/12/2007
11/19/2007
11/26/2007
12/3/2007
12/10/2007
12/17/2007
12/24/2007
12/31/2007
Johnson Engineering, Inc.


The Brooks Daily Rainfall - 2006
Rain (inches)
3.5
3
2.5
2
1.5
1
0.5
0
34.56" June 1 to December 31, 2006
Onsite data collection started June, 2006
6/1/2006
6/8/2006
6/15/2006
6/22/2006
6/29/2006
7/6/2006
7/13/2006
7/20/2006
7/27/2006
8/3/2006
8/10/2006
8/17/2006
8/24/2006
8/31/2006
9/7/2006
9/14/2006
9/21/2006
9/28/2006
10/5/2006
10/12/2006
10/19/2006
10/26/2006
11/2/2006
11/9/2006
11/16/2006
11/23/2006
11/30/2006
12/7/2006
12/14/2006
12/21/2006
12/28/2006
Johnson Engineering, Inc.

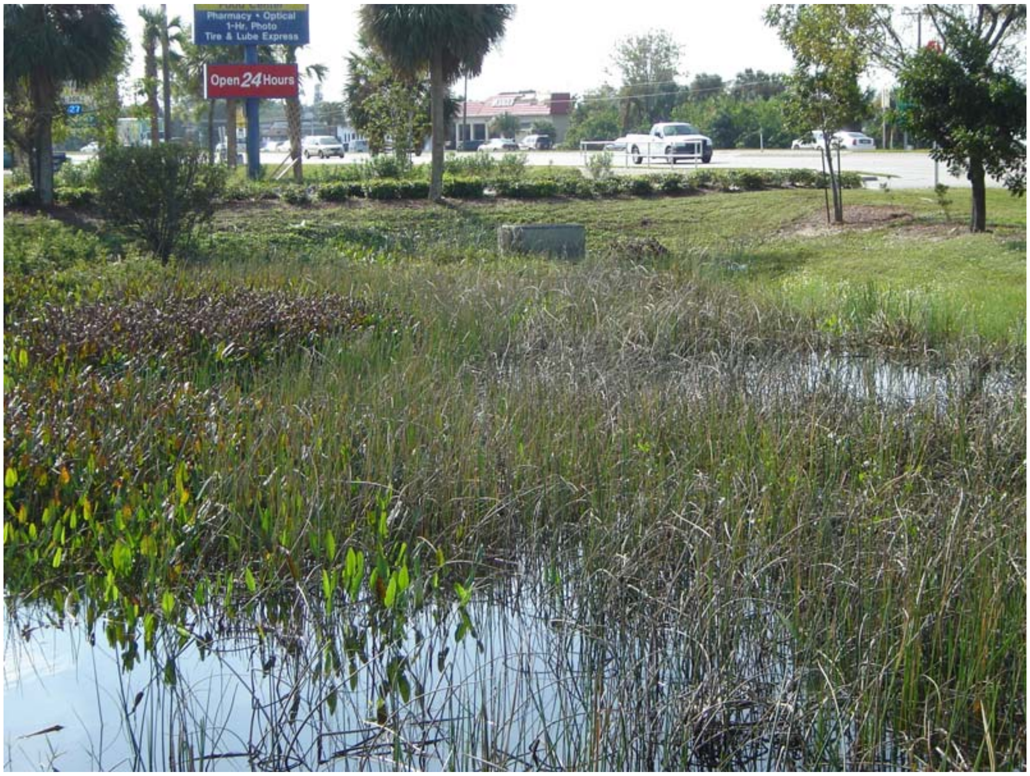


Laguna Lakes Daily Rainfall - 2006
Rain (inches)
0
0.5
1
1.5
2
2.5
3
3.5
38.88" June 1 to December 31, 2006
Onsite data collection started June, 2006
6/1/2006
6/8/2006
6/15/2006
6/22/2006
6/29/2006
7/6/2006
7/13/2006
7/20/2006
7/27/2006
8/3/2006
8/10/2006
8/17/2006
8/24/2006
8/31/2006
9/7/2006
9/14/2006
9/21/2006
9/28/2006
10/5/2006
10/12/2006
10/19/2006
10/26/2006
11/2/2006
11/9/2006
11/16/2006
11/23/2006
11/30/2006
12/7/2006
12/14/2006
12/21/2006
12/28/2006
Johnson Engineering, Inc.



Wal-Mart Daily Rainfall - 2006
44.87" June 1 to December 31, 2006
Onsite data collection started June, 2006
Rain (inches)
3.5
3
2.5
2
1.5
1
0.5
0
6/1/2006
6/8/2006
6/15/2006
6/22/2006
6/29/2006
7/6/2006
7/13/2006
7/20/2006
7/27/2006
8/3/2006
8/10/2006
8/17/2006
8/24/2006
8/31/2006
9/7/2006
9/14/2006
9/21/2006
9/28/2006
10/5/2006
10/12/2006
10/19/2006
10/26/2006
11/2/2006
11/9/2006
11/16/2006
11/23/2006
11/30/2006
12/7/2006
12/14/2006
12/21/2006
12/28/2006
Johnson Engineering, Inc.

APPENDIX J - SITE PHOTOS



Wal-Mart Outfall Structure at
US 41 at Six Mile Cypress Pkwy

Wal-Mart Water Management Lake at US 41 at Six Mile Cypress Pkwy

Wal-Mart – Discharge from Parking Lot

Wal-Mart Parking Lot

The Brooks – Outfall Control Structure

The Brooks - Lake Edge at Golf Course

The Brooks – Outfall Control Structure

The Brooks – Lake Edge at Golf Course

Laguna Lakes – Sampling Equipment

Laguna Lakes – Water Management Lakes

Laguna Lakes – Programmable Avalanche Sampler

Laguna Lakes – Inflow Inlet

Laguna Lakes – Yard Drain

Laguna Lakes – Outfall Control Structure

Laguna Lakes – Fountain Aeration

APPENDIX K - WATER QUALITY MONITORING PLAN

Water Quality Monitoring Plan

Effectiveness of Best Management Practices

Prepared for:

LEE COUNTY NATURAL RESOURCES

Prepared by:

JOHNSON ENGINEERING

ENGINEERS, SURVEYORS, PLANNERS AND ECOLOGISTS
2158 Johnson Street
Fort Myers, Florida 33901

January 24, 2006
Revised April 28, 2006

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BACKGROUND

In 2003, Harvey Harper, P.E., PhD, published a report entitled "Evaluation of Alternative Stormwater Regulations in Southwest Florida". The report stated that in order to achieve no net increase in loadings under post development conditions, pollutant removal efficiencies of 60 to 95% might be required. He identified dry retention and wet retention systems as the only stormwater management systems capable of meeting these criteria. The South Florida Water Management District (SFWMD) and the United States Army Corp of Engineers (USACE) have subsequently adopted the recommendations of this study for permitting post-development treatment options. The U.S. Environmental Protection Agency (EPA) has since commissioned a study to assess the pollutant removal efficiencies of stormwater Best Management Practices (BMPs) commonly used in southwest Florida.

In 2004, the Lee County Division of Natural Resources commissioned a study to investigate the pollutant removal efficiencies of stormwater BMPs in Lee County. This study designed by Johnson Engineering will identify, prioritize and recommend the most effective BMPs that will ensure that post-development pollutant discharge will not exceed pre-development loading rates. Johnson Engineering has completed the first two phases of this study: conducting a literature review of stormwater BMPs used in Florida, and selecting potential stormwater BMP monitoring sites in Lee County. The next phase of this study will include obtaining additional local data on the treatment effectiveness of stormwater BMPs at the selected sites. To this end, Johnson Engineering has designed this monitoring program to collect and analyze data from three different sites in southwest Florida using stormwater BMPs.

OBJECTIVES

The objective of this project is to evaluate the pollutant removal efficiencies of stormwater BMPs currently being permitted in Southwest Florida. Results from the study of the stormwater BMPs will be used to assess the pollutant removal efficiencies of wet detention systems, in order to evaluate whether post-project pollutant discharges exceed pre-project pollutant loading rates.

The literature review performed by Johnson Engineering identified few stormwater BMP studies that have been completed in southwest Florida. As a result, little local historical data exists to evaluate pollutant removal efficiencies of existing stormwater BMPs. Wet detention systems comprise the vast majority of stormwater BMPs permitted and constructed in southwest Florida. Dry detention systems are believed to be less effective due to the high water tables encountered in the southwest Florida area. Accordingly, this monitoring program will focus on evaluating the effectiveness of wet detention systems.

Three wet detention systems located in three different land use categories have been identified through the BMP Process Selection phase of this project for further detailed study. Budgetary considerations limit the number of sample sites and so the total number of analysis sets will not be ideal from a statistical standpoint, it should provide a good initial data set that can be added to in future phases. These three sites include:

Golf Course/Residential – The Brooks

Residential Only – Laguna Lakes

Commercial – Wal-Mart Site at Six Cypress Parkway and US-41

All three sites have wet detention systems in mature developments that are reasonably well-maintained. The specific project sites were selected based on willingness of the owners to participate, the layout of the wet detention system, site security and access. All sites are representative of conditions generally found in developing areas in southwest Florida such as soil types, drainage, and environmental conditions.

The monitoring program will involve collecting rainfall measurements, water level data, and inflow and outflow data at each site. Flow composited water quality samples will be collected from the inflow and outflow locations at each of the three sites during 15 rainfall events over an 18 month period, producing the required sample volumes. The water quality samples collected from each of the three sites for each event will be laboratory analyzed for several types of pollutants. Concentrations of the parameters of interest, along with the measured flow volumes, will be used to evaluate the BMP pollutant removal efficiencies within each of the stormwater management systems.

METHODOLOGY

Site Selection

The site selection process considered the following parameters:

1. Project status relative to build out (must be complete by end of summer 2005).
2. Ability to isolate drainage areas (no flow throughs)
3. Willingness of owners to participate and allow testing
4. Site access and security.

The sites represent three of the most common land use categories in southwest Florida: golf course/residential (The Brooks), residential (Laguna Lakes), and commercial (Wal-Mart). See Figure 1 for the site locations within Lee County.

At each selected stormwater management system, flow weighted composite sampling will be conducted at the locations described below:

Inflow – This location will capture runoff from the inlet device as it enters the wet detention system. A flowmeter will be installed to monitor inflow, which will be used to trigger the sample collection device to generate composite samples at the appropriate intervals.

Outflow – This location will capture treated water at the outfall structure as it leaves the wet detention system. A water level transducer will be installed to monitor outfall and generate composite samples.

Due to local site conditions at the Wal-Mart location and at Laguna Lakes, two inflow samplers will be required to properly characterize inflow to the treatment area.

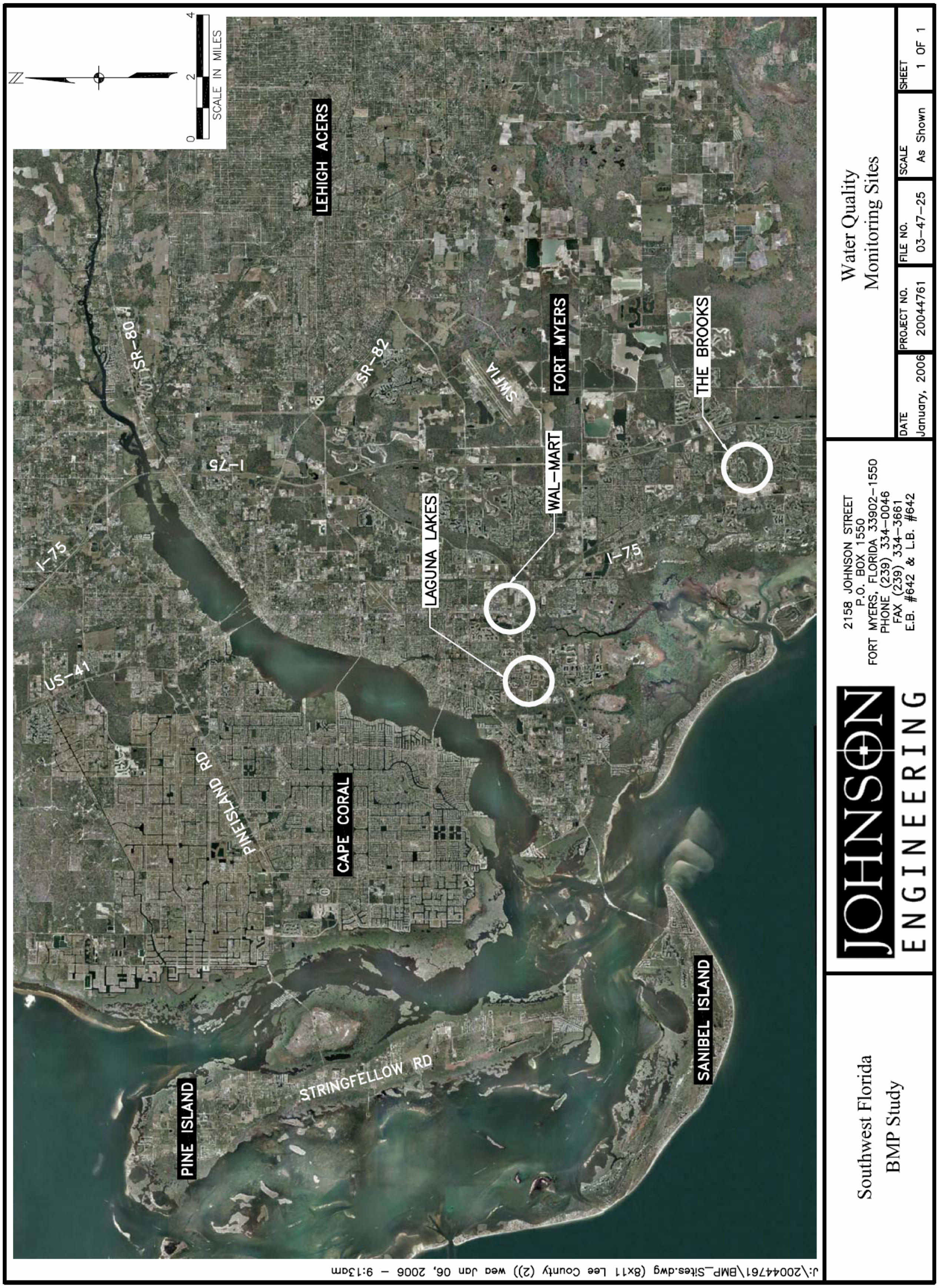

Figure 1: Selected Monitoring Site Locations Within Lee County

Sampling Event Criteria

Although it is not possible to know for certain how much rainfall will occur during a particular event, an anticipated target event must be considered in order to calculate sample aliquot composite volumes that will adequately represent the entire interval. For our purposes, a target event of half of an inch to one inch is desired.

Sampling events will be triggered by rainfall of at least 0.10 inches and flow detected at the inlet pipe. Both conditions must occur before the sampling event is initiated. These dual criteria will help to eliminate unnecessary sampling of events that do not produce enough volume for laboratory analysis.

Composite samples collected during each rainfall event will supply enough volume to analyze and characterize rainfalls in the range of 0.25 -1.5 inches. These sample volumes will be composited based on flow volumes measured at each sampling point. Due to different hydraulic flow behaviors anticipated at the three project sites, each location will likely require site specific sampling protocols. Each composite sample will consist of up to ten evenly distributed aliquots, based upon the total amount of flow measured. Samples collected from rainfall events that initially trigger the samplers but fail to provide at least six evenly distributed aliquots will not be considered valid composite samples. Additionally, samples collected at the outfall location during events that do not produce at least a six-hour discharge from the stormwater management system will not be considered as valid composite samples. Situations such as these will be considered dry runs, resulting in the samples being discarded and the samplers being cleaned and reset. Samples collected from rainfall events that exceed 1.5 inches will be analyzed only over the portion of the event during which samples were collected.

Sampling Equipment

Water quality samples will be collected by programmable, refrigerated, automatic sampling equipment manufactured by ISCO, Inc., of Lincoln, Nebraska (Figure 2). The Avalanche Series 6712 sampling units utilize peristaltic pumps with inert Tygon and polyethylene tubing. The Series 6712 sampling units are outfitted with dataloggers capable of interfacing with multiple external sensing devices and storing up to 512 KB of data. Deep cycle marine batteries coupled with 50 watt solar panels will provide power for each sampler unit.

Figure 2: Avalanche Series 6712 Automatic Sampling Unit

Sampling units will be capable of receiving input signals from external rain sensing equipment and external flow sensing equipment, as well as being equipped with cellular telephone modems for remote system monitoring and remote detection of sampling events. Both rainfall and flow will trigger activation of the sampling unit monitoring inflow to the stormwater management system. Flow out of the system will trigger the outflow sampling unit. This design will ensure that samples of outfall water quality are collected during events that may not produce discharge until after the initial rainfall event ends.

ISCO Series 674 rain gauges will be installed at each site to measure rainfall (Figure 3). These gauges are tipping bucket style devices capable of recording rainfall events as small as 0.01 inches. The rain gauge equipment will be directly connected to the sampling units and will also be remotely accessible via phone modem connection in order to download data as well as to detect the occurrence of trigger events from a remote location.

Figure 3: ISCO Series 674 Rain Gauge

Flow monitoring at each site will be accomplished using ISCO Series 2150 AV acoustic Doppler flowmeters (Figure 4). These devices will be installed in an inlet pipe at each site in order to measure the flow entering the wet detention system. Discharge from each site will be measured with an ISCO Series 720 water level transducer.

Figure 4: ISCO Series 720 Water Level Transducer

Water levels in the stormwater management systems will be measured and recorded by Infinities USA dataloggers linked to pressure transducers. The pressure transducers and data loggers will be located in the stormwater ponds near the monitored outfall structures. The pressure transducers will be housed in PVC pipes and suspended just above the pond bottoms at locations that should remain constantly submerged throughout the year. The cables suspending the pressure transducers will link them to dataloggers mounted on top of open-ended 2-inch PVC pipes. The PVC pipe will be strapped to steel pipes driven into the lake bottoms. The data loggers are capable of recording and storing water level readings for several months based on the specific reading intervals chosen.

Data from the rain gauges, flowmeters, ISCO controllers, and water level recorders will be down-loaded on-site using Panasonic TuffBook laptop computers, which will then be transferred to Johnson Engineering office network computers for processing and archiving.

Parameters

Each water quality sample collected during a qualifying rainfall event will be laboratory analyzed for the following parameters:

Parameter	Detection Limit
Total Kjeldahl Nitrogen	0.2 mg/L
Nitrate + Nitrite	0.01 mg/L
Total Nitrogen	
Ammonia - N	0.008 mg/L
Chlorophyll-a	0.5 mg/m3
Total Phosphorus	0.02 mg/L
Dissolved Phosphorus	0.008 mg/L
Total Suspended Solids	2.4 mg/L
Total Copper	1 ug/L
Total Cadmium	1 ug/L
Dissolved Copper	1 ug/L
Dissolved Cadmium	1 ug/L

These parameters have been identified as pollutants of great concern in southwest Florida water bodies.

MONITORING SITES

The Brooks

Site Description

The Brooks is a residential community with four 18-hole golf courses. Of the 2,532 total acres at The Brooks, over 400 acres are in undeveloped forest and wetlands, and nearly 900 additional acres have been set aside for recreational uses, open areas, buffers and lakes. The community occupies approximately four square miles in south Lee County, Florida, being situated south of Corkscrew Road and between US 41 and Interstate 75. The Brooks is a master planned community developed by Bonita Bay Group with some of the first site work being done shortly after 1997. The community is located in an area of intense development. The site selected for the BMP monitoring program is located in the northern portion of the development known as Shadow Wood at The Brooks.

There are approximately 148 wet detention lakes in the entire Brooks project ranging in size from less than an acre to about ten acres, with the majority of lakes being two acres or less. Total area at control elevation for these lakes is approximately 430 acres. These lakes are interconnected by culverts and by control structures strategically placed to attenuate storm flows. Lake depths are typically 12-feet, per local regulations, but some variance exists and a range of depths between eight and 14 feet can be found. Wet detention lakes will receive runoff from residential areas, golf course areas, and roadways.

The drainage subbasin (2A), in which the five lake train system selected for BMP monitoring is located, has an overall acreage of approximately 169 acres, of which about 29 acres are wet detention lakes. The remaining area is single family homesites, golf course area and internal roadways.

Prior to development, the land was primarily used for cattle grazing with the natural flow ways disrupted by farm roads. The primary drainage feature through the site is the upper reaches of Halfway Creek, which is a tributary to the Estero River, discharging into Estero Bay.

While the overall water management system often incorporates herbaceous wetlands as a part of the system design, the site selected for BMP monitoring does not. The Brooks currently maintains 10 dedicated wetlands conservation areas totaling approximately 386 acres, ranging in individual size from three acres to 135 acres. See Figure 5 for additional information.

One of the primary reasons this site was selected was that it is an example of a very well maintained wet detention system. Both the developer, the two existing Community Development Districts and the homeowners associations give a high level of attention to maintenance of the water management system facilities. The Brooks has received awards on both the local and state levels and should represent optimum conditions for the performance of the wet detention system.

Sampling Locations

The inflow monitoring and sampling for this site (BRIN) will be performed at a drainage pipe located at the fairway of golf course hole # 5. This pipe delivers water into wet detention lake IIA-2. This lake flows through a system of four more lakes in series before discharging through a control structure (CS-2A) at the outlet of lake IIA-6 into a flow way.

The outflow (BROUT) will be tested as flow discharges from control structure known as CS-2A into a flow way. The flow way continues to the west and ultimately off site. The five lakes in the test basin represent approximately 13 acres of typical wet detention at control elevation (13.8 feet, NGVD), and the individual lakes sizes range from 1.5 acres to 3.4 acres. The sample locations are shown on Figure 5.

Figure 5: The Brooks Monitoring Locations

Laguna Lakes

Site Description

Laguna Lakes is a residential community with no associated golf course facilities. The community occupies approximately 150 acres in central Lee County, Florida, being situated north of Summerlin Road, west of Bass Road and south of Gladiolus Drive. It is a planned community developed by Transeastern Homes and is currently completely sold out, leaving only a handful of lots remaining without constructed residences. The community is in an area of intense development.

There are approximately 33 acres of interconnected lakes that discharge to a manmade conveyance system known as the Iona Drainage District (IDD), a now defunct entity operated currently by Lee County. Ultimate discharge of the runoff is to Cow Slough then to either the Caloosahatchee River or to Estero Bay, depending on local conditions. All lakes at the Laguna Lakes site contain fountains, which aid in the aeration of the water. These are typically installed as aesthetic devices, but are required by local regulatory agencies for deep lakes.

Laguna Lakes contains three areas of single family residences, Monterey, Beverly Hills, and Santa Barbara. Monterey has 128 lots, typically of 0.1 acres per lot. Beverly Hills has 53 lots of approximately 0.18 acres per lot. Santa Barbara has 166 lots of approximately 0.14 acres. The development has one distinct area of multifamily dwellings, the Pebble Beach area. This area contains 25 condo buildings with 118 total units. These units are all concentrated in the northwestern quadrant of the development.

One internal lake within the Laguna lakes system provides reuse water storage and is not part of the surface water management system. This lake only discharges in emergency conditions. This lake will not be included in any of the analysis for this system.

Laguna Lakes is an example of a modern residential development. The site has a single outfall permitted through the South Florida Water Management District and approximately 465 total units.

Sampling Locations

Two inflow locations (LLIN1 and LLIN2) were selected at this site, as described below.

LLIN1 – Site runoff will be sampled at an inflow into the 1.8 acre wet detention area in the northwest quadrant of the project. This delivers runoff from a higher intensity multi-family area. The treatment train associated with this sample location is three lakes in series with a total area of 8.2 acres at control elevation (3.8 NGVD).

LLIN2 - Site runoff will be sampled at the inflow into the six acre wet detention area in the southeast quadrant of the project. This will contain runoff from a typical single family area where the individual lots are about 0.18 acres in size. All available lots are developed in this area. The treatment train associated with this sample location is two lakes in series with a total area of 10.5 acres at control elevation (3.8 NGVD).

Both of the inflow locations flow into a series of interconnected wet detention areas before reaching the final outfall control structure (S-91) located on the east side of the project at the east end of a 4.5 acre wet detention lake. Samples will also be collected from this outfall location (LLOUT). The sample locations are shown on Figure 6.

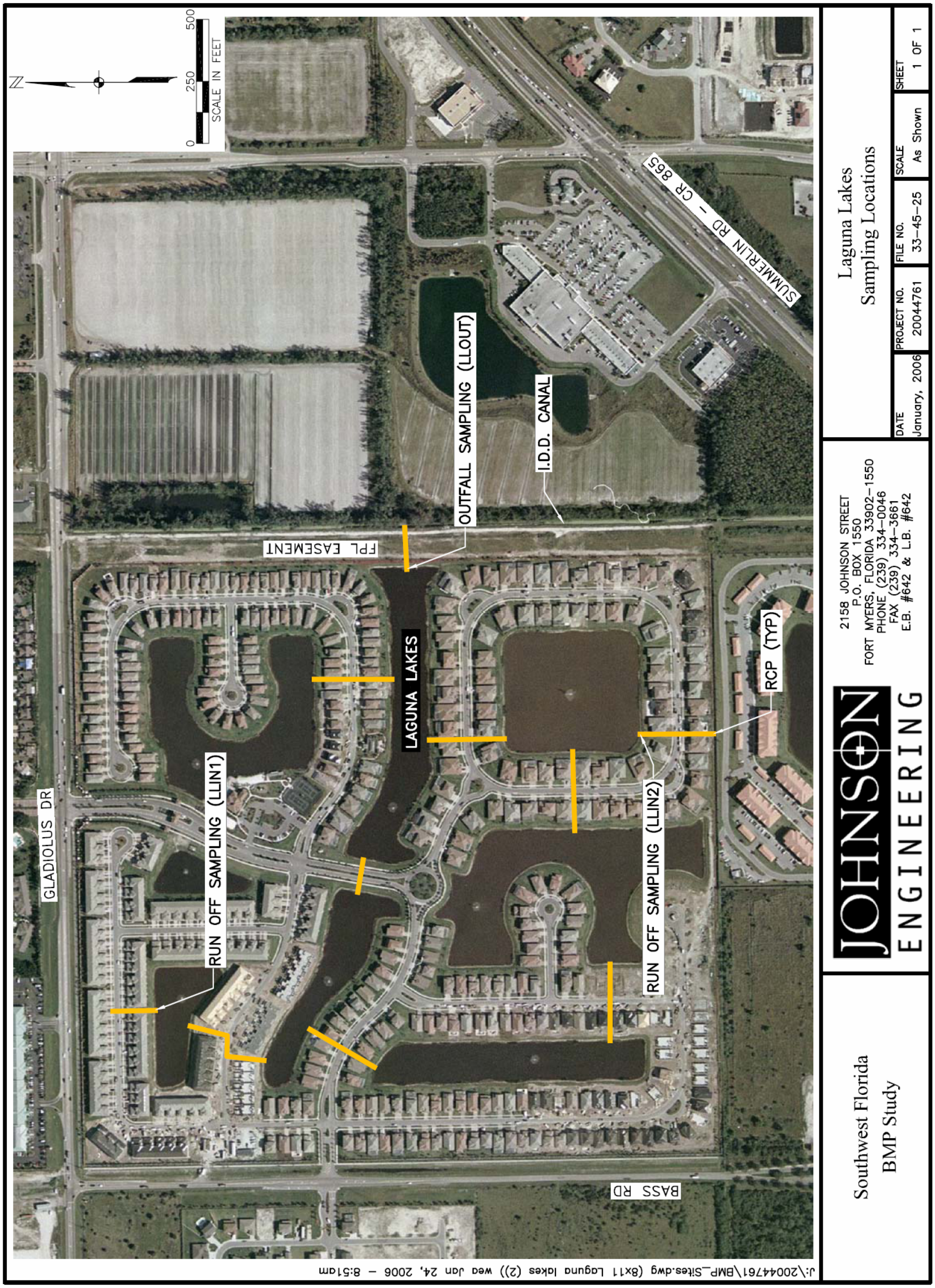

Figure 6: Laguna Lakes Monitoring Locations

Wal-Mart at Six Mile Cypress Parkway and US-41

Site Description

This site represents a typical commercial development site. According to the permit issued by SFWMD, this site has a building area of 210,679 square feet and associated paved roadways and parking areas on a 26 acre site. There are approximately 1,025 parking spaces located to the north of the building and east of the wet detention area.

The stormwater system is composed of swales, inlets and culverts, which route runoff to a wet detention area of approximately 1.6 acres. The final outfall is a single control structure in a smaller detention area of about 0.25 acres that delivers water to an existing IDD canal, eventually discharging to Hendry Creek and Estero Bay.

Sampling Locations

The surface water inflows to the wet detention area will be monitored in two locations (WMIN1 and WMIN2).

WMIN1 – Site runoff will be sampled at the north culvert from the parking area, discharging to the wet detention area. This will be exclusively runoff from paved parking areas.

WMIN2 – Site runoff will be sampled at the south culvert discharging to the wet detention area. This will represent a flow stream composed of both runoff from paved parking area and a significant contribution from roof run-off.

The outfall location (WMOUT) will be the third monitoring location at the Wal-Mart site, being near the southwest corner of the project site, just north of the entrance off of US 41. The sample locations are shown on Figure 7.

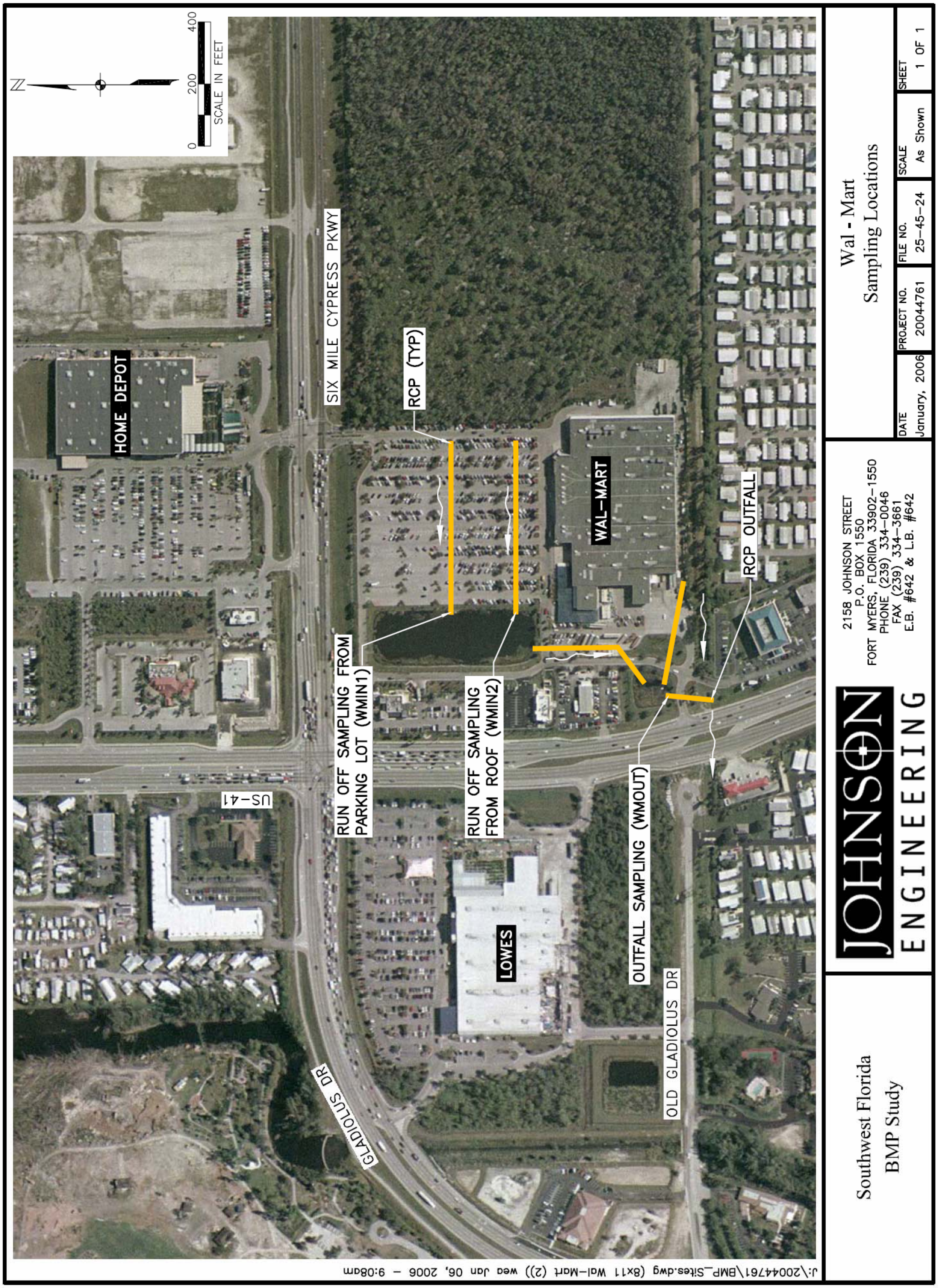

Figure 7: Wal-Mart Monitoring Locations

OPERATING PLAN AND PROCEDURES

Sampling Procedure

The Project Manager and staff will monitor local weather conditions and establish communication with samplers at each project site to determine if rainfall and site conditions have triggered a sampling event. When a sampling event has been triggered, staff personnel trained in Florida Department of Environmental Protection (FDEP) field sampling standard operating procedures (SOPs) (FDEP Standard Operating Procedures for Field Activities; DEP-SOP 001/01) will proceed immediately to the project site to complete the collection process and prepare the samplers for the next event. The entire sampling event will be documented by Johnson Engineering.

The field technician will transfer the water quality samples using gloved hands from the refrigerated automatic sampler into laboratory-supplied containers. The samples will be properly labeled, dated, and packed with ice in a laboratory-supplied cooler. The samples will be delivered to the Lee County Environmental Laboratory (Florida Department of Health No. E45049) following chain-of-custody procedures.

Laboratory Analysis and QA Procedures

Equipment blanks representing at least 5% of the total number of sample sets collected at a particular site will be collected from each monitoring location. The equipment blanks will serve to evaluate the on-site sampling environment, sampling equipment decontamination, sample container cleaning, suitability of sample preservatives and analyte-free water, and sample transport and storage conditions.

Field duplicates representing 5% of the total number of samples collected at each site during each event will be laboratory analyzed. The field duplicates are designed to measure the variability in the sampling process. The laboratory will initiate additional quality checks, including laboratory duplicates, laboratory spikes and continuous instrument calibration verification.

Data Verification Protocols

All monitoring equipment will be calibrated by the manufacturer prior to use. In addition, field calibration will be routinely performed by Johnson Engineering to ensure measurement accuracy. Rainfall data collected by the onsite rain gauges will be verified using rainfall data from a local weather station.

DATA ANALYSIS AND STATISTICAL METHODS

Laboratory analysis results from each site will be used to calculate flow composited event mean concentrations (EMCs) for each monitored parameter. Pollutant removal efficiencies for each parameter of interest will be estimated by calculating the percent reduction in the EMC for the period of record. The EMC percent reduction is calculated as:

EMC % reduction = [1 – (average outflow EMC / average inflow EMC]

The pollutant removal efficiencies of each of the stormwater BMP sites will be compared to typical efficiencies of wet detention systems, as well as other types of stormwater management systems, as reported by Harper (1995) and other published reports. In addition, pollutant removal efficiencies at the three sites will be compared to 80 percent reduction goals of the State Water Policy (Chapter 62-40 F.A.C.) and the State Surface Water Quality Standards (Chapter 62-302 F.A.C.).

Flow data recorded at each site will be combined with EMC data to assist in quantifying the annual reduction in pollutant loading provided by each of the three monitored stormwater BMP sites.

REPORTING PROCEDURE

An event summary will be provided following each rainfall event. The summary will indicate the time of the event and sample collection, as well as rainfall and flow information. All monitoring data collected at each site, including rainfall, flow rate and water level data, will be stored in a Microsoft Excel format. Laboratory analysis reports will include the parameter, result, detection limit, procedure method and reporting units. Laboratory analytical results will be stored in a Microsoft Excel format and as portable digital files, separated by site. Chain of custody documentation will also be scanned as portable digital files.

Johnson Engineering will compile quarterly reports including the individual event update memorandum, a description of the number of samples obtained, copies of laboratory analytical reports, descriptions of the BMP general operating conditions during the quarter, and a discussion of any unusual conditions of merit.

Johnson Engineering will prepare annual reports that discuss the operations status of each BMP site, including any maintenance operations ongoing or needed, any special conditions affecting the system loadings, a summary of rainfall and lake level data collected during the year, and any other information required to properly characterize the BMP operational performance during the year. Annual reports will provide graphical depictions of the water quality data, along with rainfall, lake level and flow data in order to visually describe site conditions during the monitoring period.

Following the completion of the study, Johnson Engineering will prepare a final report examining and reporting on data trends and overall program details. The report will pay particular attention to the BMP efficiency calculations generated in the annual reports and how these numbers correlate interannually. The report will also include charts depicting all site monitoring data, and rainfall, lake level and flow information, as well as data trends for individual analysis parameters. Photography will be incorporated throughout the report in order to properly depict the different BMP monitoring sites, site conditions, and the equipment used during the project.

Each of these reports will be provided in the form of a Microsoft Word document and/or Adobe Acrobat PDF file for internet publication.

APPENDIX L - QUALITY ASSURANCE PROJECT PLAN

QUALITY ASSURANCE PROJECT PLAN

EFFECTIVENESS OF BEST MANAGEMENT PRACTICES IN SOUTHWEST FLORIDA, LEE COUNTY

MAY 1, 2006

PREPARED FOR:

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QUALITY ASSURANCE PROJECT PLAN
EFFECTIVENESS OF BMP IN SOUTHWEST FLORIDA

Lee County Division of Natural Resources Management
1500 Monroe Street
Fort Myers, FL 33901

USEPA Federal Assistance Agreement

Submitted May 1, 2006

PROJECT APPROVAL

Lee County Division of Natural Resources

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Division Director

U.S. Environmental Protection Agency
USEPA Region 4 - Atlanta

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Veronica Fasselt Date
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INTRODUCTION

Johnson Engineering, Inc. has been retained by Lee County Division of Natural Resource Management (LCDNRM) to perform a water quality study titled, *Effectiveness of Best Management Practices in Southwest Florida, Lee County.* The purpose of the study is to assess the pollutant removal efficiencies of storm water treatment best management practices (BMPs), particularly wet detention systems commonly used throughout southwest Florida. Initial tasks of this study included completion of a literature review to assess the amount of research completed to date on storm water treatment BMPs. The literature review revealed that research on storm water treatment BMPs in southwest Florida is scarce.

The next phase of work included preparation of a Water Quality Monitoring Plan to identify potential monitoring sites, sampling event criteria, sampling equipment, and water quality parameters. In summary, three wet detention systems located in three different land use categories were identified and consist of: 1) Golf Course/Residential – The Brooks, 2) Residential Only – Laguna Lakes, and 3) Commercial – Wal-Mart Site at Six Cypress Parkway and US-41. The monitoring program will involve collecting rainfall measurements, water level data, and inflow and outflow data at each site. Flow composited water quality samples will be collected from the inflow and outflow locations at each of the three sites during 15 rainfall events producing the required sample volumes. The water quality samples collected from each of the three sites for each event will be laboratory analyzed for several types of pollutants. Concentrations of the parameters of interest, along with the measured flow volumes, will be used to evaluate the pollutant removal efficiencies of the selected storm water treatment BMPs.

The purpose of this Quality Assurance Project Plan (QAPP) is to document the results of the project technical planning process in one clear, concise, and complete plan for the environmental data operation and its quality objectives and identification of key project personnel.

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A4. Project/Task Organization

The following personnel will be responsible for maintaining the quality assurance/quality control (QA/QC) requirements of all field collected data, laboratory analyses, and data management/reporting. Project responsibilities for key project personnel are provided below. In addition, Figure 1 provides an organizational chart.

Program Manager - Michael L. Lohr – will have the responsibility and authority to manage all project activities including scheduling and coordination with staff from Lee County, Charlotte Harbor National Estuary Program (CHNEP) and the U.S. Environmental Protection Agency (USEPA). The Program Manager will communicate with the USEPA Technical Project Manager and the Project Officer to ensure that data generated by the program meet USEPA requirements and will provide adequate documentation that the program is achieving its QA/QC standards. At a minimum, the Program Manager will audit the program annually to document that the program's data quality goals are being met. The Effectiveness of BMP in Southwest Florida Program Manager will also be the program's primary point of contact, except as he otherwise designates, and will be responsible for submitting all data and required reports to USEPA.

Field Activities Manager - Tim Denison – will be responsible for 1) ensuring that all field data collection personnel are adequately trained to collect data in accordance with the standard operation procedures (SOP), 2) ensuring that data are collected consistently among field personnel in order to limit observer effects, and 3) oversight of all field operations to ensure on schedule completion of assigned fieldwork. The Field Activity Manager will immediately report any failure to fully meet SOP requirements to the Program Manager.

Laboratory Activities Manager - Keith Kibbey – will be responsible for 1) overseeing laboratory analyses of water samples 2) data processing duties related to the parameters analyzed by the laboratory under this program, 3) ensuring that the QA/QC procedures that have been established by the laboratory for those parameters and the guidelines of this QAPP are followed, and 4) ensuring that analytical tests are performed in accordance with approved methods. The Laboratory Activities Manager will report to the Program Manager any failure to meet any of the laboratory's QA/QC guidelines that pertain to analyses conducted for this program. All laboratory analyses conducted under this program will be performed under the supervision of the Laboratory Activities Manager.

Data Manager - Tim Denison – will be responsible for 1) ensuring that all data collected by the program are entered into the program's database accurately and timely 2) conducting database administrative functions, including correction of historic data, maintaining periodic backups of the database, processing all statistical/classification analyses, and 3) notifying the appropriate persons when follow up actions or advisories are indicated by statistical/classification analyses. The Data Manager will also be responsible for reporting all data collected under this program to USEPA in a timely fashion.

Quality Assurance Officer - David Hoffman – will be responsible to direct all aspects of program implementation, and is the final authority determining when re-sampling and advisories are warranted. This individual serves as the program's QA officer and provides oversight for the implementation of the quality assurance project plan (QAPP).

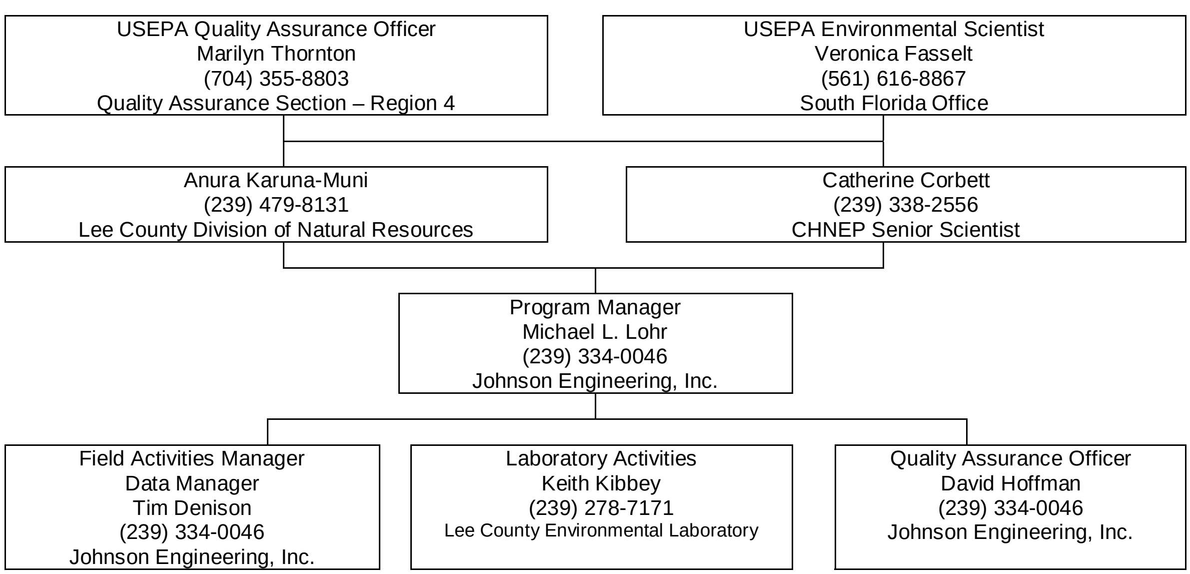

Figure A4.1 Project organization chart

A5. Problem Definition and Background

The objective of this project is to evaluate the pollutant removal efficiencies of storm water treatment BMPs common in southwest Florida. Results from this study will be used to identify, prioritize and recommend the most effective BMP.

A completed literature review identified few studies in southwest Florida on storm water treatment BMPs. Wet detention systems are the most common permitted storm water treatment BMP in southwest Florida. Dry detention systems are believed to be less effective due to the high water tables encountered in the southwest Florida area. Accordingly, this monitoring program will focus on evaluating the effectiveness of wet detention systems. A copy of the literature review is located at:

http://www.lee-county.com/STORMWATER/PDF/BMP%20Literature%20Review%205-4-05.pdf.

A6. Project/Task Description

Three sites were selected for monitoring after a site review process involving Lee County, residential community associations, businesses, and others. Based on discussions, wet detention systems were identified as the most prevalent storm water treatment BMP employed in southwest Florida. Furthermore, it was determined that monitoring wet detention systems used in different land uses would provide the valuable information. The three sites selected for study are The Brooks (residential/golf course), Laguna Lakes (single family and multi-family residential), and a Wal-Mart site (commercial). An aerial map showing the site locations is provided in Appendix A.

The Brooks

The Brooks is an existing residential community with four 18-hole golf courses occupying a land area of approximately four square miles in south Lee County, Florida. The site selected for the monitoring is an interconnected (5 lakes) wet detention system located in the northern portion of the The Brooks known as Shadow Wood at The Brooks. The wet detention system receives runoff from residential areas, golf course areas, and roadways. The primary drainage feature through the site is the upper reaches of Halfway Creek, which is a tributary to the Estero River, discharging into Estero Bay.

This site was selected due to due to an apparent high level of maintenance of the wet detention system. The developer, Community Development Districts, and homeowners associations are credited with overseeing maintenance and have received awards on both the local and state levels and should represent optimum operating conditions of the wet detention system.

Storm water inflow monitoring will occur in a drainage pipe located along the golf course fairway prior to inflow into the wet detention system. This pipe drains water into the wet detention lake which then flows through a system of four more lakes in series before discharging through a control structure into a flow way. The inflow monitoring location is shown as BRIN on the aerial photograph provided in Appendix A. Outflow monitoring will occur at the outfall structure as it flows over the control structure. This location is shown as BROUT on the aerial photograph provided in Appendix A.

Laguna Lakes

Laguna Lakes is a residential community (no golf course) that occupies approximately 150 acres with approximately 465 single family and multifamily residential units. Approximately 33 acres of interconnected wet detention lakes discharge through a single structure to an Iona Drainage District (IDD), a now defunct entity presently operated by Lee County. Discharge from the project site flows to Cow Slough then to either the Caloosahatchee River or to Estero Bay depending on local conditions. Site runoff will be monitored at an inflow into the 1.8 acre wet detention area in the northwest quadrant of the project, which is a more densely developed area. The treatment train associated with this sample location is three wet detention lakes in series with a total area of 8.2 acres at control elevation of 3.8 feet referenced to the National Geodetic Vertical Datum (NGVD) of 1929. This sample is shown as LLIN1 on the aerial photograph provided in Appendix A. In addition, site runoff will be sampled at the inflow into the six acre wet detention area in the southeast quadrant of the project. This will contain runoff from a typical single family area where the individual lots are about 0.18 acres in size. All available lots are developed in this area. The treatment train associated with this sample location is two lakes in series with a total area of 10.5 acres at control elevation (3.8 NGVD).

Both of the inflow locations flow into a series of interconnected wet detention areas before reaching the final outfall control structure located on the east side of the project at the east end of a 4.5 acre wet detention lake. Outflow monitoring will occur at the outfall control structure shown as LLOUT on the aerial photograph provided in Appendix A.

Wal-Mart

Wal-Mart is a commercial property (Six Mile Parkway and US 41) with a 210,679 square foot building and 1,025 parking spaces on a 26 acre site. The storm water system consists of swales, inlets and culverts, which route runoff to an approximate 1.6 acre wet detention lake. The outfall is a single control structure in a smaller detention area of about 0.25 acres that delivers water to an existing IDD canal, eventually discharging to Hendry Creek and Estero Bay. Surface water inflows will be monitored at two locations (WMIN1 and WMIN2) as shown on the aerial photograph provided in Appendix A. At WMIN1, site runoff will be monitored at the north culvert of the parking area, which discharges to the wet detention area. WMIN1 will monitor storm water runoff solely from paved parking areas. At WMIN2, site runoff will be monitored at the south culvert, which discharges to the wet detention lake. WMIN2 will monitor storm water runoff from paved parking and the building roof. The outfall location (WMOUT) will be the third monitoring location at the Wal-Mart site, being near the southwest corner of the project site, just north of the entrance off of US 41.

A7. Data Quality Objectives

The objective of collecting flow composite samples at the inflow device of each storm water treatment system is to characterize the inflow water quality over the entire flow hydrograph related to each storm event. Therefore, each collected sample will consist of up to 10 aliquots. Samples collected that do not consist of at least 6 aliquots will not be submitted to the laboratory for analyses. Likewise, the collection of flow composite samples from the outfall device of each storm water treatment system should be representative of long periods of discharge following each storm event. Only outflow samples collected during discharge events are at least six hours in duration will be submitted for laboratory analysis.

Data quality objectives (DQOs) for the parameters measured under this QAPP can be expressed in terms of accuracy, precision, and completeness goals (Table A7.1). Those DQOs were established by obtaining estimates of the most likely data quality that is achievable based either on manufacturer's specifications, scientific experience, or historical data. DQOs presented in Table A7.1 are used as quality control criteria for laboratory measurement processes to set the bounds of acceptable measurement error. DQOs are usually established for six aspects of data quality: precision, bias, accuracy, representativeness, comparability, and completeness (USEPA 1998, 2002a). Each of these terms is described below in the context of their application to this project.

Parameter Name	Units	Method Code	Minimum Detection Level	Precision (RPD)	Accuracy (%)
Total Kjeldahl Nitrogen	mg/L	EPA 351.2	0.1	20	90-100
Nitrate + Nitrite	mg/L	EPA 353.2	0.1	20	90-100
Total Nitrogen	mg/L	Calculation	NA	20	90-100
Ammonia - N	mg/L	EPA 350.1	0.013 mg/L	20	90-100
Chlorophyll-a	mg/m^3	SM 10200 H	0.5 mg/cubic meter	20	90-100
Total Phosphorus	mg/L	EPA 365.2	0.02	20	90-100
Dissolved Phosphorus	mg/L	EPA 365.1	0.02	20	90-100
Total Suspended Solids	mg/L	EPA 160.2	0.6	20	90-100
Total Copper	mg/L	SM20 3111B	0.01	20	90-100
Total Cadmium	mg/L	SM20 3111B	0.005 mg/L	20	90-100
Dissolved Copper	ug/L	SM20 3113B	1	20	90-100
Dissolved Cadmium	ug/L	SM20 3113B	0.4	20	90-100

Table A7.1 Data quality objectives for effectiveness of BMP in Southwest Florida

Precision

Precision is a statistical measure of the variability of a measurement when a collection or an analysis is repeated and includes components of random error. It is strictly defined as the measure of agreement among repeated measurements of the same property under identical or substantially similar conditions. Laboratory precision is assessed by comparing replicate analyses of laboratory control standards and expressing the result as relative percent difference.

Bias

Bias is defined as the systematic or persistent distortion of a measurement process that causes errors in one direction. A measurement is considered unbiased when the value reported does not differ from the true value. Bias is verified through the analysis of laboratory control standards prepared with certified reference materials and by calculating percent recovery. Matrix spikes are also used to aid in determining high or low biases due to interferences present in the sample.

Representativeness

Site selection, the appropriate sampling regime, the sampling of all pertinent media according to FDEP SOPs, and use of only approved analytical methods will assure that the measured data represents the conditions at the site. Data collected are considered to be spatially and temporally representative of routine water quality conditions. At a minimum, samples are collected over a period that includes both wet season and dry season components. Although data may be collected during varying regimes of weather and flow, the data sets will not be biased toward unusual conditions of flow, runoff, or season. However, the goal for meeting complete representativeness of each storm water treatment system may be tempered by limited periods of discharge.

Comparability

Confidence in the comparability of data sets for this project is based on the commitment of project staff to use only approved sampling and analysis methods and QA/QC protocols in accordance with quality system requirements and as described in this QAPP and in the FDEP SOPs. Comparability will also be achieved by reporting data in standard units, by using accepted rules for rounding figures, and by reporting data in a standard format as specified in Section B10.

Completeness

The completeness of the data is basically a relationship of how much of the data is available for use compared to the total potential data. Ideally, 100% of the data should be available for use. However, the possibility of unusable data due to accidents, insufficient sample volume, broken equipment or lost samples, etc. is to be expected. Therefore, it will be a general goal of the project that 80% data completion is achieved.

A8. Special Training/Certification

New field personnel will receive training in proper sampling and field analysis. Before actual sampling or field analysis occurs, they will demonstrate to the QA Officer (or designee) their ability to properly calibrate field equipment and perform field sampling and analysis procedures. Training will be documented and retained in the personnel file and be available during a monitoring systems audit.

A9. Documentation and Records

Documents that describe, specify, report or certify activities performed in this QAPP are listed in Table A9.1. Johnson Engineering will retain all documents and associated digital data. Laboratory records and QA manuals will be retained at Lee County Environmental Laboratory. The format of all data reporting will be consistent with the requirements and procedures for data validation and data assessment described in sections B, C and D of this QAPP.

Document/Record	Retention Time	Form
QAPP, amendments	3 years minimum	Paper/digital
Field data sheets	3 years minimum	Paper/digital
Laboratory Results	3 years minimum	Paper/digital
Field SOPs	3 years minimum	Paper/digital
Quarterly/Annual Reports	3 years minimum	Paper/digital

Table A9.1 Documentation Records

Data Generation and Acquisition

B1. Sampling Process Design

The sampling strategy consists of using refrigerated, automatic samplers to collect water quality samples from the inflow and outflow of three storm water treatment systems, which have been selected through a selection process to best characterize pollutant removal efficiencies. The three selected sites and associated land use types are as follows:

Golf Course/Residential – The Brooks
Residential Only – Laguna Lakes
Commercial – Wal-Mart Site at Six Mile Cypress Parkway and US41

Aerial maps that show proposed sample locations are provided in Appendix A.

Fifteen flow composite, rain event driven samples will be collected from each of the storm water treatment systems. Each of the collected samples will consist of 10 aliquots (300 ml each) for a total of 3 liters deposited in each of the four bottles housed within the automatic sampler. The inflow sample volumes will represent storm water runoff from the drainage basin leading into the storm water management system over the storm event hydrographs. The outflow sample volumes will represent flow composite storm water discharges from the outfall device. Outflow samples will only be collected for discharge events lasting a minimum of six hours.

Samples will be retrieved from each location as soon as possible following notification of sampler activation and transferred from the automatic samplers to laboratory supplied containers following Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOP) 001/01. Samples will be properly identified and documented as part of the chain-of-custody procedures. Weather and water body conditions as well as any unusual conditions will be recorded as part of the field documentation during each sample event.

B2. Sampling Methods

Johnson Engineering routinely samples in accordance with FDEP SOPs found in DEP-SOP-001/01 Quality Assurance Rule, 62-160 F.A.C. These SOPs can be found electronically at FDEP's web site http://www.floridadep.org/labs. Table B2.1 lists the specific FDEP SOPs to be used in conjunction with this project. Johnson Engineering personnel have attended FDEP field sampling training.

FDEP SOP	Description
FA 1000	Administrative
FC 1000	Field Decontamination
FD 1000	Documentation
FM 1000	Field Mobilization
FQ 1000	Quality Control
FS 1000	General Sampling
FS 2000	General Water Sampling
FS 2100	Surface Water Sampling
FT 1000	Field Testing General

Table B2.1 Applicable FDEP Sampling SOPs

Pre-cleaned, high-density polyethylene sample bottles will be supplied for the automatic samplers by the equipment manufacturer. The samplers are pre-programmed to chill the collected samples to the FDEP required temperature of 4 degrees C (39 F) following the first sample aliquot collected. Samples will remain preserved to 4 degrees C until samples are collected from the unit. Temperature is monitored inside the automatic sampler for quality assurance.

Each sample will be removed from the automated samplers and placed in laboratory provided sample containers as directed by FDEP SOP FS 2100. Sample containers with no preservative will be filled first. Sample containers containing preservative will be filled next with careful consideration to avoid cross contamination. Sample containers for orthophosphate will be filled by field filtering the collected sample through a .45 micron disposable filter. Care will be taken to prevent overfilling any sample bottles and caps will be tightened securely before filled containers are placed in the cooler also filled with bagged ice.

No modifications to the sample collection process are expected. Any possible modifications must first be approved by FDEP by performance based measures including collection of and verification of equipment blanks obtained by the modified method.

B3. Sample Handling and Custody

Maximum hold times for sample preservation of monitored parameters are shown below as outlined in 40 CFR Part 136. Samples for this project will be collected and delivered to the laboratory in a timely manner to ensure that the maximum hold times are not exceeded.

Parameter	Maximum Hold
Total Kjeldahl Nitrogen	28 days
Nitrate + Nitrite	28 days
Total Nitrogen	28 days
Ammonia - N	28 days
Chlorophyll-a	28 days
Total Phosphorus	28 days
Orthophosphorus	48 hours
Total Suspended Solids	28 days
Total Copper	6 months
Total Cadmium	6 months
Dissolved Copper	6 months
Dissolved Cadmium	6 months

Table B3.1 Maximum Holding Times for Laboratory Parameters

All samples will be collected by properly trained JEI field sampling personnel within 48 hours of the event triggering the automated samplers. Each sample container will be labeled with a unique sample identification number that identifies the date of collection, the person collecting the sample, and the type of preservative used, if any. Each sample number will be recorded on the sample bottle, field data sheet, chain-of-custody form, laboratory bench sheet, and final data report. The field sampling team will review the sample bottle identification for accuracy and completeness before relinquishing the sample. These unique sample numbers are linked to each bottle and will follow the sample from point of collection to final data report.

Once samples are collected, they will be placed in coolers with ice. In order to prevent any contamination, samples preserved with nitric acid will be separated from all other sample containers during transport. Samples will be reviewed for accurate and complete identification before the cooler is sealed. The samples will then be delivered directly to the laboratory along with the chain-of-custody. A copy of the chain-of-custody, signed by the receiving laboratory, will be obtained before leaving the facility. Copies of all chain-of-custody documents will be retained in the project folder files along with any associated shipping papers.

All original documents are controlled by the Field Quality Assurance Officer. Revisions to any field data or sampling documentation may be written by other staff members but must be reviewed and approved by the Field Quality Assurance Officer or Project Manager.

B4. Analytical Methods

All analyses will be conducted by Lee County Environmental Laboratory (LCEL) using the methods and minimum detection levels (MDL) specified as follows:

Parameter	***Method Code***	***MDL***
Total Kjeldahl Nitrogen	EPA 351.2	0.1 mg/L
Nitrate + Nitrite	EPA 353.2	0.1 mg/L
Total Nitrogen	Calculation	NA
Ammonia - N	EPA 350.1	0.013 mg/L
Chlorophyll-a	SM 10200 H	0.5 mg/cubic meter
Total Phosphorus	EPA 365.2	0.02 mg/L
Dissolved Phosphorus	EPA 365.1	0.02 mg/L
Total Suspended Solids	EPA 160.2	0.6 mg/L
Total Copper	SM20 3111B	0.01 mg/L
Total Cadmium	SM20 3111B	0.005 mg/L
Dissolved Copper	SM20 3113B	1 ug/L
Dissolved Cadmium	SM20 3113B	0.4 ug/L

Table B4.1 Methods and Minimum Detection Limits for Laboratory Parameters

B5. Quality Control

LCEL is certified by the National Environmental Laboratory Accreditation Program (NELAP #E45049) to analyze the samples listed above according to USEPA guidelines. All analyses will be conducted in accordance with LCEL Quality Assurance Quality Control (QAQC) manuals and USEPA guidelines.

Equipment blanks representing at least 5% of the total number of sample sets collected at a particular site will be collected from each monitoring location. The equipment blanks will serve to evaluate the on-site sampling environment, sampling equipment decontamination, sample container cleaning, suitability of sample preservatives and analyte-free water, and sample transport and storage conditions. LCEL will initiate additional quality checks, including laboratory duplicates, laboratory spikes and continuous instrument calibration verification.

B6. Instrument/Equipment Testing, Inspection, and Maintenance

Automated samplers used for collection will be routinely inspected and maintained as needed. Sample tubing will be visually inspected and replaced at a maximum of 6 months if no previous damage was observed. Sampler equipment maintenance records will be documented and retained in the project folder. A copy of the field equipment maintenance record is included in Appendix B. A spare automated sampler and additional replacement tubing will also be available for this project.

Water quality meters and all other JEI field equipment will be inspected and maintained regularly. Records of JEI field equipment maintenance will be documented in the field equipment maintenance log book. All testing, inspection and maintenance of laboratory equipment will be completed as described in LCEL QAQC manuals.

B7. Instrument/Equipment Calibration and Frequency

All equipment purchased for this project will be calibrated by the manufacturer prior to use. Water level indicators will also be calibrated by JEI field personnel before installation. Additionally, calibration of sample volume aliquots from the automated sampler peristaltic pumps will be conducted in the field after installation. All laboratory instrument calibration will be completed as described in LCEL QAQC manuals.

B8. Inspection/Acceptance for Supplies and Consumables

Critical supplies for field sample collection consist of sterile polycarbonate sample bottles, insulated containers for transporting samples, 0.45 micron filters and plastic syringes needed for extraction. Prior to sampling, field personnel are responsible for inspection and acceptance of sample containers. Any sample containers suspected of being non-sterile or leaking will be discarded. LCEL inspects its laboratory supplies in accordance with LCEL QA/QC manuals. Laboratory containers will remain inside laboratory supplied coolers in a clean environment and will be stored in accordance with the manufacturer's and laboratory's recommendations. Laboratory coolers and containers will remain in the possession of JEI personnel during storage.

B9. Non-Direct Measurements

Non-direct measurements to be collected include general weather conditions such as cloud cover, ambient temperature, wind speed and direction. General water body observations and any unusual conditions will also be noted. This field data will be documented on sample retrieval forms. A copy of the sample retrieval form is included in Appendix B.

B10. Data Management

Level, flow and precipitation data will be continuously monitored by the automated sampler dataloggers. Measurements will be taken by the dataloggers every minute and stored in the memory databank as 15 minute averages. Data will be either accessed and downloaded remotely onto a protected JEI server or downloaded directly to a laptop computer from the project site. Water level readings will be stored every hour and downloaded to a portable storage device or laptop computer using the manufacturer's software. The data will then be transferred to a protected JEI server.

Laboratory reports and chains-of-custody forms will be scanned into a digital data base and stored on a protected JEI server. In addition, all laboratory results as well as water level, flow and precipitation data will be exported to a Microsoft Excel database format and stored on a protected JEI server. All JEI server data is backed up routinely to prevent data loss.

Assessment/Oversight

C1. Assessments and Response Actions

Quality assurance assessment procedures will be implemented to ensure that all elements of the QAPP are correctly adhered to as prescribed. Assessment activities will include the following:

Surveillance – the continual or frequent monitoring of the status of a project and the analysis of records to ensure that specified requirements are being fulfilled. Key project personnel are responsible for surveillance of the aspects of the program under their control. Any corrective action taken to remedy deficiencies should be documented.

Technical Systems Audit (TSA) – a thorough and systematic onsite qualitative audit, where equipment, personnel, training, procedures, and record keeping are examined for conformance to the QAPP. Any deficiencies identified during the TSA should be documented and corrective actions implemented.

Performance Evaluation (PE) – a type of audit in which the quantitative data generated by the measurement system are obtained independently and compared with routinely obtained data to evaluate the proficiency of an analyst or laboratory. PEs will be conducted by LCEL in accordance with their QAQC manual procedures that are applicable to the laboratory analyses conducted under this QAPP.

Audit of Data Quality (ADQ) – an examination of the collected data to determine how well the measurement system performed with respect to the performance goals and whether the data were accumulated, transferred, reduced, calculated, summarized, and reported correctly.

Data Quality Assessment (DQA) - an evaluation to determine if the data obtained are of the right type, quality, and quantity to support their intended use.

Response actions will address failure to perform the project according to QAPP guidelines. In the event that a SOP is not being followed, corrective actions will be implemented to ensure future compliance. If laboratory sample data is suspected of being reported improperly or does not meet the MDL requirements specified for this project, the sample will be re-run to verify accuracy.

C2. Reports to Management

An event summary will be provided following each monitored rainfall event. The summary will indicate the time of the event and sample collection, as well as rainfall and flow information. Quarterly reports will be compiled including the individual event update memorandum, a description of the number of samples obtained, copies of analytical laboratory results, descriptions of the BMP general operating conditions during the quarter, and a discussion of any unusual conditions of merit.

Annual reports generated will discuss the operations status of each BMP site, including any maintenance operations ongoing or needed, any special conditions affecting the system loadings, a summary of rainfall and lake level data collected during the year, and any other information required to properly characterize the BMP operational performance during the year. Annual reports will include plots of laboratory analytical results, rainfall, lake level and flow data in order to describe site conditions during the period.

At the end of the study, Johnson Engineering will prepare a final report examining and reporting on data trends and overall program details. The report will pay particular attention to the BMP efficiency calculations generated in the annual reports and how these numbers correlate yearly.

Data Validation and Usability

D1. Data Review, Validation and Verification

Rainfall data monitored at each site will be compared to a nearby rain gauge for data quality verification. Water level data collected will be compared to actual surface water level measurements taken on site during sample collection. Laboratory data will be reviewed for completeness and verified for accurate reporting as compared to the chain of custody accompanying the data results.

D2. Validation and Verification Methods

Validation and verification activities will be performed as described in Section B5 of this document and by following LCEL QAQC manual guidelines.

D3. Reconciliation with user Requirements

Any laboratory data that does not meet the requirements set forth by this QAPP will be flagged with an appropriate qualifier. Each qualifier will be accompanied by a statement explaining the deficiency. These qualifiers and explanations will be included with the reported lab results.

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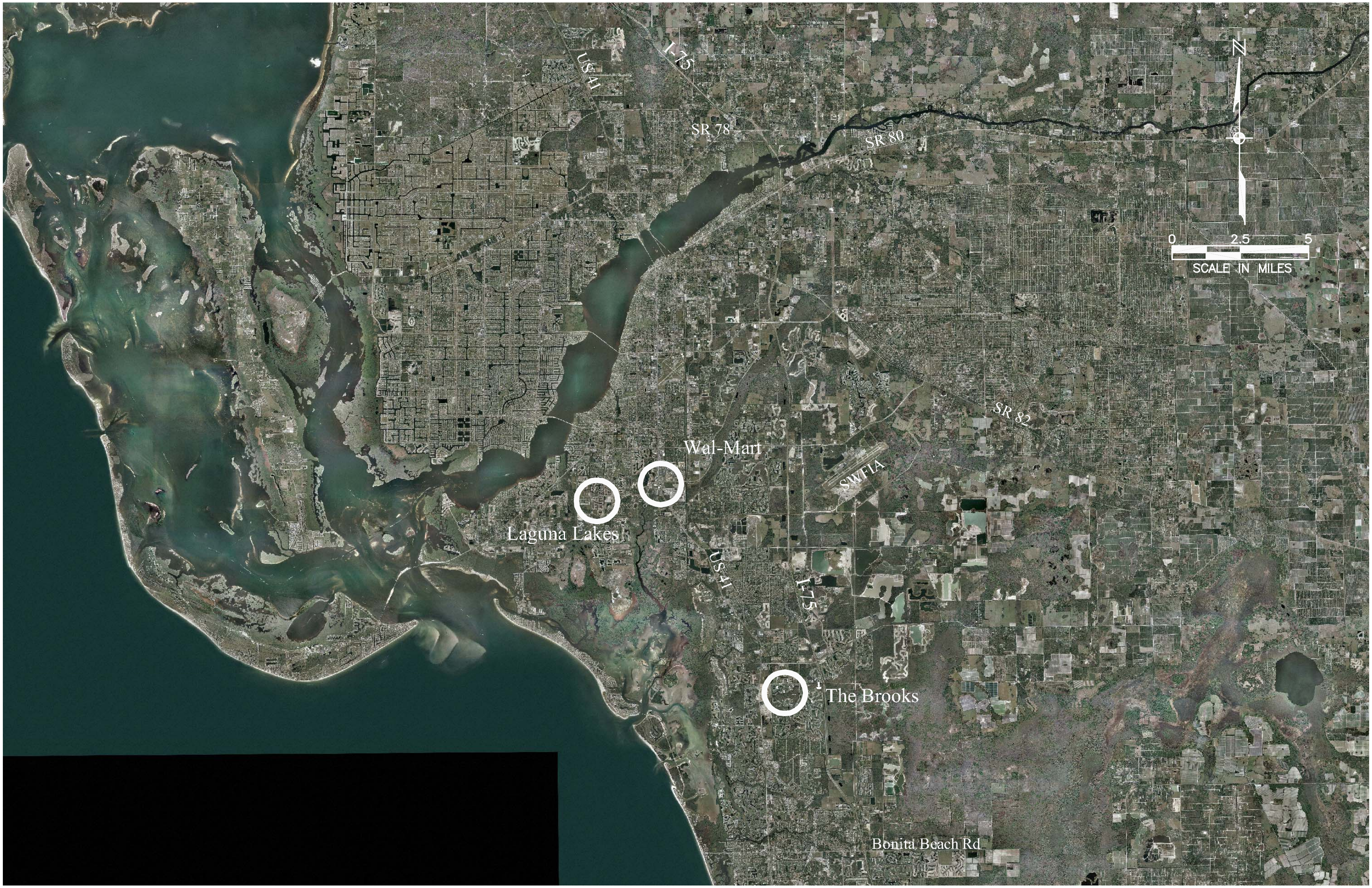
APPENDIX A



Water Quality Monitoring Sites	JOHNSON ENGINEERING 2158 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902-1550 PHONE (239) 334-0046 FAX (239) 334-3661 E.B. #642 & L.B. #642	Effectiveness of BMP Practices Southwest Florida

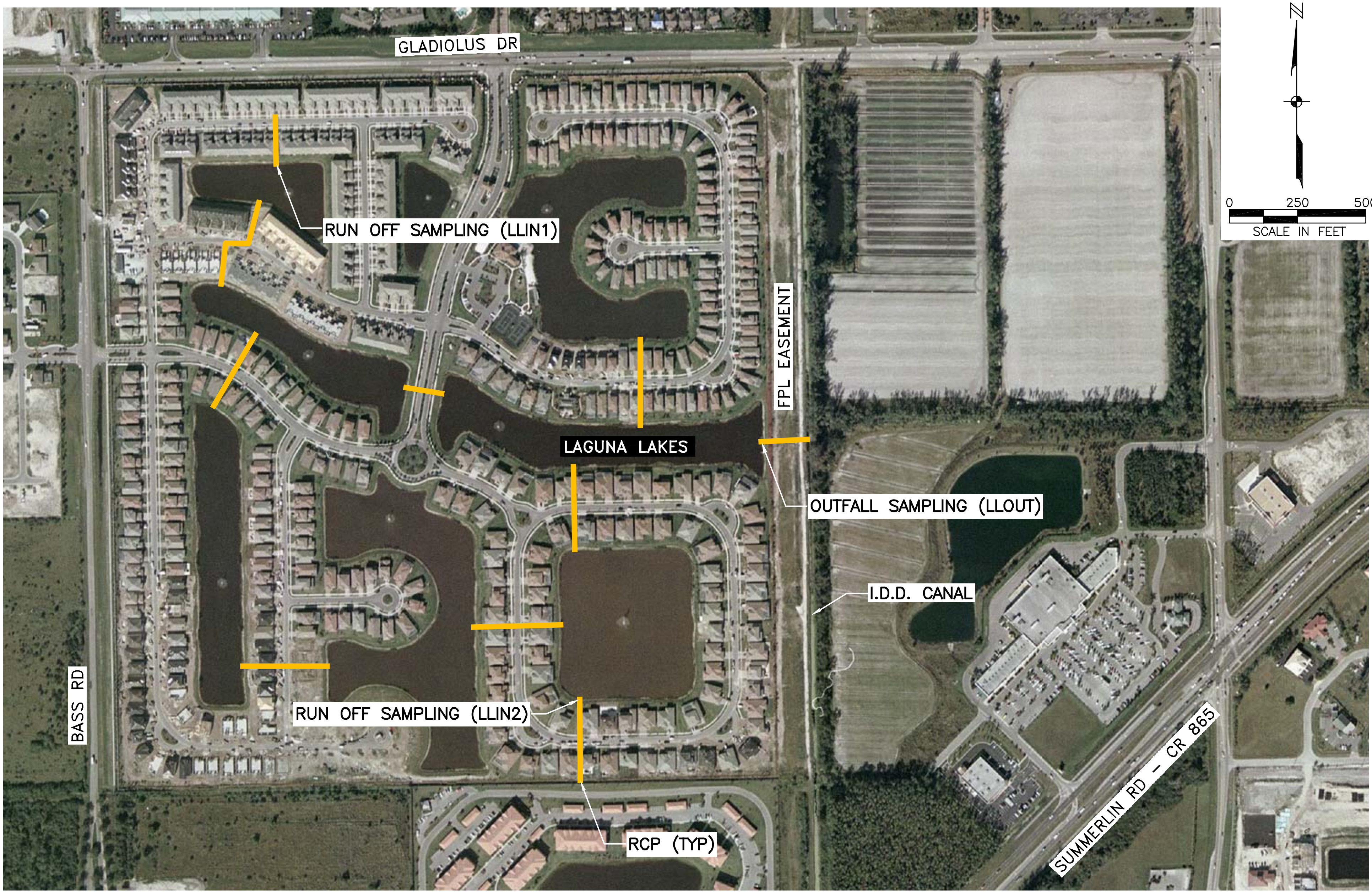
DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
09/20/05	20044761	00-00-00	As Shown	1 OF 1

J:\20044761\BMP_Sites.dwg (8x11 Lee County) mll2 Dec 05, 2005 - 4:04pm

J:\20044761\BMP_Sites.dwg (8x11 The Brooks (2)) mll2 Mar 01, 2006 – 5:12pm

Southwest Florida BMP Study	JOHNSON ENGINEERING	2158 JOHNSON STREET P.O. BOX 1550 FORT MYERS, FLORIDA 33902–1550 PHONE (239) 334–0046 FAX (239) 334–3661 E.B. #642 & L.B. #642	The Brooks Sampling Locations

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
January, 2006	20044761	03–47–25	As Shown	1 OF 1



J:\20044761\BMP_Sites.dwg (8x11 Laguna lakes (2)) wed Jan 24, 2006 – 8:51am

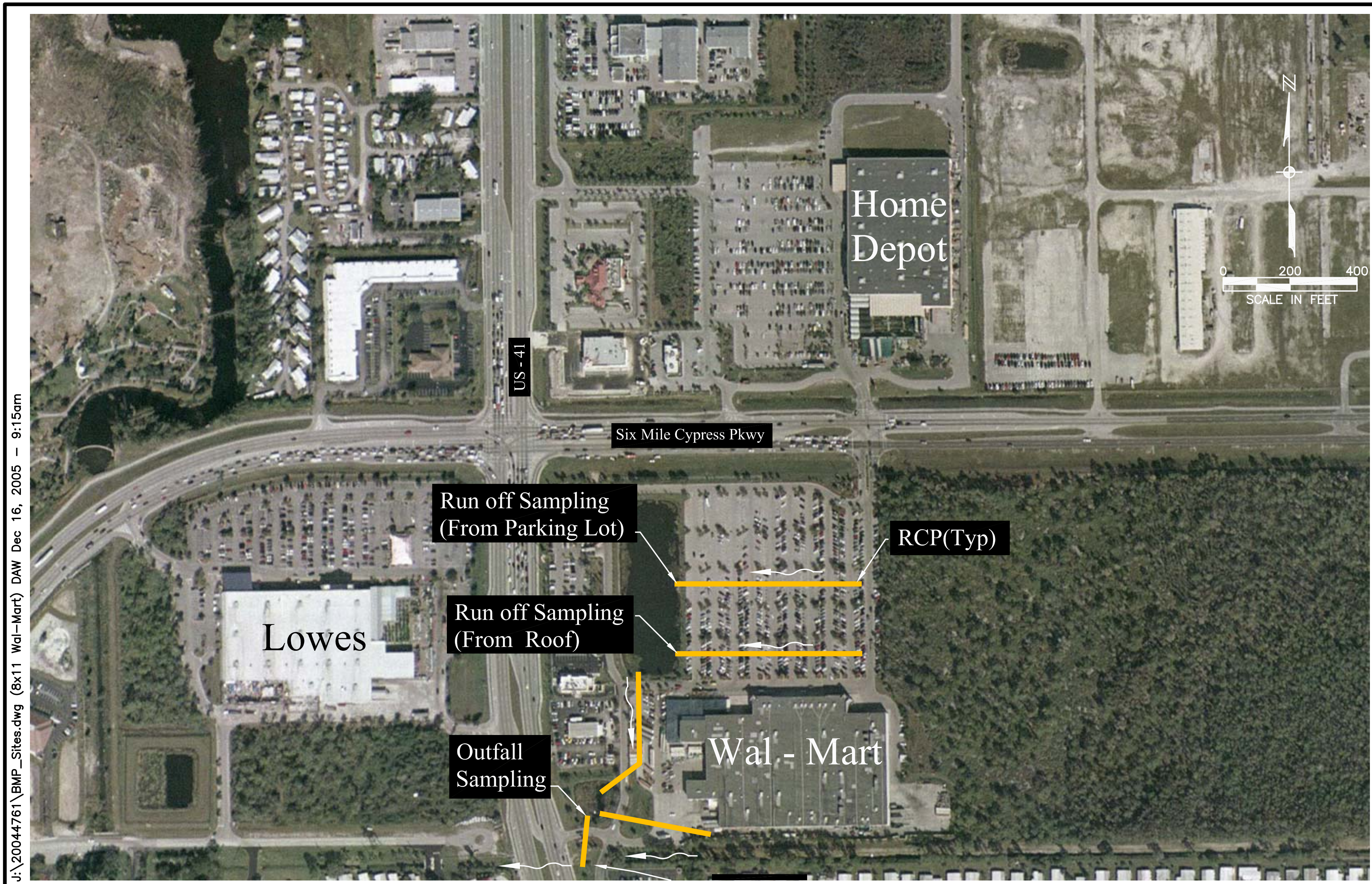
Southwest Florida
BMP Study

JOHNSON ENGINEERING

2158 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902–1550
PHONE (239) 334–0046
FAX (239) 334–3661
E.B. #642 & L.B. #642

Laguna Lakes
Sampling Locations

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
January, 2006	20044761	33–45–25	As Shown	1 OF 1



Wal-Mart Site
Lee County, Florida

JOHNSON ENGINEERING

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FORT MYERS, FLORIDA 33902-1550
PHONE (239) 334-0046
FAX (239) 334-3661
E.B. #642 & L.B. #642

Effectiveness of BMP Practices
Southwest Florida

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
October 2005	20044761	00-00-00	As Shown	1 OF 1

APPENDIX B

Form FD 9000-9: FIELD INSTRUMENT MAINTENANCE RECORDS

INSTRUMENT (MAKE/MODEL#) ____________________ **INSTRUMENT #** ______________

DATE OF PURCHASE: __________________ (☐ *new;* ☐ *used*)

PARAMETER(S): *[check all that apply for this instrument]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _________

DATE (yy/mm/dd)	TIME (hr:min)	TYPE OF MAINTENANCE	DESCRIPTION OF PERFORMED MAINTENANCE	SAMPLER INITIALS

REMARKS: ____

____

____

____

APPENDIX M - NUTRIENT-LOADING CALCULATIONS

NUTRIENT LOADING CALCULATIONS

Lee County BMP

Prepared For:

Lee County

1500 Monroe Street
Fort Myers, Florida 33901

Prepared By:

JOHNSON ENGINEERING

2122Johnson Street
Fort Myers, Florida 33902
(239) 334-0046 E.B. - #642

Impervious Area Calculations

Ground Cover/Soil Types:

Pervious developed areas are covered by lawns in good condition
Soil type will remain HSG D

Impervious Area:	Proposed
Commercial Mixed Use	
% Impervious	75%
% of DCIA	75%
% DCIA = % imper x % DCIA	56%
High Density Residential	
% Impervious	80%
% of DCIA	50%
% DCIA = % imper x % DCIA	40%
Medium Density Residential	
% Impervious	60%
% of DCIA	25%
% DCIA = % imper x % DCIA	15%

Estimate CN/Runoff Coeff.:

Commercial Mixed Use		
CN for lawns in good condition in HSG D is		
	Lawn CN	80
Impervious area curve number	98	
Non-DCIA curve number	88	
From Appendix C, the runoff coeff. this land use is:		0.636
High Density Residential		
CN for lawns in good condition in HSG D is		
	Lawn CN	80
Impervious area curve number	98	
Non-DCIA curve number	92	
From Appendix C, the runoff coeff. this land use is:		0.528
Medium Density Residential		
CN for lawns in good condition in HSG D is		
	Lawn CN	80
Impervious area curve number	98	
Non-DCIA curve number	90	
From Appendix C, the runoff coeff. this land use is:		0.278

Sub-Basin 1

Sub-basin 1 contributes flow to Sub-basin 2

Post-development:

Land Use:

High Density Residential 10.3 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

High Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 23.1 ac-ft/yr

Total Runoff (to Sub-basin 2) = 23.1 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

High Density Residential	2.32 mg/l
Average Nitrogen Loading	2.32 mg/l

High Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 66.1 kg/yr

Total Post-Development Loading = 66.1 kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	1.95	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 15.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

246 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 2)

(1.0 - Removal Eff.) * Total Loading = 41.0 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

High Density Residential 0.520 mg/l

High Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 14.8kg/yr

Total Post-Development Loading = 14.8kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	1.95	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 15.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	246	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to Sub-Basin 2)

(1.0 - Removal Eff.) * Total Loading = 3.9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	23.1 ac-ft/yr
TP load to Pond =	3.9 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.021 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	2.29
chyl-a =	9.85 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	1.71 m
	5.62 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	5.19 m
	17.03 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 2

Sub-basin 2 receives flow from sub-basin 1 and contributes flow to sub-basin 4

Post-development:

Land Use:

High Density Residential	6.2	ac
Medium Density Residential	4.6	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

High Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 13.8 ac-ft/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 5.4 ac-ft/yr

Sub-Basin 1 23.1 ac-ft/yr

Total Runoff = 42.4 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

High Density Residential	2.32 mg/l
Medium Density Residential	2.07 mg/l

High Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 39.6 kg/yr

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 13.9 kg/yr

Sub-Basin 1 41.0 kg/yr

Total Post-Development Loading = 94.4 kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	2.86	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 22.88 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

197 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 58.5 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

High Density Residential	0.520 mg/l
Medium Density Residential	0.327 mg/l

High Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 8.9kg/yr

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 2.2kg/yr

Sub-Basin 1 3.9kg/yr

Total Post-Development Loading = 14.9kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	2.86	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 22.88 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	197	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 3.9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	42.4 ac-ft/yr
TP load to Pond =	3.9 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .013 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.74
chyl-a =	5.70 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.21 m
	7.24 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	6.69 m
	21.96 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 3

Sub-basin 3 receives flow from Sub-Basin 2 and contributes flow to sub-basin 4

Post-development:

Land Use:

Commercial Mixed Use	2.5	ac
Medium Density Residential	21.8	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Commercial Mixed Use

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 6.8 ac-ft/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 25.8 ac-ft/yr

Total Runoff (to Sub-Basin 4) = 32.6 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Commercial Mixed Use	2.40 mg/l
Medium Density Residential	2.07 mg/l

Commercial Mixed Use

Runoff(ac-ft/yr.) x loading(mg/l) = 20.2 kg/yr

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 65.8 kg/yr

Sub-Basin 2 58.5 kg/yr

Total Post-Development Loading = 144.6 kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	5.71	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 45.68 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

511 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 4)

(1.0 - Removal Eff.) * Total Loading = 89.6 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Commercial Mixed Use	0.345 mg/l
Medium Density Residential	0.327 mg/l

Commercial Mixed Use

Runoff(ac-ft/yr.) x loading(mg/l) = 2.9kg/yr

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 10.4kg/yr

Sub-Basin 2 3.9kg/yr

Total Post-Development Loading = 14.3kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	5.71	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 45.68 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	511	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to Sub-Basin 4)

(1.0 - Removal Eff.) * Total Loading = 3.7 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	32.6 ac-ft/yr
TP load to Pond =	3.7 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.010 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.50
chyl-a =	4.49 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.43 m
	7.96 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	7.36 m
	24.14 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 6

Sub-Basin 6 contributes flow to Sub-Basin 7

Post-development:

Land Use:

Medium Density Residential	15.0	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) =	51.0 in/yr
Medium Density Residential	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	17.7 ac-ft/yr
Total Runoff =	17.7 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 45.3 kg/yr

Total Post-Development Loading = 45.3 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	4.03	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 32.24 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
664 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 28.1 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential 0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 7.2kg/yr

Total Post-Development Loading = 7.2kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	4.03	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 32.24 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	664	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (off-site)

(1.0 - Removal Eff.) * Total Loading = 1.9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	17.7 ac-ft/yr
TP load to Pond =	1.9 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.008 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.25
chyl-a =	3.48 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.65 m
	8.70 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	8.04 m
	26.39 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 7

Sub-basin 7 receives flow from sub-basin 6, and contributes flow to sub-basin 8

Post-development:

Land Use:
Medium Density Residential 14.9 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 17.6 ac-ft/yr

Sub-Basin 6 17.7 ac-ft/yr

Total Runoff = 35.3 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 44.9 kg/yr

Sub-Basin 6 45.3 kg/yr

Total Post-Development Loading = 90.1 kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area 7.2 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 57.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
596 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 55.9 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential 0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 7.1kg/yr

Sub-Basin 6 1.9kg/yr

Total Post-Development Loading = 8.9kg/yr

Proposed Treatment

Wet Detention Efficiency

Lake Area	7.2	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 57.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	596	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 2.3 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	35.3 ac-ft/yr
TP load to Pond =	2.3 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .005 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	0.83
chyl-a =	2.29 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.99 m
	9.80 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	9.06 m
	29.72 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 8

Sub-basin 8 receives flow from sub-basin 7 and contributes flow to sub-basin 4

Post-development:

Land Use:
Medium Density Residential 14.4 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 17.0 ac-ft/yr

Sub-Basin 7 35.3 ac-ft/yr

Total Runoff = 52.3 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 43.5 kg/yr

Sub-Basin 7 55.9 kg/yr

Total Post-Development Loading = 99.4 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 6.09 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 48.72 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
340 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 61.6 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential 0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 6.9kg/yr

Sub-Basin 7 2.3kg/yr

Total Post-Development Loading = 9.2kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	6.09	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 48.72 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	340	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 2.4 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	52.3 ac-ft/yr
TP load to Pond =	2.4 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .005 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) = 0.77

chyl-a = 2.15 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth = 3.03 m
9.94 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth = 9.19 m
30.15 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 4

Sub-basin 4 receives flow from sub-basins 2 and 8 and contributes flow to Sub-Basin 5.

Post-development:

Land Use:

Medium Density Residential 12.2 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) =	51.0 in/yr
Medium Density Residential	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	14.4 ac-ft/yr
Sub-Basin 2	42.4 ac-ft/yr
Sub-Basin 3	32.6 ac-ft/yr
Sub-Basin 8	52.3 ac-ft/yr
Total Runoff (offsite) =	142.9 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 36.7 kg/yr

Sub-Basin 2 58.5 kg/yr

Sub-Basin 3 89.6 kg/yr

Sub-Basin 8 61.6 kg/yr

Total Post-Development Loading = 249.6 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 4.54 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 36.32 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
93 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (offsite)

(1.0 - Removal Eff.) * Total Loading = 154.8 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential 0.327 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 5.8kg/yr

Sub-Basin 2 3.9kg/yr

Sub-Basin 3 3.7kg/yr

Sub-Basin 8 2.4kg/yr

Total Post-Development Loading = 16.3kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 4.54 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 36.32 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)
Calculated Time 93 days
Modified Time per SFWMD 93 days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 73.4%

Proposed Loading (offsite)

(1.0 - Removal Eff.) * Total Loading = 4.3 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	142.9 ac-ft/yr
TP load to Pond =	4.3 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.005 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	0.82
chyl-a =	2.26 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.99 m
	9.83 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	9.08 m
	29.81 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Impervious Area Calculations

Ground Cover/Soil Types:

Pervious developed areas are covered by lawns in good condition
Soil type will remain HSG D

Impervious Area:	Proposed		Typical
<u>Commercial Mixed Use</u>			
% Impervious	100%		80%
% of DCIA	100%		75%
% DCIA = % imper x % DCIA	100%		60%
DCIA Area	100.0	ac	DCIA

Estimate CN/Runoff Coeff.:

<u>Commercial Mixed Use</u>

CN for lawns in good condition in HSG D is

Lawn CN	80	
Lawn Area (site area - imper area)	0.0	ac
Non-DCIA Imperv. Area (Imperv. - DCIA)	0.0	ac

Impervious area curve number 98

Non-DCIA curve number 80

From Appendix C, the runoff coeff. this land use is: 0.823

Sub-Basin 1

Sub-Basin 1 includes the majority of the parking lot and ultimately discharges to Sub-Basin 2.

Post-development:

Land Use:

Commercial Mixed Use 8.9 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Commercial Mixed Use

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 31.0 ac-ft/yr

Total Runoff (to Isub-Basin 2) = 31.0 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Commercial Mixed Use 2.40 mg/l

Commercial Mixed Use

Runoff(ac-ft/yr.) x loading(mg/l) = 91.7 kg/yr

Total Post-Development Loading = 91.7 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 1.96 ac

Avg. Lake Depth 8.6 ft

Avg. Lake Depth Estimated to be 2/3 of assumed 13 ft Lake Depth

Provided Storage Volume 16.856 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

199 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to I200-02)

(1.0 - Removal Eff.) * Total Loading = 56.9 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Commercial Mixed Use	0.345 mg/l

Commercial Mixed Use

Runoff(ac-ft/yr.) x loading(mg/l) = 13.2kg/yr

Total Post-Development Loading = 13.2kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	1.96	ac
Avg. Lake Depth	8.6	ft

Avg. Lake Depth Estimated to be 2/3 of Maximum Lake Depth

Provided Storage Volume 16.856 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	199	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to I200-02)

(1.0 - Removal Eff.) * Total Loading = 3.4 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	31.0 ac-ft/yr
TP load to Pond =	3.4 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.015 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.94
chyl-a =	6.95 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.02 m
	6.64 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	6.14 m
	20.14 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 2

Sub-Baisn 2 receives runoff from the building and Sub-Basin 1, and discharges offsite.

Post-development:

Land Use:
Commercial Mixed Use 8.0 ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Commercial Mixed Use
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 27.9 ac-ft/yr

Sub-Basin 1 31.0 ac-ft/yr

Total Runoff (off-site) = 58.9 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Commercial Mixed Use 2.40 mg/l

Commercial Mixed Use
Runoff(ac-ft/yr.) x loading(mg/l) = 82.7 kg/yr

Sub-Basin 1 56.9 kg/yr

Total Post-Development Loading = 139.6 kg/yr

Proposed Treatment
Wet Detention Efficency

Lake Area 0.33 ac
Avg. Lake Depth 5 ft
Avg. Lake Depth Estimated to be 2/3 of Estimated 7.5ft Lake Depth

Provided Storage Volume 1.65 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
10 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 30.6\%$$

Proposed Loading (off-site)

(1.0 - Removal Eff.) * Total Loading = 96.8kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Commercial Mixed Use 0.345 mg/l

Commercial Mixed Use
Runoff(ac-ft/yr.) x loading(mg/l) = 11.9kg/yr

Sub-Basin 1 3.4kg/yr

Total Post-Development Loading = 15.3kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	0.33	ac
Avg. Lake Depth	13.3	ft

Avg. Lake Depth Estimated to be 2/3 of Maximum Lake Depth

Provided Storage Volume 4.389 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	27	days
Modified Time per SFWMD	27.17669073	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 63.5%

Proposed Loading (off-site)

(1.0 - Removal Eff.) * Total Loading = 5.6 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	58.9 ac-ft/yr
TP load to Pond =	5.6 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.026 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	2.52 mg/cu.m
chyl-a =	12.39 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	1.52 m
	4.98 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	4.60 m
	15.10 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Impervious Area Calculations

Ground Cover/Soil Types:

Pervious developed areas are covered by lawns in good condition
Soil type will remain HSG D

Impervious Area:	Proposed
Medium Density Residential	
% Impervious	60%
% of DCIA	25%
% DCIA = % imper x % DCIA	15%
Golf	
% Impervious	10%
% of DCIA	0%
% DCIA = % imper x % DCIA	0%

Estimate CN/Runoff Coeff.:

Medium Density Residential

CN for lawns in good condition in HSG D is		
	Lawn CN	80
Impervious area curve number	98	
Non-DCIA curve number	90	
From Appendix C, the runoff coeff. this land use is:		0.278

Golf

CN for lawns in good condition in HSG D is		
	Lawn CN	80
Impervious area curve number	98	
Non-DCIA curve number	82	
From Appendix C, the runoff coeff. this land use is:		0.151

Sub-Basin 1

Sub-basin 1 contributes flow to Sub-basin 2

Post-development:

Land Use:

Medium Density Residential	3.2	ac
Golf	7.5	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 3.8 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 4.8 ac-ft/yr

Total Runoff (to Sub-basin 2) = 8.6 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 9.7 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 12.3 kg/yr

Total Post-Development Loading = 21.9 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	1.69	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 13.52 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

574 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 2)

(1.0 - Removal Eff.) * Total Loading = 13.6 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 1.5kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 1.9kg/yr

Total Post-Development Loading = 3.5kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	1.69	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 13.52 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	574	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to Sub-Basin 2)

(1.0 - Removal Eff.) * Total Loading = 0.9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	8.6 ac-ft/yr
TP load to Pond =	.9 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.009 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.34
chyl-a =	3.83 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.57 m
	8.43 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	7.79 m
	25.56 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 2

Sub-basin 2 receives flow from sub-basin 1 and contributes flow to sub-basin 3

Post-development:

Land Use:

Medium Density Residential	4.3	ac
Golf	0.7	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) =	51.0 in/yr
Medium Density Residential	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	5.1 ac-ft/yr
Golf	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	.5 ac-ft/yr
Sub-Basin 1	8.6 ac-ft/yr
Total Runoff =	14.1 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l
Average Nitrogen Loading	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 13.0 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 1.2 kg/yr

Sub-Basin 1 13.6 kg/yr

Total Post-Development Loading = 27.8 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 2.82 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 22.56 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
582 days

Provided Removal Efficiency

$$\frac{43.75 \text{ x residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 17.2 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 2.0kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 0.2kg/yr

Sub-Basin 1 0.9kg/yr

Total Post-Development Loading = 3.1kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	2.82	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 22.56 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	582	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 0.8 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	14.1 ac-ft/yr
TP load to Pond =	.8 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .005 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	0.70
chyl-a =	2.02 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	3.08 m
	10.09 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	9.33 m
	30.61 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 3

Sub-basin 3 receives flow from Sub-Basin 2 and contributes flow to sub-basin 4

Post-development:

Land Use:

Medium Density Residential	2.2	ac
Golf	8.9	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 2.6 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 5.7 ac-ft/yr

Sub-Basin 2

14.1 ac-ft/yr

Total Runoff (to Sub-Basin 4) = 22.5 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l
Golf 2.07 mg/l

Medium Density Residential
Runoff(ac-ft/yr.) x loading(mg/l) = 6.7 kg/yr

Golf
Runoff(ac-ft/yr.) x loading(mg/l) = 14.6 kg/yr

Sub-Basin 2 17.2 kg/yr

Total Post-Development Loading = 38.5 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 1.19 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 9.52 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
155 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 4)

(1.0 - Removal Eff.) * Total Loading = 23.9 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 1.1kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= 2.3kg/yr

Sub-Basin 2 .8kg/yr

Total Post-Development Loading = 4.2kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	1.19 ac
Avg. Lake Depth	8 ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 9.52 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	155 days
Modified Time per SFWMD	100 days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to Sub-Basin 4)

(1.0 - Removal Eff.) * Total Loading = 1.1 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	22.5 ac-ft/yr
TP load to Pond =	1.1 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.007 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.15
chyl-a =	3.15 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.73 m
	8.97 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	8.29 m
	27.20 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 6

Sub-Basin 6 contributes flow to Sub-Basin 5

Post-development:

Land Use:

Medium Density Residential 21.1 ac

Weighted Average Runoff Coeff. = 0.278

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 24.9 ac-ft/yr

Total Runoff = 24.9 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential 2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 63.6 kg/yr

Total Post-Development Loading = 63.6 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 4.03 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 32.24 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
472 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 39.5 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential 0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 10.1kg/yr

Total Post-Development Loading = 10.1kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	4.03	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 32.24 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	472	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (off-site)

(1.0 - Removal Eff.) * Total Loading = 2.6 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	24.9 ac-ft/yr
TP load to Pond =	2.6 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .010 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) = 1.46

chyl-a = 4.32 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth = 2.46 m
8.07 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth = 7.46 m
24.48 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 7

Sub-basin 7 contributes flow to sub-basin 8

<u>Post-development:</u>

Land Use:

Medium Density Residential	11.0	ac
Golf	11.0	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

<u>Medium Density Residential</u>

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 13.0 ac-ft/yr

<u>Golf</u>

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 7.1 ac-ft/yr

Total Runoff = 20.1 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 33.3 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 18.1 kg/yr

Total Post-Development Loading = 51.4 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	5.27 ac
Avg. Lake Depth	8 ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 42.16 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

765 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 31.9 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 5.3kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= 2.9kg/yr

Total Post-Development Loading = 8.1kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	5.27	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 42.16 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	765	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 2.1 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	20.1 ac-ft/yr
TP load to Pond =	2.1 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.007 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	1.15
chyl-a =	3.15 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	2.74 m
	8.97 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	8.30 m
	27.22 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 8

Sub-basin 8 receives flow from sub-basin 7 and contributes flow to sub-basin 4

<u>Post-development:</u>

Land Use:

Medium Density Residential	7.1	ac
Golf	4.6	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 8.4 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 2.9 ac-ft/yr

Sub-Basin 7 20.1 ac-ft/yr

Total Runoff = 31.5 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 21.5 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 7.5 kg/yr

Sub-Basin 7 31.9 kg/yr

Total Post-Development Loading = 60.9 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	12.5	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 100 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
1159 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 37.7 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 3.4kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= 1.2kg/yr

Sub-Basin 7 2.1kg/yr

Total Post-Development Loading = 6.7kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	12.5	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 100 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	1159	days
Modified Time per SFWMD	100	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 1.7 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	31.5 ac-ft/yr
TP load to Pond =	1.7 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .003 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	0.15
chyl-a =	1.16 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	3.40 m
	11.16 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	10.32 m
	33.86 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 4

Sub-basin 4 receives flow from sub-basins 4 and 8 and contributes flow to Sub-Basin 5.

Post-development:

Land Use:

Medium Density Residential	5.7	ac
Golf	1.9	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 6.7 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 1.2 ac-ft/yr

Sub-Basin 3 22.5 ac-ft/yr

Sub-Basin 8 31.5 ac-ft/yr

Total Runoff (to Sub-Basin 5) = 61.9 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 17.2 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 3.1 kg/yr

Sub-Basin 3 23.9 kg/yr

Sub-Basin 8 37.7 kg/yr

Total Post-Development Loading = 81.9 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 6.4 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 51.2 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
302 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 5)

(1.0 - Removal Eff.) * Total Loading = 50.8 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l
Average Phosphorus Loading	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 2.7kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= .5kg/yr

Sub-Basin 3 1.1kg/yr

Sub-Basin 8 1.7kg/yr

Total Post-Development Loading = 6.0kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 6.4 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 51.2 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)
Calculated Time 302 days
Modified Time per SFWMD 100 days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 74.0%

Proposed Loading (to Sub-Basin 5)

(1.0 - Removal Eff.) * Total Loading = 1.6 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	61.9 ac-ft/yr
TP load to Pond =	1.6 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.003 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	0.20
chyl-a =	1.22 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	3.38 m
	11.08 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	10.25 m
	33.62 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 5

Sub-basin 5 receives flow from sub-basin 6 and contributes flow to sub-basin 4

Post-development:

Land Use:

Medium Density Residential	5.1	ac
Golf	5.1	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 6.0 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 3.2 ac-ft/yr

Sub-Basin 6 24.9 ac-ft/yr

Sub-Basin 4 61.9 ac-ft/yr

Total Runoff (to Sub-Basin 9) = 96.1 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 15.2 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 8.3 kg/yr

Sub-Basin 6 39.5 kg/yr

Sub-Basin 4 50.8 kg/yr

Total Post-Development Loading = 113.7 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	2.2 ac
Avg. Lake Depth	8 ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 17.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

67 days

Provided Removal Efficiency

$$\frac{43.75 \text{ x residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading (to Sub-Basin 9)

(1.0 - Removal Eff.) * Total Loading = 70.5 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 2.4kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= 1.3kg/yr

Sub-Basin 6 2.6kg/yr

Sub-Basin 4 1.6kg/yr

Total Post-Development Loading = 6.3kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	2.2	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 17.6 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)

Calculated Time	67	days
Modified Time per SFWMD	67	days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 70.7%

Proposed Loading (to Sub-Basin 9)

(1.0 - Removal Eff.) * Total Loading = 1.9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	96.1 ac-ft/yr
TP load to Pond =	1.9 kg/yr

Mean pond concentration remaining
TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .004 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) = 0.50

chyl-a = 1.65 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth = 3.21 m
10.52 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth = 9.73 m
31.92 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 9

Sub-Basin 9 receives flow from sub-basin 5 and contributes flow to sub-basin 10

Post-development:

Land Use:

Medium Density Residential	1.8	ac
Golf	1.8	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) =	51.0 in/yr
Medium Density Residential	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	2.2 ac-ft/yr
Golf	
Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. =	1.2 ac-ft/yr
Sub-Basin 5	96.1 ac-ft/yr
Total Runoff =	99.4 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 5.5 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 3.0 kg/yr

Sub-Basin 5 70.5 kg/yr

Total Post-Development Loading = 79.0 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area	2.59	ac
Avg. Lake Depth	8	ft

Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 20.72 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)

76 days

Provided Removal Efficiency

$$\frac{43.75 \times \text{residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 49.0 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = .9kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= .5kg/yr

Sub-Basin 5 1.9kg/yr

Total Post-Development Loading = 3.2kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 2.59 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 20.72 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)
Calculated Time 76 days
Modified Time per SFWMD 76 days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 71.7%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = .9 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	99.4 ac-ft/yr
TP load to Pond =	.9 kg/yr

Mean pond concentration remaining

TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) =	.002 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) =	-0.36
chyl-a =	.70 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth =	3.62 m
	11.86 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth =	10.97 m
	35.98 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Sub-Basin 10

Sub-Basin 10 receives flow from sub-basin 9 and contributes flow offsite.

Post-development:

Land Use:

Medium Density Residential	10.6	ac
Golf	4.5	ac

Calculate Annual Runoff Volumes:

Annual Rainfall (From Appendix A.3) = 51.0 in/yr

Medium Density Residential

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 12.5 ac-ft/yr

Golf

Land Use Area(ac) x Annual Rainfall (in) x Runoff Coeff. = 2.9 ac-ft/yr

Sub-Basin 9 99.4 ac-ft/yr

Total Runoff = 114.8 ac-ft/yr

Post-development Nitrogen Loading

Land Use Nitrogen Loading (from Table 4-17)

Medium Density Residential	2.07 mg/l
Golf	2.07 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 31.8 kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l) = 7.4 kg/yr

Sub-Basin 9 49.0 kg/yr

Total Post-Development Loading = 88.2 kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 2.49 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 19.92 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.)
63 days

Provided Removal Efficiency

$$\frac{43.75 \text{ x residency time}}{4.38 + \text{residency time}} = 38.0\%$$

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 54.7 kg/yr

Post-development Phosphorus Loading

Land Use Phosphorus Loading (from Table 6-13)

Medium Density Residential	0.327 mg/l
Golf	0.327 mg/l

Medium Density Residential

Runoff(ac-ft/yr.) x loading(mg/l) = 5.0kg/yr

Golf

Runoff(ac-ft/yr.) x loading(mg/l)= 1.2kg/yr

Sub-Basin 9 .9kg/yr

Total Post-Development Loading = 7.1kg/yr

Proposed Treatment

Wet Detention Efficency

Lake Area 2.49 ac
Avg. Lake Depth 8 ft
Avg. Lake Depth Estimated to be 2/3 of 12 ft lake depth Lake Depth

Provided Storage Volume 19.92 ac-ft

Provided Residency Time (days)

Storage Volume(ac-ft) / Post Development runoff volume(ac-ft/yr.) x 365(days/yr.)
Calculated Time 63 days
Modified Time per SFWMD 63 days

Provided Removal Efficiency

40.13 + 6.372ln(residency time) + 0.213(ln(residency time)^2 = 70.2%

Proposed Loading

(1.0 - Removal Eff.) * Total Loading = 2.1 kg/yr

Anoxic Depth Calculation

Mean water column concentration of remaining TP

Annual loading to pond =	114.8 ac-ft/yr
TP load to Pond =	2.1 kg/yr

Mean pond concentration remaining
TP load x (1-Removal Efficiency)/(Runoff to Pond + Pond Volume) = .004 mg/l

Calculate the mean Chlorophyll-a Concentration in Wet Detention Pond

ln (chly-a) = 1.058 ln (TP) - .934 (Eq. 4)

log (chyl-a) = 0.48

chyl-a = 1.61 mg/cu.m

Calculate Secchi disk depth

SD = (24.24+.30 x chyl-1)/ (6.06+ chyl-a) (From Figure 6-14)

Secchi Disk Depth = 3.22 m
10.57 ft

Calculate Depth of anoxic conditions in pool

Anoxic Depth = 3.035 x Secchi Disk Depth (m) - 0.004979 (Eq. 5)

Anoxic Depth = 9.78 m
32.07 ft

The depth of anoxic conditions is greater than the depth accounted for treatment. The area of proposed treatment is not anticipated to become anoxic.

Predicted Offsite Loading						
Basin	Offsite Discharge					
	Runoff Nitrogen	Outflow Nitrogen	Percent Reduction (N)	Runoff Phosphorus (kg/yr)	Outflow Phosphorus	Percent Reduction (P)
Walmart	174.4	96.8	44.5%	25.1	15.3	39.0%
Brooks	293.0	54.7	81.3%	45.8	2.1	95.4%
Laguna	375.9	154.8	58.8%	66.1	4.3	93.4%

APPENDIX N – LITERATURE REVIEW OF STORMWATER BEST MANAGEMENT PRACTICE RESEARCH IN FLORIDA

Literature Review
of
Stormwater Treatment
Best Management Practices Research
in Florida

May 4, 2005

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1.0 INTRODUCTION

This report provides the results of a literature review of ongoing and completed research on stormwater treatment best management practices (BMPs) in Florida. The review was limited to literature that evaluated the pollutant removal of different stormwater treatment BMPs. Results from this review will be used to avoid duplication of research projects and determine data gaps of existing stormwater treatment BMPs in southwest Florida.

The review was performed by contacting staff at the South Florida Water Management District (SFWMD), Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (FDEP), and other agencies in Florida. The review was also perform by reviewing documents available in the International Stormwater BMP database, University of Central Florida Stormwater Academy, Big Cypress Basin – Estero Bay Regional Research Database, Southwest Florida Regional Restoration Coordination Team, Stormwater Resources Library, Low Impact Development Center, United States Geological Survey, and the United States Environmental Protection Agency.

The State of Florida's stormwater rule was adopted in 1982 and required all new development and redevelopment projects to include site appropriate BMPs to treat stormwater (Bateman *et al*, 1998). The program established a performance standard of removing at least 80% of the average annual post-development loading of total suspended solids (TSS) for stormwater discharged to most waters and a reduction of pollutant loadings by 95% for discharges to Outstanding Florida Waters (*e.g.*, Estero Bay Tributaries).

Briefly, a stormwater treatment BMP is a technique, measure or structural control that is used for a given set of conditions to manage the quantity and/or improve the quality of storm water runoff in the most cost-effective manner (EPA, 1999). BMPs can be either engineered and constructed systems ("structural BMPs") that improve the quality and/or control the quantity of runoff such as detention ponds and constructed wetlands, or institutional, education or pollution prevention practices designed to limit the generation of storm water runoff or reduce the amounts of pollutants contained in the runoff ("non-structural BMPs") [EPA, 1999].

1.1 Structural Stormwater Treatment BMPs

Structural stormwater treatment BMPs are commonly used in Florida. According to Strecker *et al* (2004), 171 structural BMPs are listed in the International Stormwater BMP database of which 24 are found in Florida. The following categories of structural BMPs are taken and modified from the American Society of Civil Engineers (ASCE) National Stormwater BMP Database. The following descriptions of the structural BMP categories are intentionally brief. The reader is encouraged to review the ASCE National Stormwater BMP database for more information.

1.1.1 Retention Systems

These systems are designed to capture a volume of runoff and retain that volume until it is displaced in part or in total by the next runoff event. Pollutant removal in these systems occurs primarily by sedimentation (gravity settling), but also by biological uptake of nutrients by plants and algae, volatilization of organic compounds, uptake of metals by plant tissue, and biological conversion of organic compounds. Examples of retention systems include: 1) retention ponds and 2) retention tanks, tunnels, vaults, and pipes.

1.1.2 Detention Systems

These systems are designed to intercept a volume of storm water runoff and temporarily impound the water for gradual release to the receiving systems. Detention systems are designed to empty out between runoff producing events. Examples of detention systems include: 1) detention pond and 2) underground vaults, pipes, and tanks.

1.1.3 Wetland Systems

These systems incorporate the natural functions of wetlands to aid in pollutant removal from storm water. Limitations of these systems include maintaining a water level that mimics a natural hydroperiod for that type of wetland. Additionally, sediment pretreatment needs to be employed to prevent sediment build-up in the constructed wetland system to prevent degradation of the wetland system.

1.1.4 Filtration Systems

These systems use a media such as sand, gravel, peat, or compost to remove a fraction of the constituents found in storm water. Filtration systems are primarily a water quality control device designed to remove particulate pollutants and are most commonly used to treat runoff from small sites (*e.g.*, parking lots, small developments), areas with high pollution potential (*e.g.*, industrial areas), and highly urbanized areas where land availability is limited. Examples of filtration systems include: 1) surface sand filters, 2) underground vault sand filter, and 3) biofiltration/bioretention systems.

1.1.5 Vegetated Systems (Biofilters)

These systems use vegetation to filter storm water and provide some degree of treatment, storage, and infiltration. Examples include grass filter strips and vegetated swales.

1.1.6 Infiltration Systems

These systems are designed to capture a volume of storm water runoff, retain it, and infiltrate that volume of water into the ground. Advantages of this type of system include water quantity control by reducing discharges, increasing recharge of the surficial aquifer, and water quality control through soil filtration and biodegradation. Disadvantages include potential contamination migration in areas where the surficial aquifer is used as a primary source of drinking water. Performance of infiltration systems is limited by the infiltration capacity of the soil. Types of infiltration systems include: 1) infiltration basins, 2) porous pavement systems, and 3) infiltration trenches and well.

1.1.7 Minimizing Directly Connected Impervious Surfaces

This system involves a variety of practices designed to limit the amount of storm water runoff that is directly connected to the storm drainage system. Runoff is instead directed to landscaped areas, grass buffer strips, and grassed swales to reduce the velocity of runoff, reduce runoff volumes, attenuate peak flows, and encourage filtration and infiltration of runoff (UDFCD, 1992).

1.1.8 Miscellaneous and Vendor-Supplied Systems

These systems include a variety of devices that are used for urban storm water management and incorporate a combination of filtration media, hydrodynamic sediment removal, oil and grease removal, or screening.

1.1.9 Treatment Train Systems

These systems employ a combination of structural stormwater treatment BMPs commonly in series. Research of BMPs containing BMPs from two or more categories is listed as a treatment train system in this report.

1.2 Non-Structural Stormwater Treatment BMPs

Non-Structural stormwater treatment BMPs include institutional and pollution prevention type practices designed to prevent pollutants from entering storm water runoff. Examples include public education programs (*e.g.*, storm drain stenciling), oil recycling programs, and litter control programs. While non-structural BMPs can be effective in controlling pollution generation at the source, research of their pollutant removal efficiency is difficult without well-defined boundaries (*e.g.*, inlets, outlets). Non-structural BMPs are geographically interspersed with many pollutant sources and are virtually impossible to monitor or at best can be evaluated using trend monitoring (ASCE, 2002).

2.0 STORMWATER TREATMENT BMP RESEARCH IN SOUTHWEST FLORIDA

The following is a list of known stormwater treatment BMP research in southwest Florida. Published results are limited at this time.

2.1 Green Roof at Shadow Wood Preserve, Lee County, Florida

Summary: The objective was to develop a green roof model for South Florida that shares many of the characteristics of so-called 'extensive' green cover systems developed in Europe. These are veneer systems incorporating 'engineered soil' and synthetic layers which can support a dense ground covering vegetation layer without active irrigation. The pilot green roof at the Shadow Wood Preserve project included three test plots, each approximately 800 square feet in area. All of these emphasized good drainage, since the threat posed by the hot humid summer conditions seemed greater than the winter dry season. The growth media used in each case was designed with a volumetric maximum moisture content of 35%. To conduct the stormwater monitoring, a stormwater monitoring station was established that would measure flows and collect water quality samples. The core of the sampling equipment is an ISCO Model 6712FR refrigerated, programmable, multi-bottle sampler using a peristaltic pump and Tygon tubing to deliver the sample stream into polyethylene container bottles in the refrigerated unit connected to a 110v standard AC power supply. The sampler is triggered by the accumulation of a specified amount of rain within a time period. Flow composited sampling is accomplished by interconnecting the ISCO sampler with a pressure transducer located in the bottom of a PVC "rain barrel" which has precisely measured openings. The ISCO unit translates the transducer signal into a flow measurement that is in turn used to trigger subsequent flow compositing aliquots. Water quality samples are being analyzed for cadmium, chromium, copper, zinc, dissolved copper, ammonia, nitrite, nitrate, orthophosphate, total Phosphorus, total kjeldahl nitrogen, total nitrogen, and total suspended solids.

Reference: Ongoing, Johnson Engineering, Inc.

2.2 Porous Pavement Evaluation at Shadow Wood Preserve, Lee County, Florida

Summary: The project assesses reductions in stormwater runoff and pollutant loading from porous concrete pavement versus asphalt pavement at Shadow Wood Preserve in Lee County, Florida. Each of the two study areas has a catch basin outfitted with a fiberglass insert box to facilitate flow measurements and sampling. Two automated, refrigerated ISCO sampler units were tied to a nearby rain bucket to facilitate storm event detection, and to put the ISCO units into sample mode. Continuous flow measurements were made utilizing bubbler tube technology, allowing flow composited samples to be collected. Events were collected for both wet season and dry season storms, with a 1-inch event being the target sample event. Data collection for this project is now complete, and lab results, volumes and water levels are being evaluated. Of particular note is the substantial reduction in discharge volumes from the porous system compared to the standard asphalt system. During the initial onset of a storm event, essentially all of the runoff generated in the porous area, percolates through the porous concrete in to the subsurface system and enters the groundwater table. Runoff will occur under very high rainfall intensities that exceed the infiltration rate of the porous pavement, but under normal to low rainfall intensities, it was not unusual to see a 30 minute delay before any water entered the catch basin in the porous area, compared to the standard asphalt area. This can be a significant benefit on its own, for the receiving water body, in addition to any pollutant reduction accomplished by the filtering action of the porous concrete itself. Water quality samples were laboratory analyzed for cadmium, chromium, copper, zinc, ammonia as N, nitrate and nitrite, orthophosphate as P, total phosphate, total kjeldahl nitrogen, total nitrogen, and total suspended solids.

Reference: Ongoing, Johnson Engineering, Inc.

2.3 Littoral Plantings Project at Bonita Bay Lake 62, Lee County, Florida

Summary: This project was designed to assess the water quality impact of a littoral planting in a wet detention system in southwest Florida. The wet detention lake is in a typical residential/golf course community having runoff from residential lawns, roadways, and golf course areas. Three sample stations at the wet detention lake are located at: 1) the inflow pipe, 2) a temporary V-notch controlled outflow, and, 3) at the final outfall control structure. Outflow from the lake passes over a naturally vegetated area before overflowing the final control structure. Automated, refrigerated, ISCO samplers are used at all three sample stations to collect both flow composited samples and weekly composite samples taken during periods of limited rain events. These samplers are sophisticated programmable units capable of sampling a variety of protocols, and have telemetry equipment to allow remote observation of the sample units status, flows, rainfall, and other on site data. The collected water quality samples are laboratory analyzed for cadmium, chromium, copper, zinc, ammonia as N, nitrate and nitrite, orthophosphate as P, total phosphate, total kjeldahl nitrogen, total nitrogen, sulfate, and total suspended solids. The wet detention lake also contains two YSI 6600 EDS Data Sondes, deployed at mid lake depth to provide ongoing data collection at 15 minute intervals for dissolved oxygen, specific conductance, pH, temperature, oxidation/reduction potential, depth, and turbidity. This high resolution data can be compared with lake water levels collected with Infinities USA pressure transducer dataloggers, as well as with laboratory analysis from the ISCO sample units. Data collected to date represents the background data collected prior to construction of the littoral shelf. It is anticipated that the littoral plantings will be done during this dry season and monitoring will begin again at the next wet season.

Reference: Ongoing, Johnson Engineering, Inc.

2.4 Deep and Shallow Wet Detention Ponds Water Quality at The Brooks, Lee County, Florida.

Summary: The primary objective of this study was to evaluate wet detention ponds of various depths to understand whether or not aeration of the ponds is beneficial or desired. The secondary objective of this study was to determine whether or not stratification of the water column occurs in ponds. Four ponds were selected from a shallow and deep wet detention system at The Brooks residential development for this study. Each pond contains multiple aerators. The study consisted of placing water quality data sondes in each of the ponds. The sondes monitored temperature, conductivity, pH, dissolved oxygen, oxidation-reduction potential and turbidity. The study was made up of two phases lasting approximately three weeks each. Background data was collected for approximately one month prior to the first phase. During the background period, the aerators in the ponds were left on as normal. In each phase, aerators in two of the ponds were operated as normal while aerators were turned off in the other two ponds. Ponds selected to be aerated during phase two were different than those being aerated in phase one. In addition to the data collected by the water quality sondes, three sets of water quality data were collected from each lake using a separate water quality meter. The readings taken by the independent meter were used to verify the sonde data and also to provide a vertical profile of the water column. Three sets of water quality samples were also collected using a Van Dorn type sampler from each of the ponds during the study and laboratory analyzed for pH, turbidity, ammonia nitrogen, total nitrogen, nitrate and nitrite, orthophosphate, total phosphate, chlorophyll a, and specific conductance.

Reference: Ongoing, Johnson Engineering, Inc.

2.5 Roadway Runoff and Wet Detention Pond Water Quality Assessment, Metro Parkway, Lee County, Florida

Summary: The objective of this project is to evaluate the quality of water runoff from state-managed roadways similar to that of the proposed expansion of Metro Parkway. The water quality results will be analyzed to characterize stormwater runoff and treatment efficiency of wet detention ponds. In order to achieve this, runoff will be monitored at three separate points: directly from the road surface, at the inflow to an adjacent wet detention pond and at the wet detention pond outfall. In addition, a fourth monitor point will capture rainfall at the site before it reaches the ground surface. The project will involve the collection of water quality samples during at least five rainfall events that produce discharge. Sampling of the treatment pond will be triggered by the same rainfall event. Vehicle traffic counts for the area will be studied to characterize level of service for the roadway. This information will be used to help understand and evaluate the water quality results. The runoff collected directly at the road surface will be compared to that at the inflow to the adjacent treatment pond. The runoff diverted to the treatment pond is part of a closed system. Therefore, any differences between the road surface and treatment pond inflow samples should be attributable to additional runoff entering the system through grates in medians or beside walkways along the stretch of road being analyzed. Collected water quality samples will be laboratory analyzed for total cadmium, total chromium, total copper, total iron, total lead, total manganese, total nickel, total zinc, ammonia as N, nitrate and nitrite, orthophosphate as P, total phosphate, total kjeldahl nitrogen, total nitrogen, and total suspended solids.

Reference: Ongoing, Johnson Engineering, Inc.

2.6 Stormwater and Nutrient Loadings from FDOT Roadways in Southwest Florida

Summary: This project evaluates stormwater runoff and pollutant removal efficiency of wet detention ponds that treat stormwater from FDOT roadways in Lee, Collier, and Hendry counties. The project will involve identifying stormwater treatment ponds suitable for water quality monitoring, hydrologic monitoring, determining level of service for each adjacent roadway, installation of automatic samplers and other required equipment, and the collection of samples from the inflow and outflow for laboratory analyses.

Reference: Ongoing, Johnson Engineering, Inc.

2.7 Leitner Creek By-Pass Canal BMPs, Lee County, Florida

Summary: Leitner Creek By-Pass Canal is an annual public works project to ensure flood control in the relatively flat topography of Lee County, Florida. This canal is over 4400 feet in length and the maintained portion discharges to an Outstanding Florida Waterbody (OFW) tributary emptying into Estero Bay. OFW's have the highest level of water quality protection in the state. As if this were not difficult enough, water levels in the canal vary from several inches to over 4 feet in depth. Typical problems encountered in the past have been: high turbidity levels from the clean-out efforts, lengthy turbidity plumes moving downstream causing environmental and visual impairment, odor complaints associated with organic sediment and vegetation removal, and conflicts between the need for permit compliance and flood control maintenance. A site-specific water/soil sample test showed that APS 706b Floc Logs along with 712 powder could be used to provide flocculation and chelation of the fine mucky soil particles generated from the maintenance activities. The 712 powder could be used to stabilize the canal embankment and provide additional turbidity treatment as needed. The project was able to proceed with minimal changes to current procedure. Odor complaints were significantly reduced. A tremendous visual improvement was apparent in the canal. Future uses will explore more efficient use of floc log mixing devices that are adaptable to different types of drainage maintenance equipment. A metal box was designed and constructed to provide a movable mixing zone for the Floc Logs. Several were attached to this box and to the Water Spyder to allow agitation and current flow to dissolve the APS product for turbidity treatment. Particle curtains, made of PVC pipe and jute were constructed and placed downstream to capture fine flocculent material that did not gravity settle. Turbidity values in the work area ranged between 423 - 1,000 NTUs. These were acted on by the Floc logs, which caused the mucky sediment to form floc materials and chelating bridges between individual particles. As these particles clumped together, they became larger and heavier. Gravity settled out most of these particles leaving the water very clear. Two hundred (200) feet downstream of the work area, turbidity was down to 7.5 NTUs. These levels continued to remain low and resisted resuspension, so that even more than 1,000 feet downstream of the work area, turbidity levels were between 10 - 13.5 NTUs.

Reference: Applied Polymer Systems, Inc., Outstanding Florida Waterbody, Innovations in Stormwater Control, www.swfwc.org/EBNMP/BonitaSpringsCaseStudy1.doc, 2 p.

2.8 Florida Gulf Coast University

Summary: Students and staff at FGCU are performing a water quality study of wet detention ponds in Lee County. According to Win Everham (*personal comm.*), the one-year study consists of collecting water quality samples from twenty-two wet detention ponds and laboratory analyses of total nitrogen, phosphorus, orthophosphorus, and chlorophyll-a. The wet detention ponds are of varying age, size, depth, riparian zones (planted littoral and rip rap), and surrounding land uses. The study will also include hourly sample collection during the rainy season from a subset of the ponds.

Reference: Ongoing, Edwin Everham, Florida Gulf Coast University

3.0 STORMWATER TREATMENT BMP RESEARCH IN FLORIDA

The following provides a summary of completed and ongoing stormwater BMP research in Florida. The following summaries are from published literature. Research of other BMPs in Florida may be underway and may be published in obscure publications.

3.1 Detention Systems

3.1.1 Evaluation of the Performance Efficiency of a Modified Wet Detention Pond for Enhanced Nitrogen Removal

Summary: This project will specifically evaluate the performance efficiency of a modified wet detention pond to reduce input concentrations of nitrogen. A series of floating baffles will be used to create both oxic and anoxic zones which will be used to stimulate denitrification removal processes. The specific objectives of this research project are to: 1) evaluate the pollutant removal effectiveness of an unmodified wet detention pond for nutrients and heavy metals, 2) evaluate the ability of floating curtains and baffles to maintain separate oxic and anoxic environments in segmented portions of a wet detention pond, 3) evaluate the hydraulic impacts of floating curtains and baffles in a wet detention pond, and 4) evaluate the performance efficiency of alternating anoxic and oxic zones on pollutant removal effectiveness, particularly with respect to species of nitrogen.

Reference:

Ongoing (August 13, 2003 until April 12, 2005), Environmental Research and Design, Inc.

3.1.2 Quantifying the Pollutant Load Reduction of Wet Detention Systems Before and After Planting of a Littoral Zone

Summary: To evaluate the effects of littoral zone vegetation planting on wet detention pond performance using an *in situ* investigative approach. This will include determining the effects of both littoral zone vegetation planting and related vegetation management activities on pond performance by establishing large *in situ* compartments within an existing wet detention pond.

Reference: Ongoing (July 7 2003 until January 3, 2005), DB Environmental, Inc.

3.1.3 Water-Quality Survey of Twenty-Four Stormwater Wet-Detention Ponds

Summary: As part of its stormwater management responsibility, the Southwest Florida Water Management District conducts research to implement better stormwater regulations. During 1988-89, the District conducted a water-quality survey of twenty-four stormwater wet-detention ponds that had been permitted by the District in the Tampa Bay Region. These ponds were studied to characterize the discharge effluent water quality and to determine consistency with State water quality standards. The objectives of the survey were threefold: (1) to provide regional, base-line water-quality data in urban, stormwater wet-detention ponds, (2) to document whether the water quality of effluents from wet-detention ponds met State water-quality standards, and (3) to explore relationships among physical/chemical (water-quality) variables, water-level variables, and pond dimension variables. To accomplish the objectives, grab samples were collected in the pond and at the outflow within two days after a storm event. Samples collected at the outfall station (located at the point of discharge from wet detention ponds) found exceedences (non compliance) of State water quality standards, which included: dissolved oxygen (34%), zinc (31%), cadmium (10%), copper (12%), lead (9%), conductivity (6%), turbidity (3%), chromium (3%), nickel (1%) and magnesium (1%). Exceedence of the total suspended solids standard (20 mg/L -- for an efficient secondary sewage treatment) in 10 percent of samples, and exceedence of the turbidity standard (29 NTU) in only 4 percent of samples indicated the wet-detention ponds were effective as sedimentation basins. Evaluation of seasonal patterns in the data indicated that hydrologic conditions (*i.e.*, water levels) were rainfall related, as expected. More importantly, several variables (conductivity, turbidity, cadmium, and possibly zinc and iron) were inversely correlated with rainfall-related water-level indicators (*i e*., the number or percent of ponds discharging, and the bottom depth at the sample location). Also, as would be expected seasonal temperature patterns were important with regards to dissolved oxygen levels. The inverse relationship between the number of ponds discharging and mean outfall station concentrations for certain water-quality variables also suggests that higher mean values and perhaps more exceedences of standards corresponded with periods of lower rainfall when fewer ponds were discharging. Thus, an exceedence during dry periods might not actually constitute a violation of water quality standards since these are designed to protect receiving waters. Results of multivariate statistical analyses (cluster techniques, multiple regressions, etc.) provided evidence that hydrologic conditions and pond dimensions were important for certain water-quality variables, especially suspended particles and iron. The results also suggested a relationship between water quality and primary production in wet-detention ponds since temperature, dissolved oxygen and pH were closely related. Data from the land-use evaluations and cluster analyses of ponds suggested that multifamily residential ponds are among those with poorest water-quality, probably caused by greater impervious areas. Some additional parameters should be incorporated for more complete evaluation of water-quality data (*e.g.*, total hardness, alkalinity, redox potential, nutrients and/or chlorophyll, and color). These variables are important because of their influence on metal concentrations and metal toxicity, as well as, on other water-quality characteristics. Research concerning the ecological value of stormwater ponds has been mostly overlooked. With ever increasing development pressures reducing wetland and surface water resources, biological sampling (*e.g.*, plants, algae, and benthos) would help determined the strengths and weaknesses of stormwater ponds as fish and wildlife habitat. Stormwater rules should relate percent impervious area to the amount of treatment required for stormwater ponds since the greater the impervious area, the more often these stormwater systems exceed standards.

Reference:

Kehoe, M.J., 1993, Water Quality Survey of Twenty-Four Stormwater Wet-Detention Ponds, Southwest Florida Water Management District, 84 pages.

3.1.4 Comparative Water Quality Data of a Deep and a Shallow Wet-Detention Pond

Summary: Stormwater treatment criteria as stated in State Water Policy 62-40 has a goal of 80% removal efficiencies for annual pollutant loads. A common method used to treat stormwater includes wet-detention. Studies have indicated that some wet-detention systems fail to meet the goal of 80% removal. As a result, this study investigated methods to improve the wet-detention system design. This study examined the effect of the depth of the permanent pool on pollutant removal efficiency. Two adjacent ponds with similar parameters except for the depth (9.0 feet vs. 3.5 feet) were tested for pollutant removal. Pollutant removal efficiencies were calculated based on mass loading numbers. Removal efficiencies for copper were low in both ponds, possibly due to low concentrations entering at the inflow. The highest removal efficiencies for both ponds were for iron. Iron removal was 87% for the deep pond and 85% for the shallow pond. Since iron removal is a good predictor for the behavior of other metals, it can be assumed that efficiencies for copper and zinc would have been better if concentrations had been higher. Suspended solid and volatile suspended solid removal was greater in the deeper pond (77% vs. 69%). Nitrogen removal was modest (<50%) in both ponds. Greater than 80% removal for orthophosphorous was recorded for both ponds. Low dissolved oxygen levels at the bottom of ponds were associated with thermal stratification. The deeper pond was stratified more often than the shallow pond. The removal efficiencies between the two ponds were similar except for greater suspended solid removal in the deeper pond. Wet-detention pond depth does not seem to significantly affect removal efficiencies of nutrients and metals, but low initial concentrations of metals may have skewed this result. Deeper ponds may be more prone to low dissolved oxygen levels at the bottom due to increased frequency of thermal stratification.

<u>Reference</u>:

Cunningham, J., 1993, Comparative Water Quality Data of a Deep and a Shallow Wet Detention Pond, *In* Proceedings of the

3rd Biennial Stormwater Research Conference, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609.

3.1.5 An In-Depth Analysis of a Wet Detention Stormwater System and Three Design Alternatives for Stormwater Detention Ponds

Summary: Wet detention ponds are the most common method used in our District for treating stormwater runoff, but little data is available about how different designs affect pollution removal. The purpose of this study was to provide scientific documentation to support or modify certain aspects of the District's stormwater rule (40D-4). Other objectives included measuring pollutant loading from rainfall, correlating relationships between constituents, determining compliance with state water quality goals, measuring pollutants in the sediments and making recommendations for reducing non-point source pollution. One pond was reshaped three different ways to compare designs that have been used or can be used to meet District surface water runoff rules. Each pond design was studied for an eight month period from June through January of each year. The major features of each design are: a shallow pond was studied in 1990. It was originally one foot deep with an average 2-day wet season residence time and 100% vegetated with planted wetland species and the design followed the early parameters established by SWFWMD rules promulgated in 1988. The same pond was studied in 1993 except that it had been reshaped with a permanent open water pool five feet deep, which allowed a 5-day wet season residence time. An unplanted shallow shelf (littoral zone) occupied 33% of the pond and was allowed to colonize naturally from the available seed source and the largest part of the shelf was located near the outflow. Design parameters represent SWFWMD criteria in effect in our current rules. The

pond, reshaped once again, to test the Conservation Wet Detention Design criteria (developed by SWFWMD's regulatory staff), was studied in 1994. These design criteria include a 14-day wet season residence time and a planted littoral shelf similar in area to the previous pond design. These criteria represent an alternative design that can be used by developers seeking SWFWMD permits. The drainage basin for the pond is 6.5 acres with about 30 percent of the watershed covered by rooftops and asphalt paving, 6 percent by a crushed limestone storage compound and the remaining 64 percent is a grassed storage area. The impervious surfaces discharge to ditches that provide some pre-treatment before stormwater enters the pond. Instruments at the inflow and outflow collected flow-weighted samples for over 20 storm events during each eight month sampling period. Rainfall amounts and water quality were also quantified. Since treatment credit is given for some of the storage in the permanent pool, the Conservation Wet-Detention design can reduce the amount of fill needed for elevating house pads and also use less land area for the pond. The most important finding showed the Conservation Wet Detention design that included the 14-day residence time had the best removal efficiency. Also, using these criteria, the reduction of pollutants from the inflow to the outflow usually met the 80 percent pollutant reduction goal specified by the State Water policy. Organic nitrogen and ammonia are the most difficult pollutants to remove with wet detention ponds. Ammonia concentrations were reduced by 18% to 70% and organic nitrogen by 5% to 42%. The Conservation wet-detention design had the highest removal rates compared to the other two designs. Rainfall is a significant source for nitrogen and some metals. Low dissolved oxygen levels (< 2 mg/L near the pond sediments) increase phosphorus concentrations in the water column. Sediment samples indicate polycyclic aromatic hydrocarbons (PAH) concentrations present a problem in stormwater runoff and concentrations in sediments increase as ponds age. Iron is a controlling mechanism for pollution removal forming positive correlations with metals and phosphorus. Iron was present in higher concentrations at the inflow during the final year of the study and since it forms particles that settle easily it may have improved pollution removal for the final year. Macroinvertebrate sampling indicated that newly constructed wet detention ponds can be diverse and productive habitats supporting even some pollution sensitive species. Desirable wetland herbaceous species planted on the wide littoral shelf reduced the amount of torpedo grass that had invaded the pond. In contrast, the steep slopes of the narrow littoral shelf around the pond favored the expansion of torpedo grass. Much more diverse planted wetland vegetation survived on the wide littoral shelf near the outflow than on the narrow shelf that surrounded the pond. The Conservation Wet Detention criteria should be recommended for all stormwater systems where deeper surficial groundwater tables and confining strata allow for adequate pond depth. In this study the effluent, which resulted from using these criteria met almost all State water quality standards and this design can also reduce the need for fill material and produce other economic benefits. Stormwater designs that utilize the entire drainage basin and reduce discharge to predevelopment levels should be encouraged and credit given to developers who use these techniques. Although stormwater ponds reduce peak flows, only a watershed approach will significantly reduce the volume of water discharged downstream. Stormwater rules need to address extreme events. During 1993 in this study, from 32 to 77 percent of all pollutant loads measured during the 22 storms monitored that year were discharged during one storm. Source reduction is needed for stormwater improvement since atmospheric deposition was a significant source of inorganic nitrogen and some metals. Aerobic bottom sediments and a circumneutral pH in a permanent pool with adequate residence times are a necessary condition for stormwater ponds and designs that provide these conditions should be incorporated into stormwater systems. Operation and maintenance information for the care of stormwater systems is needed.

Reference:

Rushton, B.T., Miller, C., Hull, C., and Cunningham, J., 1997, Three Design Alternatives for Stormwater Detention Ponds, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609, 59 pages.

Rushton, B.T. and Dye, C.W., 1993, An In-Depth Analysis of a Wet Detention Stormwater System, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609, 121 pages.

3.1.6 A Survey of Outflow Water Quality from Detention Ponds in Agriculture

Summary: Agriculture is considered the major source of non-point source (NPS) pollution to water bodies in the United States. Because of the diffuse nature of NPS pollution, treatment of the discharge waters has been difficult. One method used to treat agricultural runoff is to direct the runoff from stormwater and irrigation to detention ponds. Detention ponds have been used in urban settings to treat stormwater before discharge into environmentally sensitive waters and have proven to act as a filter for pollutants such as metals, nutrients, and other water contaminants. In this study, discharge from detention ponds at nine agricultural sites, which covered a three county area were investigated to assess the outflow water quality and compliance with State water quality standards. From December 1993 through November 1994, monthly water samples were taken from the outflows of nine detention ponds in agricultural basins to assess compliance with State of Florida water quality standards. Three analyses were performed: 1) discharge water quality data were compared with State surface water and ground water standards, 2) discharge water quality data were compared with treated and untreated agricultural discharge values found in literature, and 3) correlations of water quality data were performed to investigate relationships and trends. For this study, it is important to consider that data was gathered from only the outflow of detention ponds. Water quality data was not gathered at the inflow and therefore, this study does not assess the treatment efficiency nor does it characterize how the detention ponds function. Since the ponds discharged almost continually the samples were collected on a monthly basis and do not necessarily represent storm runoff. Comparison with State Class III surface water standards indicates that out of nine total sites, violations occurred for lead (2 sites), iron (3 sites), alkalinity (1 site), unionized ammonia (1 site), pH (3 sites), and dissolved oxygen (8 sites). Comparisons to ground water were performed to provide additional insight to the water quality because the source of irrigation water which flowed into the ponds was groundwater. Comparison with groundwater standards indicates that violations were noted for iron (6 sites), manganese (7 sites), total dissolved solids (7 sites), sulfates (5 sites), and pH (4 sites). Although violations of both surface water and groundwater standards were detected, the violations were infrequent. Some of the exceedences were related to the summer rainy season and farming schedules which may have elevated certain water quality parameters. Comparisons of agricultural survey data with data from untreated agricultural runoff reported in the literature indicate lower values from the agricultural survey sites in almost all parameters (includes various forms of nitrogen and phosphorous, pH, dissolved oxygen, total suspended solids, and turbidity). Comparisons of agricultural survey data with data from treated agricultural discharges reported in the literature, indicate similar water quality values for all parameters (includes various forms of nitrogen and phosphorous, pH, dissolved oxygen, total suspended solids, and turbidity). In some cases, the values from the agricultural survey were actually lower. High correlations between hardness, conductivity, total dissolved solids and various ion species such as calcium, magnesium, and sulfate confirmed expected relationships between the variables. Unexplained correlations (includes negative correlations) were noted between phosphorous and major ions (rs value range of -0.77 to -0.61), and also copper and zinc to various major ions (rs value range of -0.50 to -0.39). Ponds in this study discharged almost constantly, especially in filtration systems. Designs of detention ponds should be reviewed to maximize treatment ability by increasing retention time and other design criteria. In agricultural systems, organochlorine and organophosphorous pesticides are used to control insects and other pests. Pesticides can be introduced into the water column, and have adverse effects on the reproductive and neurological systems of the biological community in the aquatic systems. Pesticides and other anthropogenic compounds should be addressed in characterizing water quality from agricultural sites.

Reference:

Bahk, B., and Kehoe, M., 1997, A Survey of Outflow Water Quality from Detention Ponds in Agriculture, Southwest Florida Water Management District, 42 pages.

3.1.7 Outfall Water Quality from Wet-Detention Systems

Summary: This survey study was conducted to statistically compare samples collected before and after discharge over the outfall structure. This was done to validate the feasibility of collecting samples before discharge for compliance monitoring. Additionally, the outfall effluent from permitted wet-detention systems were compared to State water quality standards. This study compared the effluent water quality of two types of permitted stormwater systems: constructed wet-detention ponds and natural wetlands. A survey of permitted wet detention ponds was conducted between June 1992 and April 1993. Twenty-two systems in the Tampa Bay area were sampled; nine were natural wetlands and thirteen were constructed ponds. Data collection took place during fourteen sampling events. Samples were collected during system discharge from two locations: 1) in the system just before the outflow weir (***b*** side) and 2) after the outflow weir (***a*** side) but before it entered the receiving water. The ***a*** side is also referred to as the wet detention system effluent. Water quality sampling included eight metal species, six nutrient species, turbidity, total suspended solids, temperature, dissolved oxygen, pH and conductivity. Study goals were to: 1) compare the water quality in front of the outfall weir to that of its effluent, 2) determine whether the effluent complied with class III Florida

State Water Quality Standards and 3) compare the effluent from constructed and natural systems for standard compliance. Additional analyses were conducted to determine relationships between constituents. Unionized ammonia, iron, manganese (class III Standard) and nickel measured during this study complied with water quality standards 100 percent of the time. Most constituents complied >79 percent of the time except dissolved oxygen (in noncompliance 64% of the time). In a comparison of the metals in noncompliance between the natural and constructed systems, the natural systems had a higher percent noncompliance than the constructed systems (ranging from two to nine times higher). Despite these differences between system types, every metal complied with water quality standards >65 percent of the time. A comparison of the data from both sides of the weir in each of the data sets revealed that all constituents measured were not significantly different except dissolved oxygen, turbidity, temperature, and pH. Dissolved oxygen was significantly lower on the ***b*** side of the weir than the ***a*** side in each of the three data sets caused by aeration as water flowed over the weir. The pH was significantly higher on the ***a*** side of the weir in the constructed system data set. Turbidity was significantly higher on the ***a*** side of the weir in the natural system data set. The temperature on the ***a*** side of the weir in the natural system was significantly higher. The discharge from constructed systems met State water quality standards more often than discharges from natural wetland systems for copper, lead, zinc, and cadmium. Better compliance with the metal standards observed in the constructed systems may be the result of the generally harder water found in those systems since the standard is hardness dependent. Non-compliance in natural wetlands were: dissolved oxygen (48%), copper (35%), lead (27%). Alkalinity (27%), zinc (18%), and cadmium (9%). When water quality from constructed wetlands was compared to State standards, the discharge water failed to meet standards for some of the metals and other constituents. For constructed wetlands, the following were in non-compliance: dissolved oxygen (70%), copper (12%), lead (12%), and zinc (6%). No statistical differences were found between the water quality on either side of the weir during discharge (except pH and dissolved oxygen). Thus, samples can be collected from the more accessible ***b*** side of the weir (just before the water discharged across the weir located inside the pond). Current requirements dictate that samples be taken from the ***a*** side (after water exits the pond). Methods to increase dissolved oxygen in ponds should be considered. Examples include aeration devices (*i.e.*, fountains) and maintenance of a deeper area devoid of vegetation immediately adjacent to outfall weirs.

Reference:

Carr, D. W., and Kehoe, M.J., 1997, Outfall Water Quality from Wet-Detention Systems, Southwest Florida Water Management District, 36 pages.

3.1.8 Water Quality Efficiency of an Urban Commercial Wet Detention Stormwater Management System at Boynton Beach Mall in south Palm Beach County, Florida

Summary: Urban wet detention system investigations were conducted at a commercial shopping mall in Boynton Beach, Florida. This study site possessed a permitted drainage area of 25.4 ha (62.8 ac), which was approximately 90 percent impervious. The water management area consisted of three interconnected ponds, each approximately 1.2 ha (3 ac), totaling 3.5 ha (8.7 ac). This site was instrumented with automatic water quality samplers to collect storm-generated runoff samples. In addition, digital stage measurement equipment continually monitored and recorded both surface and ground water elevation. The results were collated with previous results in the literature and comparisons indicated superior treatment efficiencies.

References:

Holler, J.D., 1989, Water Quality Efficiency of an Urban Commercial Wet Detention Stormwater Management System at Boynton Beach Mall in south Palm Beach County, FL, Florida Scientist. Orlando Fl, vol.52, no.1, pp.48-57.

3.1.9 Evaluation of Dry Detention/Filtration Stormwater Management System Receiving Runoff from a Mixed Urban Land Use

Summary: The South Florida Water Management District's Resource Planning Department has initiated a series of applied research projects to aid the Resource Control (Regulatory) Department in refining criteria for the permitting of surface water management systems. This project was designed utilizing criteria developed by the Florida Department of Environmental Regulation to compare respective regulatory criteria. Surface runoff from six discrete storm events was sampled at the Lake Tohopekaliga Demonstration site in Kissimmee, Florida. Parameters included turbidity, specific conductance, pH, soluble reactive phosphorus, and total phosphorus. Samples were taken at the critical depth inflow flume, at the infiltration berm, and at the outfall of the underdrains. Because of the use of native soils containing organic material and clay, the infiltration berm became clogged early in the study, preventing drainage of the basin as designed.

Reference:

Dierberg, F.E., Cullum, M.G., 1988, Evaluation of Dry Detention/Filtration Stormwater Management System Receiving Runoff from a Mixed Urban Land Use, 8th Annual International Symposiun on Lake and Watershed Management, p. 29.

3.1.10 Effects of Detention on Water Quality of Two Stormwater Detention Ponds Receiving Highway Surface Runoff in Jacksonville, Florida

Summary: Water and sediment samples were analyzed for major chemical constituents, nutrients, and heavy metals following ten storm events at two stormwater detention ponds that receive highway surface runoff in the Jacksonville, Florida, metropolitan area. The purpose of the sampling program was to detect changes in constituent concentration with time of detention within the pond system. Statistical inference of a relation with total rainfall was found in the initial concentrations of 11 constituents and with antecedent dry period for the initial concentrations of 3 constituents. Based on graphical examination and factor analysis, constituent behavior with time could be grouped into five relatively independent processes for one of the ponds. The processes were (1) interaction with shallow groundwater systems, (2) solubilization of bottom materials, (3) nutrient uptake, (4) seasonal changes in precipitation, and (5) sedimentation. Most of the observed water-quality changes in the ponds were virtually complete within 3 days following the storm event.

Reference:

Hampson, P.S., 1986, Effects of Detention on Water Quality of Two Stormwater Detention Ponds Receiving Highway Surface Runoff in Jacksonville, Florida, USGS Water

Resources Investigations Report 86-4151, 69p, 20 fig, 16 tab, 34 ref, 2 append.

3.1.11 Treatment of Stormwater Runoff from an Agricultural Basin by a Wet-Detention Pond in Cockroach Bay, Florida (Phase I)

Summary: Agriculture has been identified as a significant source of water pollution in the United States. The use of agricultural fertilizers and pesticides doubled from the mid 1960s to the early 1980s and may be responsible for a major portion of surface and ground water contamination. The effects of agricultural pollution are numerous and include: sediment contamination and deposition with subsequent impairment of aquatic habitat, pesticide contamination, eutrophication of surface waters, and general water quality degradation of downstream water bodies. The Environmental Protection Agency (EPA) ranks agricultural activity as the greatest threat to water quality in streams and lakes. The EPA also notes that nutrient and silt runoff are the leading causes of water quality impairment. Given the water quality problems associated with agriculture, the Southwest Florida Water Management District initiated a study on the effectiveness of a wet-detention pond to treat stormwater runoff from an agricultural basin. The Cockroach Bay Restoration Project in Ruskin, Florida is an effort to reclaim over 650 acres of natural habitat in a landscape historically used for row crop agriculture. As a part of the larger reclamation landscape, two wet-detention ponds in series receive stormwater runoff from 210 acres of active row crop farmland. The monitoring of the Cockroach Bay Stormwater Project included flow-weighted sampling of inflow and outflow to the detention ponds, as well as collection of rainwater for chemical analysis. The main goal of this project is to assess the treatment

efficiency of the wet-detention ponds. The primary constituents monitored include nutrients, metals, ions, pesticides, and bacteria. Additionally, continual measurements of pond water level, temperature, pH, dissolved oxygen and conductivity are recorded in data loggers. Other monitoring efforts include bi-weekly measurements of depth to groundwater around the ponds, quarterly ambient grab samples in the pre-treatment ditch, water quality in groundwater wells and yearly samples of the sediments. A complete water budget estimated for storm events showed most (>70%) of the water enters and leaves the pond at the two control structures. In addition, about 25 percent of all the storm input to the ponds is introduced by rainfall directly on the pond. Additional water export from the pond for the duration of storm events was estimated at 8 percent by evapo-transpiration; and 15 percent by net seepage. The large pervious area in the drainage basin as well as the pre-treatment ditch and sandy soils contributed to low runoff coefficients. During the rainy season when ample moisture was available the estimated runoff coefficient showed that 10 to 30 percent of rainfall was discharged from the drainage basin into the pond. During dry periods only 1 to 10 percent of rainfall ran off. In general, inorganic nitrogen (ammonia and nitrate) have their highest concentrations in rainfall, but even with this atmospheric input, nitrate had the greatest percent reduction of all constituents measured (greater than 90% in 1999 and 2000). In contrast, organic nitrogen often increases between the inflow and outflow, probably as a result of nitrogen transformations taking place. Phosphorus is measured at relatively high levels at the inflow to the pond with average concentrations of total phosphorus near 1 mg/L. Although average concentrations at the outflow for phosphorus are reduced by about 40 percent, the concentrations still exceed by a factor of 5 to 8 the suggested EPA goal for streams and rivers of 0.1 mg/L. During the three years of study (70 rain events), over 65 percent of all the pollutant loads for potentially toxic metals entered the pond during five El Nino storms. Larger loads are more easily reduced in wet-detention ponds and the goal of 80 percent reduction is met for most metals in 1998 and 2000 and nearly so for inorganic nitrogen. Percent reduction was poorer in 1999, a drought year. Ten pesticides or degradation compounds (chlordane, chlorothalonil, DDE-p,p, endosulfan, endosulfan II, diazinon, malathion, metalazyl, metribuzin and endosulfan sulfate) were detected in stormwater runoff at the inflow of the detention pond. At the outflow, only four pesticide degradation compound, the endosulfan series, were detected. Based on the number of pesticides detected at the inflow vs. outflow, the detention pond seems to function as a sink for pesticides. Chlorophyll was measured monthly at the inflow and outflow of the pond and except during periods of stagnant conditions the ponds reduced all species of Chlorophyll by a significant amount (Chlor a at the inflow 37.6 ug/L and at the outflow 8.25 ug/L). Sediment samples for metals and phosphorus increased dramatically from 1997 to 1998. Phosphorus concentrations were highest in the most overgrown part of the pre-treatment ditch and in the center of the two ponds. The highest concentrations of metals occurred in the marsh after water leaves the pond. These elevated levels can by explained by estaurine mixing at the fresh water/salt water interface. Ground water levels were measured in 12 shallow wells surrounding the pond and show a close interaction with pond levels. The water table gradient is toward the pond and eventually the outflow marsh. When pond levels are high the gradient is out of the pond and when pond levels are low the surrounding water table to the north seeps into the pond. The wet-detention pond was effective for reducing most pollutant loads by at least 60 percent, and often, over 80 percent especially in 1998 and 2000 which had higher concentrations of pollutants entering the pond. The differences in efficiency of the pond to reduce pollutants during different years demonstrates the need for more long term studies, especially those that investigate processes going on in the pond. Maintenance guidelines need to be developed for wet-detention ponds especially since maintaining ponds may help reduce total suspended solids and organic nitrogen, which sometimes increased from the inflow to the outflow in these ponds. More data are needed to determine treatment efficiency as ponds age. This study suggests that recently constructed ponds are much better at some forms of pollution removal.

Reference:

Rushton, B. T., 2001, Treatment of Stormwater Runoff from an Agricultural Basin by a Wet-Detention Pond in Ruskin, Florida, DEP Contract Number WM 539, Southwest Florida Water Management District.

3.1.12 Treatment of Stormwater Runoff from an Agricultural Basin by a Wet-Detention Pond in Cockroach Bay, Florida (Phase 2)

Summary: The project will provide data for an additional year to enhance the information collected from an existing three year project (see Cockroach Bay phase I). The wet detention pond is part of a watershed project designed to control non-point source pollution to a priority water body that has an impaired or protected use. Tampa Bay has been designated as the number one priority

water body in the Southwest Florida region by SWIM. Field investigation involving treatment for agricultural runoff from row crops is limited. This project will provide insight into methods to support district (WMD), state (DEP) and federal (EPA) stormwater runoff guidelines and will add to the statewide stormwater data base documenting the efficiency of wet detention ponds. The study provides an additional year of hydrology and stormwater data covering all seasons. The data will be used to calculate loading rates and will more thoroughly document the efficiency of the wet detention pond in reducing agricultural pollutants. Samples from a network of wells will indicate possible groundwater pollution from agricultural practices and an adjacent wastewater package treatment plant. Sediment samples in the pre-treatment ditch, the pond and the receiving marsh will indicate pollutant build-up and indicate maintenance requirements.

Reference: On-going

3.1.13 EMS Stormwater Enhancement Project, Pinellas County, Florida

Summary: The original stormwater facility was constructed in accordance with regulations in 1990 to provide stormwater treatment and peak attenuation for the county's new Emergency Medical Services (EMS) complex. The facility discharges indirectly into Boca Ciega Bay. The pond was designed to capture stormwater and treat, using a sand filter encased in a concrete vault, the first half-inch of runoff from the entire site. The facility was constructed with 4:1 side slopes, 2 foot average water depth, and a 0.4 foot treatment prism for capturing and filtering runoff. Prior to the enhancements, a monoculture of primrose willow dominated the entire perimeter of the pond. The primary objective of this project was to demonstrate how stormwater ponds can be designed to enhance their aesthetic and wildlife habitat values while at the same time meeting their intended water quality treatment and/or flood control purposes. The secondary objective was to actually improve the treatment effectiveness of the existing pond by expanding and planting the pond's littoral zone, increasing the treatment volume between the control elevation and overflow weir, and increasing the permanent pool volume, thereby increasing the residence time in the pond. By more than doubling the permanent pool volume of the pond, the pond's residence time was substantially increased. The pond's treatment volume also was increased by 13.4%, from 0.50 inches of runoff to 0.57 inches. The increased residence time allows for longer periods of physical settling as well as biological activity. The reshaping and replanting of the littoral shelf resulted in increased nutrient uptake.

Reference:

Bateman, M., Livingston, E.H., Cox, J., 1998, Overview of Urban Retrofit Opportunities in Florida, in National Conference on Retrofit Opportunities for Water Resource Protection in Urban Environments Proceedings Chicago, IL, February 9-12, 1998, p. 166.

3.1.14 Pinellas Park Detention Pond, Pinellas Park, Florida

Summary: A multipurpose wet stormwater-detention pond was studied to determine its effectiveness in reducing the load of selected water-quality constituents commonly found in urban streamflow. This paper studies the loading of 19 chemical and physical constituents during six storm events. Because all stormwater entering the detention pond was not measured at the inflow site, computed stormwater inflow loads were adjusted to account for loads from the unmonitored areas. Stormwater loads of the major ions (chloride, calcium and bicarbonate) and dissolved solids at the outflow site exceeded loads at the inflow site, partly as a result of mixing with base flow stored within the pond. However, the detention pond was effective in reducing the stormwater load of metals (25% to >60%), nutrients (2% to 52%), suspended solids (7% to 11%), and biochemical and chemical oxygen demand (16% to 49%). The author attributes the reductions in base-flow loads to adsorption, chemical precipitation, biologic uptake, and settling within the detention pond. These processes were more effective in reducing base-flow loads after the establishment of aquatic vegetation in the pond.

Reference: International Stormwater BMP Database Basic Database

3.1.15 Duvall County Pond 1, Jacksonville Florida

Summary: Water and sediment samples were analyzed for major chemical constituents, nutrients, and heavy metals following 10 storm events at 2 stormwater detention ponds that receive highway surface runoff. The purpose of the sampling program was to detect changes in constituent concentration with time of detention within the pond system. Pond 1 is in the infield of the intersection of two major highways, U.S. Highway 1 and Interstate 95. Inflow is routed to the pond by three drainage culverts (55%) and by overland flow (45%). Constituent behavior could be grouped into five relatively independent processes for Pond 1: (1) interaction with shallow groundwater system, (2) solubilization of bottom materials, (3) nutrient uptake, (4) seasonal changes in precipitation, and (5) sedimentation. Most of the observed water-quality changes in the ponds were virtually complete within 3 days following the storm event. This study was hampered by problems with one of its ponds (Pond 2), as well drought conditions during the study period, which limited the number of storms suitable for sampling. The study report provides some useful data, but lacks suitable QA/QC discussion, and does not provide flow measurements. There was going to be a second detention pond in the study (Pond 2), which drains a 6 acre shopping center parking lot. However, the pumping system at the site malfunctioned early in the study, and was not promptly repaired. As a result, only limited data was collected, and no conclusions could be made.

Reference: International Stormwater BMP Database Basic Database

3.1.16 Performance Evaluation of Dry Detention Stormwater Management Systems

Summary: Field and laboratory investigations were conducted from August 1997 to March 1998 at a project site in DeBary, Florida to evaluate the hydraulic and water quality characteristics of a dry detention pond system constructed with a perforated pipe vertical filter system as an outlet control structure and anti-clogging device. The *dry* detention pond was constructed in 1996 to provide stormwater treatment for a 9.66 ha (23.86 ac) single-family residential watershed. Field instrumentation was installed at the dry detention pond site to conduct a complete hydrologic budget for the pond, including water level recorder, rainfall recorder, Class A pan evaporimeter, and groundwater piezometers. Automatic sequential samplers with integral flow meters were installed to provide continuous records of inflow and outflow from the pond and to collect stormwater and outflow samples on a flow-weighted basis. On a mass basis, the *dry* detention pond was extremely effective in retaining mass inputs for all measured parameters. Overall mass removal for total nitrogen within the system was approximately 86%, with 84% removal of total phosphorus, 99% removal of TSS, 82% removal of BOD, and 88-96% removal for heavy metals. However, the magnitude of the mass removal efficiencies are due to the fact that more than 70% of the inputs into the pond were lost as a result of groundwater seepage through the pond bottom. On a concentration basis, the water column of the dry detention pond was capable of providing removal efficiencies of 30-90% for all input parameters with the exception of dissolved organic nitrogen, particulate nitrogen, total nitrogen, and BOD. Migration through the filter system provided little additional removal for most parameters. The filter underdrain system was observed to exhibit highly variable hydraulic characteristics and was prone to clogging after only a few weeks of operation. Routine backwashing was necessary to maintain the filter system in an operational manner. In the absence of the substantial losses observed as a result of groundwater seepage from the pond, it appears that the filter underdrain system would be incapable of maintaining the pond in a near-dry condition.

Reference:

Harper, H.H., Herr, J.L., Baker, D., Livingston, E.H., 1999, Performance Evaluation of Dry Detention Stormwater Management Systems, Proceedings of the Sixth Biennial Stormwater Research and Watershed Management Conference, September 14-17, 1999, p. 162-178.

3.1.17 Stormwater Retrofit of the Abandoned Jan-Phyl Wastewater Treatment Plant Site

Summary: The Jan Phyl Stormwater project was completed in January 1998 to retrofit the abandoned wastewater treatment plant site to provide treatment of stormwater runoff through nutrient and sediment removal. The project also created storage volume to reduce localized flooding for a 90 acre portion of the watershed of the Winter Haven Chain of Lakes which is a SWIM Waterbody. Of the seven acre total project area, four acres were utilized for stormwater treatment. The existing wastewater percolation ponds were retrofitted as wet detention ponds to provide stormwater treatment of the runoff from the first 1.25 inches of rainfall, Sediment excavated from the existing percolation ponds was tested for Fecal Coliform, nutrients and Toxic Contaminant Leaching Potential (TCLP) to verify the material met the criteria established under Chapter 17-640 of the Florida Administrative Code (FAC) for the disposal of waste water residuals. It was originally estimated that nine tons of Total Nitrogen and six and one-half tons of Total Phosphorus was removed with the sediment from this site and disposed of in accordance with FDEP approval. Over 25,000 aquatic plants were placed in the littoral zone. The remaining three acres of property have been sodded to allow for passive recreation and to educate visitors through the use of signs depicting native fish, water fowl and aquatic vegetation. Water quality monitoring is being performed to determine the pollutant load reductions achieved at this facility.

Reference:

Kollinger, R.J., 1999, Stormwater Retrofit of the Abandoned Jan-Phyl Wastewater Treatment Plant Site, Proceedings of the Sixth Biennial Stormwater Research and Watershed

Management Conference, September 14-17, 1999, p. 238-247.

3.1.18 Water Quality Assessment of Permitted Stormwater Management Systems

Summary: Preliminary results of a water quality study, performed as part of the St. Johns River Water Management District's, on-going strategy to evaluate the effectiveness of the stormwater rule, found discharges from stormwater treatment facilities to cause violations of Florida's water quality standards for copper, dissolved oxygen, total suspended solids, and zinc. Permitted wet treatment facilities with varying design criteria that serve different land uses are sampled on a monthly basis for variables associated with stormwater runoff. Samples are collected at the treatment facility outfall (discharge), and downstream (affected) and upstream (unaffected) in the receiving waters. Comparison of data to applicable State water quality standards found copper to exhibit the highest percentage of violations followed by dissolved oxygen, total suspended solids, and zinc. Levels of arsenic, cadmium, chromium., iron, and nickel did not violate state standards. Additional data is being collected to allow for future correlations between the water quality data, fertilization and best management practices, and treatment facility design criteria.

Reference:

Nepshinsky, J., Dewey, C., Victor, P., and Brown R., 1995, Water Quality Assessment of Permitted Stormwater Management Systems, St. Johns River Water Management District, 12 p.

3.1.19 Effectiveness of a Stormwater Collection and Detention System for Reducing Constituent Loads from Bridge Runoff in Pinellas County, Florida

Summary: The quantity and quality of stormwater runoff from the Bayside Bridge were evaluated to determine the effectiveness of the stormwater collection and detention pond system of the bridge in reducing constituent loads to Old Tampa Bay. Water quality samples of stormwater runoff from the bridge, and outflow from the detention pond, were collected during and after selected storms. These samples were used to compute loads for selected constituents. Stormwater on the Bayside Bridge drained rapidly during rain events. The volume of stormwater runoff from 24 storms measured during the study ranged from 4,086 to 103,705 cubic feet. Storms were most frequent during July through September and were least frequent from February through May. Concentrations of most constituents in stormwater runoff before the bridge opened to traffic were less than or equal to concentrations measured after the bridge was opened to traffic. However, concentrations of arsenic in the outflow from the detention pond generally were greater before the bridge opened than concentrations after, and concentrations of orthophosphorus in the stormwater runoff and outflow from the pond were greater before the bridge opened than during over half the sampled storms after the bridge opened. Concentrations of most constituents measured in stormwater runoff from the bridge were greatest at the beginning of the storm and decreased as the storm continued. Variations in suspended solids, nutrients, and trace element concentrations were not always concurrent with each other. The source of the measured constituent (rainfall or road debris) and the phase of the constituent (suspended or dissolved) probably affected the timing of concentration changes. The quality of stormwater runoff from the Bayside Bridge varied with total runoff volume,

with the length of the dry period before the storm, and with season. Average concentrations of suspended solids, ammonia plus organic nitrogen, nitrite plus nitrate nitrogen, orthophosphorus, phosphorus, total organic carbon, aluminum, arsenic, copper, and zinc in stormwater runoff generally were inversely related to runoff volume. The quality of outflow from the detention pond also varied during a storm event and with season. Maximum concentrations generally occurred near the beginning of a storm, and decreased as the storm continued. Maximum concentrations of many constituents occurred in June and July 1995. During the summer months, pH exceeded 9.0 while inorganic nitrogen concentrations were very low. These high pH values and low inorganic nitrogen concentrations are most likely associated with photosynthesis by algae or aquatic plants in the pond. Concentrations of nitrogen, phosphorus, and nickel in stormwater runoff were correlated with total organic carbon concentrations. Concentrations of chromium, copper, iron, nickel, lead, and zinc in stormwater runoff were correlated with aluminum concentrations. The source of these metals is probably the bridge materials and metallic debris from vehicles. The northern detention pond system of the Bayside Bridge effectively reduced concentrations of suspended solids, ammonia nitrogen, nitrite plus nitrate nitrogen, phosphorus, aluminum, cadmium, chromium, copper, iron, lead, nickel, and zinc in stormwater runoff before water discharged from the pond. However, concentrations of ammonia plus organic nitrogen, organic carbon, arsenic, and values for alkalinity, pH, and specific conductance generally were greater in outflow from the pond than in stormwater runoff from the bridge. Stormwater runoff and pond outflow for three storm events were evaluated to determine the effective ness of the detention pond system in removing selected constituents from the stormwater runoff. Most constituents and constituent loads were reduced in the outflow from the pond. Suspended solids loads were reduced about 30 to 45 percent, inorganic nitrogen loads were reduced by about 60 to 90 percent, and loads of most trace elements were reduced by about 40 to 99 percent. However, the pond exports ammonia plus organic nitrogen, organic carbon, arsenic, and phosphorus. The source of most of these constituents probably is biological activity in the pond. The export of arsenic and the elevated concentrations of arsenic in the pond outflow before the bridge opened implies that arsenic is stored in the pond sediments and is being released to the overlying pond water. Schiffer (1989) studied the water quality of two wetlands that receive stormwater and reported that water quality improved significantly from the inlet to the outlet of the pond and wetland system. Rushton and Dye (1993) reported that removal rates of selected nutrients and metals in a wet detention pond were between 30 to 60 percent. Kantrowitz and Woodham (I 995) reported that a wet detention pond in Pinellas County was effective in removing selected metals, nutrients, suspended solids, and in reducing oxygen demand.

Reference:

Stoker, Y.E., 1996, Effectiveness of a Stormwater Collection and Detention System for Reducing Constituent Loads from Bridge Runoff in Pinellas County, Florida, U.S. Geological Survey, Open- File Report 96-484.

3.1.20 Pollutant Removal Efficiencies for Typical Stormwater Systems in Florida

Summary: A literature review was conducted of previous research performed within the State of Florida which quantifies pollutant removal efficiencies associated with various stormwater management systems. Comparative removal efficiencies were obtained and summarized for dry retention, wet retention, off-line retention/detention systems, wet detention, wet detention with filtration, dry detention with filtration, and dry detention. Estimated pollutant removal efficiencies were generally available for total nitrogen, orthophosphorus, total phosphorus, TSS, BOD, copper, lead and zinc. Of the stormwater management systems evaluated, only dry retention systems are capable of meeting the State Water Policy Goal of 80% reduction for pollutant inputs. Off-line retention/detention facilities are capable of meeting the 80% reduction goal for total phosphorus, TSS, BOD and zinc, but provide only a 60-75 % annual pollutant reduction for total nitrogen, copper and lead. Wet retention systems can meet the 80% reduction goal for TSS only, with removal efficiencies from 40-50% for total nitrogen, total phosphorus and BOD. Good pollutant removal efficiencies are achieved in wet detention systems for orthophosphorus, total phosphorus, TSS, BOD and heavy metals, although removal efficiencies are less than 80%. Dry detention with filtration systems were found to exhibit a high degree of variability in estimated removal efficiencies. The actual removal efficiencies achieved by these systems is a function of the relationship between the underdrain system and the seasonal high groundwater table. Overall, the most effective stormwater management systems in terms of retaining stormwater pollutants appear to be dry retention, off-line retention/detention ponds, wet retention, and wet detention systems. The use of these systems should be emphasized to maximize the pollutant removal effectiveness of stormwater management programs.

Reference:

Harper, H.H., Pollutant Removal Efficiencies for Typical Stormwater Systems in Florida, Environmental Research & Design, Inc., 3419 Trentwood Blvd., Suite 102, Orlando, Florida 32812-4863, 11 p.

3.2 Wetland Systems

3.2.1 Hydromentia, Inc. S154 Basin Aquatic Plant Based Water Treatment System Prototype

Summary: As one of the thirteen state-funded projects under the Phosphorus Source Control Grant Program, the S-154 Aquatic Plant Based Water Treatment (APBWT) System Prototype is a small scale pilot facility designed to demonstrate the applicability of managed biological treatments for nutrient removal. Operated by Hydromentia, Inc. (HMI), this prototype reduces phosphorus through a two stage treatment process. The first stage consists of water hyacinths, while the second stage consists of algal turf scrubbers. By managing and harvesting the unit processes, the system is being evaluated for maximizing P reduction and estimating scale up costs, while formulating a strategy for the marketability of a useable end product. The prototype has averaged an approximate P concentration reduction of 83% over the first nine months of operations.

Reference:
http://www.sfwmd.gov/org/wrp/wrp_okee/projects/PsourceControlLinks/WebPage/Hydromentia.html

3.2.2 Integrating a Herbaceous Wetland into Stormwater Management

Summary: The large number of natural wetlands and the rapid population growth in Florida make using existing isolated wetlands an attractive alternative for stormwater treatment. Uncertainty exists, however, in their ability to absorb the increased peak volumes and higher levels of pollutants found in urban runoff. This study evaluated the effectiveness of a marsh to treat stormwater, compared water quality results to State water quality standards and documented the effects of urban runoff on marsh vegetation and sediments. This project incorporated an existing isolated wetland as part of a stormwater system at an office complex. The wetland was a 3 acre herbaceous marsh which had historically received most of its hydrologic input directly from rainfall and a small amount of runoff from surrounding native pine forests; therefore, it was characterized by low levels of nutrients, dissolved oxygen, pH and conductivity. After development, it also received hydrologic input from urban runoff (15.3 acres in an office park), which had received some pre-treatment from sedimentation basins. The 0.175 acre east sedimentation basin received its runoff from a central roadway and the 0.012 acre west basin collected runoff from a parking lot and a portion of an office building before discharging into the marsh. To study the effect of stormwater on the marsh, automatic data recording stations were installed to measure water quality and quantity as it was discharged from the sedimentation basins and again as it was discharged from the marsh. A rainfall station measured these parameters for rain. Analysis of 81 storm events during the 30 month study provided extensive water quality and hydrologic data. Removal efficiencies (i.e. the sum of pollutant load from rainfall and surface water inputs compared to pollutant loads at the outflow) indicate the marsh effectively reduced the following: cadmium by 92 percent, inorganic nitrogen, suspended solids and zinc by at least 85 percent, and copper and phosphorus by at least 71 percent. Removal efficiencies were good because only 27 percent of the water measured coming into the marsh was discharged, the rest was lost by evapotranspiration and infiltration. Marshes can be effective at removing stormwater pollutants, but changes in the physical and chemical properties of the marsh will occur. The sedimentation basins had significantly higher levels of pH, dissolved oxygen, oxidation reduction potential and conductivity than was measured in the marsh but higher levels of these parameters were starting to be measured in the marsh by the end of the study. Event mean concentrations measured at the outflow exceeded State standards in effect after 1992 by the following percentages: Lead 62%, zinc 23%, copper 44%, and cadmium 2%. One reason for the high noncompliance were the result of the soft water that is typical of many natural wetlands. Soft water makes metals more toxic to organisms, therefore, the standard is hardness dependent and wetlands that receive much of their input from rainfall exceed standards more often for equal concentrations of metals. Rainfall was found to be a source of inorganic nitrogen and zinc to the marsh. Total annual rainfall on the marsh represented 45 percent of the annual hydrologic input which approximately equaled the evapotranspiration loss of 41 percent. Surface water inflow accounted for 55 percent of total input and 27 percent of output, while net seepage accounted for 31 percent of the outflow from the marsh. Dominant plant species with the highest percent cover in the marsh were maidencane, pickerelweed, water-lily and arrowhead. Detailed vegetation analyses and historical aerial photographs documented an increase in nuisance plant species such as primrose willow and cattail which first appeared in areas where the wetland margins had been altered with steeper slopes. Subsequently the nuisance species invaded the marsh itself. Soil cores indicate the marsh and sedimentation basins have mineral soils and all concentrations of pesticides, organic priority pollutants, and PCB were below detectable levels. The soils in the west basin contained toxic levels of zinc, probably from roof runoff, and the zinc was increased at the inflow station in the marsh. Correlation analysis showed that phosphorous concentrations increased during extended periods between rainfall events. Other relationships indicate that as total suspended solids increase so do iron, lead, copper, and ammonia. A large wetland to drainage basin ratio should be encouraged. Significant mass pollutant removal occurred in the marsh because only 27 percent of the hydrologic input to the marsh was actually discharged at the outflow. A large wetland to watershed ratio will also protect against detrimental changes in hydroperiod. To maintain the existing integrity of the marsh and avoid the adverse impact of invasive plant species, emphasis should be placed on maintaining an undisturbed upland buffer zone around the wetland. Inspections and maintenance should be required to minimize the impact of non-native and invasive plant species in areas within and adjacent to natural wetlands and invasive species removed. Toxic zinc levels in the sediments of the west basin suggests the need for an operation and maintenance guideline for the periodic removal of accumulated pollutants from pretreatment ponds. The problem of pollutants in atmospheric deposition needs to be addressed by source reduction. The low pH, conductivity and dissolved oxygen typical of many natural wetlands reduces their effectiveness for removing metals and phosphorus.

Reference:

Carr, D.W., and Rushton, B.T., 1995, Integrating a Native Herbaceous Wetland into Stormwater Management, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609, 131 pages.

3.2.3 Effectiveness of an Urban Runoff Detention Pond - Wetlands System

Summary: The effectiveness of a detention pond and wetlands in series in reducing constituent loads carried in runoff was determined. The detention pond was effective in reducing loads of suspended solids and suspended metals. Suspended phase efficiencies for solids, lead, and zinc ranged between 42 and 66%. Nutrient efficiencies were variable, ranging for all species and phases from less than 0 to 72%. The wetlands generally were effective in reducing both suspended and dissolved loads of solids and metals. Total (dissolved + suspended) solids, lead, and zinc efficiencies ranged between 41 and 73%. Efficiencies for total nitrogen and phosphorus were 21 and 17%. The system, by combining the treatment of the pond and wetlands, was very effective in reducing loads of most constituents. Total solids, lead, and zinc efficiencies ranged between 55 and 83%. Total nitrogen and phosphorus efficiencies were 36 and 43%. The Stormwater Detention Facility, comprising part of the Orlando, Florida, urban drainage system, is composed of a detention pond and wetlands in series. The efficacy of the detention system in reducing constituent loads carried in runoff was evaluated. Measurements show the pond was effective in reducing loads of suspended solids and

metals. Suspended-phase efficiencies for solids, lead, and zinc were in the 42-66% range. Nutrient efficiencies were variable, ranging for all species and phases from less than 0 to 72%. The wetlands generally were effective in reducing both suspended and dissolved loads of solids and metals.

Reference:

Martin, E. H., 1988, Effectiveness of an Urban Runoff Detention Pond - Wetlands System, Journal of Environmental Engineering (ASCE) JOEDDU, Vol. 114, No. 4, p 810-827, August 1988, 4 fig, 5 tab, 11 ref.

3.2.4 Management of Stormwater Runoff for Water Quality Using an Isolated Natural Wetland

Summary: The management of stormwater runoff water quality will become increasingly important into the 21st century as more natural lands succumb to development. Wetlands are a valuable resource for they are natural water quality filters and enhance groundwater recharge. Utilizing certain natural wetlands for stormwater treatment was approved by the Florida legislature in 1984 (Chapter 17-25, Florida Statutes). Despite legislative approval, the ability of natural wetlands to treat stormwater as well as the extent to which the wetlands themselves are effected have been questioned. Two objectives of the study were: 1) to assess the effectiveness of a natural wetland to treat stormwater runoff and 2) to document the effect of stormwater treatment on wetland vegetation. Flow-weighted water quality samples were taken at each inflow and outflow as well as rainfall and pollutant load removal efficiencies were calculated. Two detailed vegetation analyses were conducted during the study and results were reported as percent cover. During the two and one-half year study, eighty three storm events were sampled for water quality. Dry

season pollutant removal was better than the wet season. Pollutant removal during the 1992/1993 period (wet & dry seasons) was better than 1991/1992. Negative Fe (-15%) and Mn (-44%) mean removal efficiencies were detected during the wet seasons. Negative TKN (-5%), TON (-12%) and Fe (-8%) mean removal efficiencies were detected during the 1991/1992 period. A total of 34 and 40 plant species were observed during the 1992 and 1993 detailed vegetation analyses, respectively. Dominant species (including cover types) were Panicum hemitomon, open water, Pontederia cordata, litter and Nymphaea odorata. Physical alteration to the south edge of the wetland and construction of a sediment basin facilitated establishment of Typha latifolia, Typha domingensis, Ludwigia peruviana and Mikania scandens (nuisance plant species). None of these nuisance species were observed at the natural north edge.

Reference:

Carr, D.W., 1994, Management of stormwater runoff for water quality using an isolated natural wetland, Lake Reserv. Manage., vol. 9, no. 2, p. 63, 1994.

3.2.5 Overview of the Lake Jackson Restoration Project with Artificially Created Wetlands for Treatment of Urban Runoff

Summary: The Northwest Florida Water Management District engaged in a federally funded Clean Lakes Restoration Project for Lake Jackson in Tallahassee, Florida, during the late seventies. Construction on this experimental $2.6 million stormwater treatment facility was begun in 1981 with completion in 1983. The design employed a three step process to remove sediment and nutrients from urban runoff prior to entering the lake. The first two steps entail the detention of the stormwater in a 20-acre impoundment followed by passage through a four-acre filter with an underdrain collection system. The final step consists of the partially treated stormwater flowing to a nine-acre artificial marsh for further sediment removal and nutrient assimilation. The entire process has been monitored to determine the effectiveness of the various steps within the project. A recent report concludes that while the stormwater facility works well (>90% removal of solids by the filter/60-65% removal of nutrients by the marsh) there remain operational deficiencies. One of the major deficiencies cited was the exceedance of the total volume of the impoundment by more than half of the large storms monitored. These larger storms also bypass treatment by the created wetlands in the artificial marsh. Several proposed projects address this concern and would implement measures to help alleviate the current burden on the facility.

Reference:

Esry, D.H., and Cairns, D.J., 1989, Overview of the Lake Jackson Restoration Project with Artificially Created Wetlands for Treatment of Urban Runoff, p. 247-257, in: D.W. Fisk (ed.), Wetlands, Concerns and Successes. Proceedings, American Water Resources Association Symposium in Tampa, Florida, Sept. 17-22, 1989.

3.2.6 Fate of Phosphorus from Residential Stormwater Runoff in a Southern Hardwood Wetland

Summary: The movement and fate of phosphorus inputs from residential stormwater runoff were investigated in a 1.0 hectare hardwood wetland near Sanford, Florida. This wetland receives stormwater runoff from a large residential community through a small shallow canal and provides treatment prior to discharge to Hidden Lake. Field investigations were begun in 1984 and were

divided into the following tasks: (1) assessment of the quantity of nutrients and heavy metals entering the wetland by way of stormwater runoff, (2) measurement of the attenuation of these pollutants during travel through the wetland, (3) monitoring of the concentrations of nutrients and heavy metals in groundwaters, (4) accumulation of nutrients and heavy metals in the sediments of the wetland, (5) examination of the typical chemical associations binding nutrients and heavy metals to the sediments using sequential extraction procedures, and (6) investigation of the importance of redox potential and pH on metal-sediment stability with regard to the release of phosphorus from wetland sediments. After entering the wetland treatment system, stormwater inputs were observed to exhibit general reductions in pH, specific conductivity, dissolved oxygen, ORP and alkalinity with increasing flow distance. Concentrations of both dissolved orthophosphorus and total phosphorus increased during flow through the wetland system and were found to be closely correlated to decreases in pH and ORP. A stagnant control area, removed from runoff influence was found to exhibit elevated concentrations of phosphorus when compared to the flowpath area. Water quality characteristics in groundwaters beneath the flowpath were very similar to surface water characteristics, with dissolved oxygen and ORP levels decreasing with depth, whereas phosphorus concentrations increased. Groundwaters in the stagnant control area exhibited significantly elevated concentrations of phosphorus, TOC, color, and iron when compared to groundwaters in other locations. Patterns of accumulation and deposition of sediment bound phosphorus along the wetland flowpath were investigated and found to increase substantially from the inlet canal to a distance of 50 m after which they declined slightly throughout the remainder of the wetland flowpath. Also apparent was the attenuation of sediment phosphorus concentrations with increasing sediment depth, with the majority of the phosphorus being retained in the top 10 cm. The removal potential for dissolved orthophosphorus in wetland systems was found to be greatest in flow-through systems with sediment contact based on kinetic rate experiments performed at the study site. The majority of the dissolved orthophosphorus removal, 75 percent was found to occur within the first 24 hours of contact with the wetland sediments after which only slight decreases in concentration occurred. Stagnant systems as well as systems with less sediment contact were not effective in providing attenuation of dissolved orthophosphorus concentrations as well as other water quality parameters.

<u>Reference</u>:

Fries, B.M., 1986, Fate of Phosphorus from Residential Stormwater Runoff in a Southern Hardwood Wetland, Thesis, Master of Science in Engineering, University of Central Florida, Orlando, Florida.

3.2.7 <u>Utilization of a Freshwater Marsh to Treat Rainfall Runoff from Upland Pasturelands</u>

<u>Summary</u>: A freshwater wetland system in Osceola County, Florida is being used to detain and store agricultural and stormwater runoff. In this process, some degree of treatment is provided, thereby improving water quality. Monitoring of meteorological and hydrological conditions at the site indicates that a first flush phenomenon of nutrients from pastureland occurs simultaneous with the beginning of rains. Mean concentrations of nitrogen and phosphorus are lower in effluent leaving the marsh

than in influent. The marsh acted as a sink for some 3980 kg of total nitrogen and 835 kg of total phosphorus during a nine-month study period.

Reference:

Goldstein, A.L., 1982, Utilization of a Freshwater Marsh to Treat Rainfall Runoff From Upland Pasturelands, Presented at Univ. of Florida *et al*, Nonpoint Pollution Control Technology in Florida Symposium, Gainesville, Florida, March 9-10, 1982, page 106-126.

3.2.8 Stormwater Treatment by Natural Systems

Summary: A study was undertaken to evaluate the feasibility of using wetlands to treat sporadic inputs of stormwater runoff using a Florida wetland. The following tasks were undertaken: 1) characterization of rainfall and runoff inputs into the wetland system, 2) monitoring of hydrological quantities in and out of the wetland, 3) characterization of surface and groundwaters along the wetland flow path and in isolated control areas, 4) investigation of the horizontal and vertical migration of nutrients and heavy metals in wetland sediments 5) determination of the chemical speciation of phosphorus and heavy metals in the sediments and the effect on the ability of the sediments to retain pollutants, 6) determination of the influence of pH and redox potential on the chemistry and stability of phosphorus and heavy metals in the sediments 7) examination of the rate of uptake and removal of nutrients and heavy metals during flow through the wetland 8) examination of the physical mechanisms and characteristics that enhance pollutant removal to aid in development of specific design suggestions, and 9) examination of changes in algal productivity due to stormwater flow through bioassay experiments. The report includes a literature review of pollutant removal mechanisms in wetlands,

characteristics of urban stormwater drainage, and experiences of wetland treatment of stormwater runoff. The literature review is followed by a site description, experimental methodology, results, and discussion. Among the general results was the finding that nitrate is rapidly removed from the water column under reduced conditions and maximum removal of total nitrogen occurred after 48 hours. Phosphorus uptake is primarily sediment mediated and is optimized at flow rate of one meter per second or less. Phosphorus is rapidly adsorbed by sediments under aerobic conditions, but is released under reduced conditions and pH values of less than 5.5. Flow path sediments clearly retained a large portion of some metals, including nickel, chromium, aluminum, and iron, while lead, cadmium, and copper were not retained to as great a degree. The authors made the following recommendations concerning the use of wetlands for stormwater treatment: 1) wetland systems best suited for modification for use as stormwater management systems are those that already exhibit relatively long hydroperiods, 2) runoff inputs into wetland treatment systems should be attenuated and released slowly into the system to avoid erosion or high flow velocities that reduce opportunities for adsorption, 3) inflow should be spread evenly over the flow path, 4) retention times should not exceed 48 hours to avoid reduction in uptake potential of sediments and release of pollutants back into the water column, and 5) flow velocities should not exceed one meter per second.

Reference:

Harper, H.H., Wanielista, M.P., Fries, B.M., and Baker, D.M., 1986, Stormwater Treatment by Natural Systems, Florida Department of Environmental Regulation, Star Project number 84-026, 331 pages.

3.2.9 Ecology, Hydrology, and Advanced Wastewater Treatment Potential of an Artificial Wetland in North-Central Florida

Summary: Two artificial marsh/pond systems with a combined area of 21 ha were studied during a one-year period. Since their construction in 1978, volunteer plant colonization has resulted in a shifting mosaic of cattails (Typha spp.), water pennywort (Hydrocotlye umbellata), frog's-bit (Limnobium spongia), duckweed (Lemna spp.), and other less abundant species. At least 45 bird species were observed to use the wetlands during this study with very dense populations noted for several wetland-dependent species. Alligators, fish, turtles, and snakes were abundant in the ponds. The ponds operate as flow-through systems, receiving an average treated wastewater application of 4.8 cm per week. Mass balances indicated significant percent removals for biochemical oxygen demand (82%), total suspended solids (80%), and total nitrogen (93%). Removal of total phosphorus was lower, averaging 31% over the one-year study.

Reference:

Knight, R.L., Winchester, B.H., and Higman, J.C., 1985, Ecology, Hydrology, and Advanced Wastewater Treatment Potential of an Artificial Wetland in North-Central Florida, Wetlands 5: 167-180 (Journal of the SWS).

3.2.10 Artificial Wetlands as Nonpoint Source Wastewater Treatment Systems

Summary: The use of a meadow/marsh/pond natural system for the treatment of agricultural runoff from individual farms was assessed. The primary concern was the ability of these small systems to remove nitrogen and phosphorus to the extent necessary to make them cost-effective and energy-conservative eutrophication abatement devices for the Kissimmee agricultural

region in Central Florida. Design parameters were defined for meadow/marsh/pond systems that would be capable of meeting the nitrogen and phosphorus effluent requirements for discharge.

Reference:

Small, M.M., 1978, Artificial Wetlands as Nonpoint Source Wastewater Treatment Systems, In: Environmental Quality Through Wetlands Utilization, Proceedings from a Symposium Sponsored by the Coordinating Council on the Restoration of the Kissimmee River, Feb 28, Tallahassee, Florida.

3.2.11 A Survey of the Water Quality of Wetlands-Treatment Stormwater Ponds

Summary: Wetlands are associated with the transition from upland to aquatic ecosystems and provide many natural amenities to society including flood control, water quality enhancement, and fish and wildlife habitat. Although surface runoff is a natural source of hydrologic inputs to wetlands and surface waters, non-point sources of pollution associated with human activities make stormwater runoff a major source of degradation of surface waters in Florida. This study investigated the ability of natural wetlands to treat stormwater without degrading the wetland while still meeting State water quality standards at the outflow. A water-quality survey of stormwater treatment systems that employed wetlands-treatment with pretreatment and natural wetlands was conducted. The survey provided regional stormwater data, and documented the exceedence (non-compliance) of State water-quality standards at points of discharge from wetlands-treatment systems. Additionally, statistical analysis of relationships among survey variables provided insight about factors that affect water quality in wetlands-treatment systems. Total percent exceedence of water-quality standards at the twelve wetland outfalls focused attention

on variables that frequently exceeded standards in the Wetlands-Treatment Survey (and also the Twenty-Four Pond Survey). Wetland treatment systems failed to meet standards while discharging for: dissolved oxygen 70%, cadmium 37%, zinc 27% and copper 2% of the time. The anaerobic characteristics of many wetlands may account for the fact that percent exceedence was much higher for dissolved oxygen and total cadmium in the Wetlands-Treatment survey than the exceedence for these parameters found in the 24 pond survey. In overall paired statistical comparisons, pre-treatment stations had greater average depths, temperature, dissolved oxygen, pH, zinc, and copper than wetland outfalls, suggesting that natural wetlands are generally effective in reducing some constituents. Notable water-quality relationships observed during the survey suggest that an equilibrium between primary production (*i.e.*, photosynthesis), aerobic (microbial) respiration, and temperature are responsible for temporal and spatial dissolved oxygen distribution. Results also suggest that pH-mediated mechanisms and oxidation-reduction potential affect heavy metal concentrations. Numerous factors were probably involved in establishing ambient water quality at the two stations in the survey wetlands-treatment systems. There were indications of water quality variability between wetlands and of seasonal fluctuations in the data, a result that agrees with the variability noted in an earlier study of 24 wet-detention systems. The data suggest that hydrologic conditions may have a significant impact on constituent concentration and the roles of sediments in samples, internal sediment and biogeochemical cycles, plant and algal cycles, and rainfall and runoff sources of metals. There is potential for both positive and negative impacts when using natural wetlands as part of a stormwater treatment system. Stormwater provides the hydrologic input that may be necessary to keep the wetland viable, but the stormwater it receives may change the character of the wetland. For example, pH and dissolved oxygen were measured at much lower concentrations in wetland water than in stormwater in the pre-treatment basin. Natural wetlands may not meet water quality standards as well as constructed wetlands. Dissolved oxygen, for example, was in non-compliance in the discharge water of natural wetlands 75 percent of the time compared to 40 percent, in constructed wetlands. The use of fountains in many constructed ponds likely caused this result. Some metals were also more problematic in natural wetlands. Toxic levels of cadmium exceeded standards in the discharge water 37 percent of the time compared to 10 percent in constructed ponds. For zinc exceedences were about the same (27% for natural vs. 31% in constructed). Other toxic pollutants were more common in constructed wetlands. Copper noncompliances were higher in constructed wetlands (2% for natural and 12% for constructed) probably caused by maintenance practices in constructed ponds. Lead never exceeded standards in natural wetlands but was measured at toxic levels 8 percent of the time in the discharge water of constructed ponds.

Reference:

Kehoe, M.J., Dye, C.W., and Rushton, B.T., 1994, A Survey of the Water-Quality of Wetlands-Treatment Stormwater Ponds, Southwest Florida Water Management District, 42p.

3.3 Filtration Systems

3.3.1 Naturally Selected Biologically Activated Deep-Bed Slow Sand Filtration for the Enhancement of Water Quality Facilitated by Irrigation Quality Utility Facilities

Summary: The objective of this project is to determine the effectiveness of a naturally selected biologically activated deep bed slow sand filtration system for a stormwater treatment reuse system in which the pond water that has visible algal mass and one that has no visible algal mass.

Reference: Ongoing (December 30, 2003 until December 29, 2006), Dr. Marty Wanielista, Stormwater Management Academy University of Central Florida.

3.3.2 Demonstration of the Tampa Filter BMP for the Removal of Nitrogen from Stormwater Runoff

Summary: The objective of this study is to evaluate a new technology for the enhancement of nitrogen removal in stormwater to supplement or enhance other commonly utilized BMPs in Florida. The Tampa Filter is a stormwater treatment filter design that uses natural zeolites (chabazites and cliniptilolotes) as filtration media to enhance nitrogen removal from stormwater. Specific study objectives are defined as follows: 1) evaluate the physical response of the zeolite filter to varying hydraulic conditions, including loss of hydraulic conductivity over continued operation, 2) evaluate the ability of the zeolite filter to remove total nitrogen and nitrogen species, and the removal response to varying applied stormwater flow rates and quality, 3) demonstrate operational methods that support and sustain nitrification and denitrification and optimize nitrogen removals over extended periods of filter operation, and 4) estimate the overall efficiency and design requirements for a full scale Tampa Filter system that will include pre-sedimentation, a zeolite filter unit, and post-treatment with free surface man-made wetlands, littoral treatment, or other denitrification enhancing media.

Reference: Ongoing (January 21, 2004 until January 20, 2006), Hillsborough County Stormwater Program, Berryman and Henigar.

3.3.3 Packed Bed Filter System

Summary: Three square miles of highly developed urban area drains into Clear Lake and ultimately into the Shingle Creek drainage system. Clear Lake is a 360 acre lake in the southwest section of Orlando. It has had significant water quality problems over the past decade. Clear Lake is characterized by high chlorophyll a concentration, low light penetration and high nutrient levels. The Florida trophic state index has ranged between 60 and 75. Based on estimated index has ranged between 60 and 75. Based on estimated pollutant loadings, there was a clear need for a treatment system to effectively remove a high percentage of biological oxygen demand (BOD), suspended solids, total nitrogen and total phosphorus. Since best management practices were not available in this built out environment, an innovative method of stormwater treatment was needed. Therefore, the treatment facility known as the Packed Bed Filter system was constructed. This system is comprised of 10 discrete unit operations designed for contaminate removal. Each bed can be varied for resident time, filter media and wetland plantings to determine the optimal treatment. There is also a recirculation system that allows treatment of Clear Lake water during periods of insufficient stormwater runoff.

Reference:

Howard, R.M., 1994, Packed bed filter system, Lake Reserv. Manage, vol. 9, no. 2, p. 83.

3.3.4 The Demonstration Project and Stormwater Management

Summary: A monitoring project was designed to measure pollutant concentrations as well as the amount of water discharged from an effluent filtration (underdrain) system during storm events. The system was analyzed for water quality discharged from a stormwater pond that ultimately flows into the Tampa Bay estuary in Florida. The volume of stormwater runoff was also measured to estimate a water budget for the system. Also, the water quality and flow discharged through the underground filter system on a daily basis was quantified. The data in this report include nineteen rain events and concluded the first year of the study, which was designed to collect background data before making recommendations and improvements to the systems for phase II of the project.

Reference:

Huneycutt, D., 2002, The Demonstration Project and Stormwater Management, In: Seventh Biennial Stormwater Research & Watershed Management Conference May 22-23, 2002, p. 213-222.

3.4 Vegetation Systems (Biofilters) Systems

3.4.1 Enhanced Erosion and Sediment Control Using Swale Block

Summary: Earthen cross barriers, or swale blocks, can be used to increase retention of stormwater runoff from highways in grass swales to increase retention of solids for reduction of sediment loadings to permanent watercourses. According to this report, at one site in Florida, 3 swale blocks in a long swale in Florida were effective at retaining water and solids.

Reference:

Wanielista, M.P., Yousef, Y.A., et al., 1986, Best Management Practices - Enhanced Erosion and Sediment Control Using Swale Block, Florida Department of Transportation.

3.4.2 Removal of Highway Contaminants by Roadside Swales

Summary: The removal of heavy metals, nitrogen and phosphorus species on a mass basis is directly related to infiltration losses through swales. Therefore, retention of as much water as possible on the swale area will reduce the highway pollutant loadings to receiving waters. Removal efficiency is higher for metals than for nitrogen or phosphorus. Heavy metals in highway runoff with large particulate fractions show higher removal efficiencies.

Reference:

Yousef, Y.A., Wanielista, M.P., *et al.*, 1985, Best Management Practices - Removal of Highway Contaminants by Roadside Swales, Fl-ER-30-85, Florida Department of Transportation, Tallahassee, Florida; FDOT-ER-34-86.

3.4.3 Maitland Swale Biofilter - Grass Swale Orlando, Florida

Summary: The site for this investigation is located at the intersection of Interstate 4 and Maitland Blvd., north of the City of Orlando in Orange County, Florida. Maitland Blvd. crosses over Interstate 4 by means of a bridge overpass created during the construction of the interchange in 1976. The traffic lanes on the interstate are separated by a 6 meter grassy median which widens to 13.5 meters through the interchange. The Maitland Blvd. Bridge consists of two sections: one carrying two lanes of east bound traffic plus one exit lane and the other carrying two lanes of west bound traffic plus one exit lane. The section carrying west bound traffic spans 168 meters with a 16 meter roadway and a 16 meter horizontal clearance. The section carrying east bound traffic spans 163 meters and also with a 16 meter roadway and 16 meter horizontal clearance. The average annual daily traffic volume on Maitland Blvd is 15,000 vehicles per day. Interstate 4 has three lanes of traffic east and west bound through the Maitland Interchange. The traffic volume on Interstate 4 through the Maitland Interchange is approximately 45,000 ADT in each direction. A grassy swale along the eastern side of Ramp A was selected for this investigation. This swale was used because of its accessibility and the availability of a continuous source of runoff water from a drain located at the bottom of the swale. The drain connects to the west pond via a 36 inch diameter RCP. The experiments conducted at this site used a submersible pump placed at the downstream stormwater inlet. The water was spiked with a concentration of heavy metal (Pb, Cd, Zn, Cr, Cu, Ni, and Fe) and nutrients (P and N) in concentrations typical of highway runoff. The spiked water traveled a distance of 175 ft. From the results obtained, it appears that ionic species of metals, nitrogen and phosphorous species may be retained on the swale site by sorption, precipitation, co-precipitation and biological uptake processes. These processes can reduce pollutant concentration in highway runoff flowing over swales. Occasional increases in dissolved highway contaminants were observed at intermediate stations during swale experiments particularly close to the inflow point. This may result from the initial flow resuspension and resolubilization of loosely bound contaminants. The removal of heavy metals, nitrogen, and phosphorous species on a mass basis was directly related to the infiltration losses through swales.

Therefore, retention of as much water as possible on the swale area will reduce the highway contaminant loadings to adjacent receiving waters. Recommendations for the construction of roadside swales are presented. The information in the document is limited to a small number of storms and, thus, may provide only minimal data for the efficiency analysis of the swale in question.

Reference: International Stormwater BMP Database Basic Database

Yousef, Y.A., Hvitved-Jacobsen, T., Wanielista, M.P., Harper, H.H., Hamilton, R.S., Harrison, R.M., (eds), 1987, Removal of Contaminants in Highway Runoff Flowing through Swales, Special Issue: Highways Pollution Proceedings of the Second International Symposium, London, United Kingdom, 7-11 July 1986, 1987, pp. 391-399, Sci. Total Environ, vol. 59, Dep. Civ. Eng., Univ. Central Florida, Orlando, Florida 32816-0093, USA

3.4.4 EPCOT Swale Biofilter - Grass Swale Orlando, Florida

Summary: The EPCOT interchange was constructed during 1982-83 as a 0.8 mile multilane connector between the EPCOT entrance and SR 535. The interchange is approximately 1.5 miles southwest of the I-4/SR535 interchange and 2.4 miles northeast of the I-4/US 192 interchange, near Lake Buena Vistas in Orange County, Florida. Watershed size is unknown. The swale area selected for this study was a newly constructed swale along ramp A which connected the EPCOT Center Exit to the westbound lanes of I-4. Two experiments were conducted at this site, one in a predominately earthen state before the establishment of vegetation in the swale, and the other after vegetation had become established. The experiments conducted at this site used a submersible pump placed at the downstream stormwater inlet. The water was spiked with a concentration of heavy metals (Pb, Cd, Zn, Cr, Cu, Ni, and

Fe) and nutrients (P and N) in concentrations typical of highway runoff. Occasional increases in dissolved highway contaminants were observed at intermediate stations during swale experiments particularly close to the inflow point. This may result from the initial flow resuspension and resolubilization of loosely bound contaminants. The removal of heavy metals, nitrogen, and phosphorous species on a mass basis was directly related to the infiltration losses through swales. Therefore, retention of as much water as possible on the swale area will reduce the highway contaminant loadings to adjacent receiving waters. Recommendations for the construction of roadside swales are presented. The information in the document is limited to a small number of storms and, thus, may provide only minimal data for the efficiency analysis of the swale in question.

Reference: International Stormwater BMP Database Basic Database

Yousef, Y.A., Hvitved-Jacobsen, T., Wanielista, M.P., Harper, H.H., Hamilton, R.S., Harrison, R.M., (eds), 1987, Removal of Contaminants in Highway Runoff Flowing through Swales, Special Issue: Highways Pollution Proceedings of the Second International Symposium, London, United Kingdom, 7-11 July 1986, 1987, pp. 391-399, Sci. Total Environ, vol. 59, Dep. Civ. Eng., Univ. Central Florida, Orlando, Florida 32816-0093, USA

3.5 Infiltration Systems

3.5.1 Oleander Avenue Stormwater Exfiltration Trench System, City of Daytona Beach, Florida

Summary: The Oleander Avenue watershed historically discharged untreated runoff to storm sewers that ultimately discharged to the Halifax River. The area was also subject to periodic local flooding due to the inadequate capacity of the conveyances. The primary objective of this project is to demonstrate the cost-effectiveness of using exfiltration systems as a method of retrofitting stormwater problem areas for future use within the city's beachside community. To alleviate the flooding problem and to reduce pollutant loading to the river, a perforated pipe exfiltration trench treatment system was constructed. Site constraints limited the treatment volume to 0.75 inches over the DCIA which translates into a storage volume of 30,700 cubic feet. The 294 feet of exfiltration system is designed to accept the runoff from a 5 year, 24 hour storm representing flows of from 1.5 to 17.5 cfs from the drainage area subbasins. Actual pipe sizes varied from 19” x 30” to 29” x 45” to meet the design storm flow conditions. The rock filled trench measures 16 feet in width and 2 feet in depth. The exfiltration trench appears to be functioning very well as water quality monitoring efforts have failed to find any discharge from the system. Since exfiltration systems provide 100% treatment for all water which is retained and exfiltated, this system will reduce the stormwater pollutant loadings discharged to surface waters by at least 80%, since the trenches will eliminate the discharge from over 80% of the storms that occur. The project allowed the city to identify the design and construction constraints associated with this type of treatment system as well as installation costs for these systems. This knowledge will be used as the city retrofits other basins.

Reference:
Bateman, M., Livingston, E.H., Cox, J., 1998, Overview of Urban Retrofit Opportunities in Florida, in National Conference on Retrofit Opportunities for Water Resource Protection in Urban Environments Proceedings Chicago, IL, February 9-12, 1998, p. 166.

3.6 Minimizing Directly Connected Impervious Surfaces

3.6.1 Evaluation of Green Roof Technology in Central Florida

Summary: The objective of this project is to design, construct, and monitor a green roof at the UCF Student Union to determine: 1) the appropriate plants for green roofs under Florida climatic conditions, 2) the stormwater management benefits of green roofs, and 3) the energy benefits of green roofs.

Reference: Ongoing (January 15, 2004 until January 14, 2007), Dr. Marty Wanielista, Stormwater Management Academy University of Central Florida.

3.7 Miscellaneous and Vendor-Supplied Systems

3.7.1 Evaluation of Pollutant Removal Effectiveness of Proprietary BMPs

Summary: To test and provide technical data and cost evaluation associated with different levels of three proprietary BMP systems (CDS, Stormceptor, BaySaver). To accomplish the stated objective, the selected systems will be evaluated based on the following parameters: 1) initial cost (equipment and installation costs), 2) applicability to perform under varied flow rates, 3) percentages of removal for different pollutants, 4) validate the manufacturers maintenance plans, and 5) develop a cost/pollutant removal rate.

Reference: Ongoing (July 4, 2003 until March 3, 2005), Dr. Fidelia (Ola) N. Nnadi, Stormwater Management Academy University of Central Florida.

3.7.2 Stormwater Treatment Using Alum

Summary: Innovative and cost-effective stormwater treatment systems using alum have been constructed in Florida to meet the challenge of reducing pollutant concentrations in nonpoint source discharges to surface waters without committing large amounts of land to the treatment process. In 1986, a prototype system was introduced in a lake restoration project on Lake Ella in Tallahassee, Florida, based on the flow-weighted injection of liquid aluminum sulfate, commonly called alum, into the runoff flow inside storm sewer lines before discharge into the lake. The Lake Ella project constituted the first use of alum for treatment of stormwater inputs into a receiving water body. Lake Ella is a shallow, 13-acre lake that received stormwater input through 18 separate storm sewers from 160 acres of a highly impervious urban watershed. Lake Ella has a volume of only 30 million gallons, but receives 137 million gallons annually. A second, similar treatment system was constructed at Lake Dot and others are planned for Lake Lucerne, Lake Osceola, and Lake Cannon. Alum stormwater treatment combines an extremely cost-effective method of retrofitting direct discharge stormwater systems with unequaled removal rates of nutrients, heavy metals, and bacteria.

Reference:

Harper, H.H., Herr, J.L., 1992, Stormwater Treatment Using Alum, Public Works Magazine PUWOAH, Vol. 123, No. 10, p 47-49, 89-90, September 1992. 1 fig, 1 tab.

3.7.3 An Assessment of an In-line Alum Injection Facility Used to Treat Stormwater Runoff in Pinellas County, Florida

Summary: This study was conducted to determine the feasibility of using an in-line alum injection facility for a stormwater treatment retrofit. Alum treatment is primarily used to remove phosphorus (usually the limiting nutrient in fresh water). Other alum treatment facilities constructed in Florida inject alum into the stormwater flow in storm sewers located upstream of receiving water bodies (*e.g.*, a lake) with the alum floc allowed to settle in the water body.

The purpose of this study is to determine the effectiveness of alum technology for an in-line system with limited storage volume for alum floc containment, and to conduct an environmental impact assessment. This study also afforded the District an opportunity to characterize the water quality of an older urban ditched system. Data collection included flow-weighted storm event samples, monthly water quality samples, and hydrologic data collection. Event based load reductions were calculated, comparisons were made of pre- and post-treatment data, and event and monthly water quality were compared to State surface water quality Class III standards. Additionally, a comparison to event mean concentration (EMC) pollutant reduction was performed between predicted reductions estimated in the permit application and load reductions measured during this study. The water quality constituents analyzed included various forms of phosphorus and nitrogen, and several metals. To some degree, portions of these data were likely biased due to a backflow of alum in the inflow station samples. A detailed analysis of the potential for aluminum toxicity to various fish and benthic species was also conducted. Event load reduction calculations were performed on inflow and outflow data collected during seven storm events that were successfully treated with alum. Mean total phosphorus and ortho phosphorus load reductions were 37 and 42 percent respectively. Mean percent load reductions of ammonia and nitrate+nitrite were 24.5 and 52.2 percent respectively while, event total Kjeldahl nitrogen loads increased on average by 5 percent. Zinc loads were reduced in most events (despite the alum solution being contaminated with zinc) and when a single outlier was excluded, mean zinc removal was 41 percent. Iron and lead load reductions were variable with the mean load increasing (export). Dissolved monomeric aluminum event loads were mostly reduced with a mean 56 percent reduction. However, total aluminum mean loads revealed an increase of 36 percent. This large increase in total aluminum was attributed to inadequate storage volume for the alum floc. Generally, the load reductions outlined above are good considering the settling ponds small size. Lead and iron EMCs were in noncompliance less at the outflow than inflow. Copper and zinc EMCs, on the other hand exhibited higher percent noncompliance at the outflow than inflow. The increase in copper and zinc standard noncompliance at the outflow were attributed to these metals being a contaminant in the alum solution. Reductions in pH values were mirrored by peaks in aluminum concentrations. This relationship exemplifies the environmental chemistry of aluminum where pH is the driving force in aluminum solubility. Zinc was the sole metal to consistently show concentrations within detectable levels and seemed unaffected by facility operations. Generally, phosphorus concentrations measured downstream of the alum facility were lower and less variable after facility installation. The data suggest that alum residual in the sediment pond tempered phosphorus concentration increases during periods when the injection facility was inoperable. TSS concentration peaks at the outflow were lower after installation. TKN concentrations at all stations showed little change throughout the study due to alum facility installation and operation. Inflow and outflow event mean concentration (EMC) data were compared to predicted EMC reductions calculated in the MSSW permit application. Predictions for ammonia and nitrate+nitrite agreed with measured data. Measured changes in pollutant EMCs were a 32 percent *increase* in total nitrogen, a seven percent *decrease* in total phosphorus and a 184 percent *increase* in total suspended solids. EMC predicted percent reduction should not be confused with actual percent load reduction also presented in the report. The importance of operation and maintenance cannot be over emphasized. The regulatory agencies should require the permittee of an alum injection system to: a) assure sufficient funds are available for repair/replacement of inoperable equipment, b) submit semi-annual operation and inspection reports, and c) require operators to have some level of expertise appropriate for facility operations. It is important to maximize alum floc containment volume to minimize potential adverse environmental impacts downstream. The containment volume at this study site was inadequate. Despite the operation and maintenance problems experienced, event mean concentration and loads of phosphorus were reduced during alum facility operations. The data indicate the alum facility could be effective in reducing phosphorus if properly maintained. Monthly samples showed that phosphorus concentrations measured downstream from the alum injection facility were generally lower and less variable after facility installation. Potentially toxic concentrations of aluminum to aquatic wildlife were measured at stations immediately upstream and downstream of the alum facility. Aluminum concentrations at stations further downstream were below these potentially harmful levels.

Reference:

Carr, D. W., 1998, An Assessment of an In-line Alum Injection Facility Used to Treat Stormwater Runoff in Pinellas County, Florida, Southwest Florida Water Management District, 36 pages.

Carr, D.W., 1999, An Assessment of an In-Line Alum Injection Facility Used to Treat Stormwater Runoff in Pinellas

County, Florida, Proceedings of the Sixth Biennial Stormwater Research and Watershed Management Conference, September 14-17, 1999, p. 68-79.

3.7.4 Lake Ella Alum Injection System

Summary: In 1985, a lake restoration project was initiated in Lake Ella, a shallow, 13.3 acre hypereutrophic "lake" which receives stormwater runoff from a 157 acre highly impervious watershed. Due to its highly developed and urban watershed, and because of the low permeability of the watershed's clay soils, it was determined that traditional stormwater treatment BMPs could not be used. Instead, chemical treatment of runoff was evaluated using various chemical coagulants including aluminum sulfate (alum), ferric salts, and polymers. Jar tests determined that alum consistently provided the highest removal efficiencies and produced the most stable end product. Consequently, a prototype alum injection system was designed where liquid alum was injected within storm sewers on a flow weighted basis. Standard triplex metering pumps are used as the injection pumps, each individually regulated by sonic flow meters attached to the storm sewer lines to be treated. Many of the smaller storm sewers were combined to reduce the points of discharge into the lake from 17 to ten. Six of these ten inputs, representing 95% of the average flow, are equipped with alum injectors. Alum is pumped from a 6000 gallon alum storage tank into individual one inch PVC underground carrier lines to the point of injection. The alum mixes with stormwater as it travels through the storm sewers, passes through a fine mesh trash trap, and is discharged into Lake Ella. The restoration project also included the removal of 50,000 yds^3 of accumulated sand, debris, and muck from the bottom of Lake Ella and the recontouring of the lake's bottom with a gradual slope toward the outfall control structure. Pre- and post-alum injection monitoring is summarized below:

Parameter	Before	After	Parameter	Before	After
pH	7.41	6.43	DO	3.5 mg/l	7.4 mg/l
T N	1876 ug/l	417 ug/l	Total P	232 ug/l	26 ug/l
BOD	41 mg/l	3.0 mg/l	Chlorophyll-a	180mg/m^3	5.1 mg/m^3
Secchi Depth	0.5 m	2.2 m	Florida TSI	98	47

Alum sludge accumulation rate: 0.33 cm/yr. Pollutants in sediments are much more tightly bound after alum injection system.

Reference:

Harper, H., 1990, Final Report on the Long Term Performance of the Alum Stormwater Treatment System at Lake Ella, Florida, Submitted to Florida Department of Environmental Regulation, Stormwater/NPS Management Section, Tallahassee, Florida.

3.7.5 Indian River Lagoon Baffle Boxes, Brevard County Surface Water Management

Summary: The Indian River Lagoon National Estuary Program identified stormwater discharges as the major factor in the decline in the lagoon's health. In particular, reductions in the stormwater loadings of total suspended solids, nutrients, and freshwater are needed to restore the lagoon. The county developed an innovative BMP, the baffle box, which can be installed within existing rights-of-way as a way of retrofitting stormwater discharges where land is unavailable for traditional BMPs. Baffle boxes are large sediment traps that require regular maintenance. Sediment accumulation rates vary depending on site characteristics such as drainage area, land use, soil type, slope, mowing frequency, and base flow. The box accumulates from 500 to 50,000 pounds per month, and requires monthly cleaning in the wet season and cleaning every two to three months in the dry season. By the end of 1997, the county had installed 31 baffle boxes, with others under construction. As part of the implementation of the Indialantic area stormwater master plan, 11 baffle boxes currently are being installed and monitored. Three different designs are being evaluated to determine their effectiveness including: (1) a two-chamber box for small pipes and drainage areas; (2) a three-chamber box for larger pipes; and (3) two boxes in series, where one box currently exists and collects large amounts of sediment. The monitoring program for the 11 new baffle boxes will not begin until the spring of 1998. However, previous assessments of the effectiveness of baffle boxes on 22 existing systems is shown below: The county has also installed a continuous deflective separation unit, a new BMP from CDS Technologies of Australia. This unit cost $55,000 to install and treats the runoff from a 40 acre watershed. This unit captures 100% of floatables and has been cleaned out twice resulting in the removal of 8,013 pounds of sediment.

Reference:

Bateman, M., Livingston, E.H., Cox, J., 1998, Overview of Urban Retrofit Opportunities in Florida, in National Conference on Retrofit Opportunities for Water Resource Protection in Urban Environments Proceedings Chicago, IL, February 9-12, 1998, p. 166.

3.7.6 Oil and Grease Removal BMP Demonstration, City of Oakland Park, Florida

Summary: The City of Oakland Park received one of the state's Stormwater Demonstration Grants to develop and monitor a prototype BMP for in-line removal of oil and grease from stormwater using oil absorbent material. The Northeast 40th Court site was chosen because inspection of the storm sewer system revealed substantial amounts of oil and grease. These were attributed to the large number of automobile repair shops, paint shops, plating shops, and similar businesses in the drainage area. The project consisted of characterizing the concentrations of oil and grease in the stormwater, a review of the material safety data sheets of three different oil sorbent materials, a laboratory bench scale study of one of the oil sorbent materials, construction of the BMP system, and effectiveness monitoring. The final BMP system included diversion box with a weir to direct runoff into the treatment system. As stormwater enters the treatment unit, flow is directed against an aluminum baffle imparting a slight rolling motion which causes floatables and trash to be trapped against the baffle wall for easy removal. Upon entering the treatment chamber, velocity slows greatly, allowing grit, sludge, and oil particulate matter to settle to the sloping bottom. The stormwater is then redirected upward through two cross-layers of the absorbent media, which are secured by being sandwiched between two aluminum grates, where free oil and grease are removed via absorption into the material. The absorbent media chosen was custom made by NewPig Corporation of Tipton, Pennsylvania. The product, called the Spaghetti Pillow, consists of shredded strips of polypropylene packaged in tough, UV resistant mesh skin in the shape of a rectangular bag or pillow. The two layers of media are placed perpendicular to each other to avoid short circuiting. Inflow and outflow sampling of the system was conducted for ten storms between July 1994, and April 1995. Storm event oil and grease concentrations ranged from 0 to 261 mg/l, with mean pollutant concentrations ranging from 1.41 to 85.58 mg/l. Oil and grease mass removal efficiencies ranged from 71% to 95%, while flows ranged from 0 to 1.75 cfs. The absorption efficiency of the filter media bags were measured twice. The amount of oil and grease absorbed ranged from 1.7 pounds to 62.5 pounds, which represents an absorption efficiency of 110% to 470%.

Reference:

Camp, Dresser, and McKee, 1995, Final Report on the City of Oakland Park Stormwater Demonstration Grant Project, Submitted to Florida Department of Environmental Protection, Stormwater/NPS Management Section, Tallahassee, Florida.

3.7.7 Pollutant Removal Testing for a Suntree Technologies Grate Inlet Skimmer Box

Summary: Over the last several years, a number of BMPs have been developed to provide stormwater treatment by trapping pollutants and debris in inlets. Inlet trap BMPs are quasi source controls, being inexpensive, requiring no roadway construction or utility relocation, and keeping pollutants out of the water bodies, rather than trying to remove the pollutants from the water once it is contaminated. Suntree Technologies, of Cape Canaveral, Florida, commissioned Creech Engineers, Inc. and Universal Engineering to perform testing on a Grate Inlet Skimmer Box (GISB) to determine its pollutant removal effectiveness for sediment and grass clippings. The testing was performed on September 26, 2001. The GISB is designed to trap sediment, grass, leaves, organic debris, floating trash, and hydrocarbons as they enter a grated inlet, thereby preventing these pollutants from entering the stormdrain system where they would cause detrimental impacts on downstream waterbodies. The GISB is a 3/16” thick fiberglass device custom made to fit most types of grated inlets. The overflow capacity of the GISB is designed to be greater than the curb grate capacity, thereby insuring that there will be no loss of hydraulic capacity due to the device being inside the inlet. The bottom of the GISB is designed to be above any pipes entering or leaving the inlet so that flow through the inlet is not blocked. Water flowing through the grate first encounters a hydrocarbon absorbing cellulose. This boom also serves to trap large debris between the boom and the body of the GISB. At the bottom of the trap are a series of stainless steel filter screens covering 3.5 inch wide cutouts in the fiberglass body. These screens trap debris while allowing water to pass through the bottom of the body and out to the storm drain system. The screens in the floor and first vertical row of the GISB are fine mesh. The second vertical row of screens are medium mesh and the highest row are coarse mesh. On the outside of the cutouts the screens are backed by stainless diamond plate to provide support to the screens since heavy loads of debris build up in the box. If the flow rate through the inlet exceeds the capacity of the filter screens there is another row of overflow holes cut out with no screens. These overflow holes allow water to pass through the GISB even if it becomes full of debris. The level of the holes is above the bottom of the top tray, enabling the tray to act as a skimmer to prevent floating trash from escaping through the overflow holes. About halfway down the box is a diffuser plate to minimize resuspension of trapped sediment. Inlet traps such as these are generally designed to capture hydrocarbons, sediment, and floating debris. There is generally a large build up of grass, leaves, and yard debris in the GISBs; which represent a source of nutrients, which do not enter the waterbodies. Royal and England, 1999, determined that leaves and grass leach most of their nutrients into the water within 24-72 hours after being submerged in water. GISBs are designed to keep captured debris in a dry state, off the bottom of the inlet, thus preventing phosphates and nitrates from leaching into the stormdrain system, where much more expensive BMPs would be required to remove the dissolved nutrients.

Reference:

Creech Engineers, Inc., 2001, Pollutant Removal Testing for a Suntree Technologies

3.7.8 Sedimentation Control Using Two Baffle Boxes in Series

Summary: For the last 8 years, the Brevard County Surface Water Improvement Program has used baffle boxes for stormwater sedimentation control at over 34 locations. As part of a Florida Department of Environmental Protection Demonstration Project for Indialantic Area Baffle Boxes, two baffle boxes were constructed in series on a 9.75 ha (24.1 ac) drainage basin in Sunset Park, near Indialantic. The first baffle box was installed in 1992 and long-term cleanout records have been documented on the performance of this baffle box. A second baffle box was installed in 1998 immediately upstream of the first baffle box to create a series configuration. Autosampler monitoring results for TSS, Total Phosphorus, COD, and BOD removal efficiencies are presented in this report for the second baffle box. In addition, the effectiveness of two baffle boxes in series is examined.

Reference:

England, G., and Royal, J, (date not specified) Sedimentation Control Using Two Baffle Boxes in Series, Creech Engineers and Brevard County Surface Water Improvement

3.7.9 Site Evaluation of Suntree Technologies, Inc. Grate Inlet Skimmer Boxes for Debris, Sediment, and Oil & Grease Removal

Summary: Stormwater is now recognized as the leading source of pollution to our remaining natural water bodies in the United States. Development and urbanization have removed most of the natural filtration and sediment trapping systems provided by the environment. Current development must address this need through the implementation of stormwater treatments systems in the project design. Most of these systems perform reasonably well, if properly designed, constructed, and maintained. Retrofit of older urban areas lacking these modern stormwater systems is a continually expensive challenge. The Downtown Disney complex, formerly the Lake Buena Vista Shopping Village, has several drainage basins with 1970's stormwater systems. These older systems discharge directly into the adjacent drainage canal with no pollutant treatment. Over time the accumulation of sediments, nutrients, intensive development, and recreational/entertainment pressures are contributing to water quality degradation. Whenever new development or redevelopment occurs, the stormwater system is brought to current code/permit requirements. In the interim, several areas are in need for rapid, effective, and economical improvement in the quality of its stormwater discharge. Suntree Technologies Incorporated, located in Cape Canaveral, Florida, manufactures stormwater grate inlet skimmer boxes. They are made of a high quality fiberglass frame, with stainless steel filter screens backed by heavy-duty aluminum grating. Each unit is custom made to accommodate various inlet sizes. A hydrocarbon absorption boom is attached to the top of the skimmer box for petroleum, oil, and grease removal. These devices fit below the grate and catch sediment, debris, and petroleums, oils & greases.

Clean-out, maintenance, and performance reporting is provided by Suntree on a scheduled basis.

Reference:

Snell, E., Site Evaluation of Suntree Technologies, Inc. Grate Inlet Skimmer Boxes for Debris, Sediment, and Oil & Grease Removal, Reedy Creek Improvement District Planning & Engineering Department, 4 p.

3.7.10 The Evaluation and Design of an Alum Stormwater Treatment System to Improve Water Quality in Lake Maggiore in St. Petersburg, Florida

Summary: Lake Maggiore is a 156-hectare hypereutrophic lake located adjacent to Tampa Bay in the City of St. Petersburg, Florida. Since virtually all watershed development occurred prior to implementation of current stormwater management regulations, Lake Maggiore receives untreated stormwater runoff from a 927-hectare watershed area. The lake also receives significant quantities of baseflow, partially a result of reclaimed wastewater used for irrigation in the watershed. Documentation of water quality problems such as algal blooms, fish kills, nuisance macrophyte growth, and high bacteria levels date back as far as the early 1950s. An environmental assessment of Lake Maggiore was conducted from 1989-1991 which concluded that an acceptable improvement in the trophic status could be achieved by an 80% reduction in annual loadings of total phosphorus from stormwater runoff and baseflow. The study recommended that alum treatment of stormwater and baseflow be implemented due to the low cost and high removal efficiencies. Five separate alum stormwater treatment systems were designed during 1995, including one on-line system with direct floc input into the lake and four off-line systems using adjacent golf course and park ponds, to provide an

80% reduction of stormwater and baseflow loadings of total phosphorus into Lake Maggiore. Construction began in August 1996 and was completed in October 1997. Start-up and testing of the systems are ongoing, with full operation scheduled for late November 1997. The Lake Maggiore Restoration Project demonstrates alum stormwater treatment systems are extremely effective in removing nutrients, heavy metals, and bacteria from lake inputs and are routinely the most cost-effective lake restoration alternative. Alum treatment systems consistently provide the highest removal efficiencies of any retrofit alternative and typically require no land acquisition.

Reference:

Herr, J.L., Harper, H.H., 1997, The Evaluation and Design of an Alum Stormwater Treatment System to Improve Water Quality in Lake Maggiore in St. Petersburg, Florida, In: Fifth Biennial Stormwater Research Conference, November 5- 7, 1997.

3.7.11 Continuous Deflection Separation (CDS) Unit for Sediment Control In Brevard County, Florida

Summary: In July 1997, Brevard County's Stormwater Utility Program installed a new type of trash and sedimentation control device called a continuous deflection separation (CDS) unit. This was the first American installation to use the CDS technology, which was developed in Australia. This location served a drainage basin of 24.87 hectares (62.45 acres) of mixed industrial, commercial, and vacant land. Over an 18 month period 5 storm events were monitored for 6 parameters: pH, TSS, BOD, COD, turbidity, and Total Phosphorus. In addition, sediment samples were collected and tested for 61 parameters. Sampling was accomplished using autosamplers placed upstream and downstream of the CDS unit. The first three storms were monitored using flow weighted composite samples and the last two used discrete samples. This sampling program proved to be quite a challenge for the personnel relatively inexperienced in the use of autosamplers and stormwater sampling techniques. The lessons learned in monitoring techniques are discussed in detail and illustrate the difficulty in evaluating new technologies.

Sediment sampling showed no significant accumulations of hydrocarbons or heavy metals. In fact, few of the sampled parameters were above detectable limits. The stormwater samples showed a wide range of removal efficiencies; most of which could be explained by problems with equipment failure or improper equipment set up. It is estimated that the CDS unit provided an average of 52% removal efficiency for total suspended solids and 31% removal efficiency for phosphorus.

Reference:

Strynchuk, J., Royal, J., England, G., 2000, Continuous Deflection Separation (CDS) Unit for Sediment Control In Brevard County, Florida, Brevard County Surface Water Improvement, 35 p.

3.7.12 Baffle Boxes and Inlet Devices for Stormwater BMPs

Summary: With the advent of NPDES Stormwater Permits and increased environmental awareness, many municipalities are confronted with the daunting task of retrofitting existing developed areas, which provide little or no water quality treatment for stormwater runoff. While retention ponds are the traditional method used for treating stormwater, they are often not feasible for retrofit projects due to available land constraints. This study will present several new types of treatment methods utilizing existing inlets and manholes. There are no universal fixes for stormwater pollution control. Each outfall and drainage basin must be analyzed to determine types of pollutant loadings, size of drainage basin, type of conveyance system, and pollutants targeted for removal. Then the appropriate BMP or series of BMP's should be selected. Baffle boxes are effective BMP's for sediment removal in small to medium size drainage basins. They are installed inline with existing pipes, requiring minimal easements and utility relocations. For small flows and drainage basins, grate inlet baskets, and curb inlet baskets are affordable alternatives for providing stormwater treatment. Installation into existing inlets and manholes avoids disruptive and expensive conventional construction. Inlet devices trap small amounts of sediment and larger volumes of yard debris and trash. Research is being continued to quantify nutrient loading rates from grass clippings captured by these units. The tradeoff for these low cost treatment methods is the perpetual maintenance expense. It is important to note that if the devices are not going to be frequently maintained they will not be effective. A dedicated source of manpower and equipment is needed to remove the pollutants from these BMP's.

Reference:

England, G., 1999, Baffle Boxes and Inlet Devices for Stormwater BMPs, 6 p.

3.8 Treatment Train Systems

3.8.1 The Effectiveness of a Detention Pond and Wetlands System in Reducing the Amounts of Lead Transported by Urban Stormwater Runoff

Summary: The construction of different types of in-line temporary storage devices to reduce constituent loads carried by urban stormwater runoff is becoming more prevalent. The results of a study to determine the effectiveness of a detention pond-wetlands system to reduce the amount of lead in urban stormwater runoff are presented. The detention pond and wetlands receive drainage from a 42 acre urban area. The pond area is 9,000 square feet and the depth of water is about 8 feet during rainstorm periods. The wetlands are about 34,000 square feet in size and the depth of water ranges from 0 to 2 feet during nonstorm periods. Total lead loads entering the system ranged from 0.021 to 1.7 pounds. Data were collected for the pond and wetlands for nine storms, and the pond only for an additional three storms. System inlet data only were collected for one storm. The detention pond and wetlands are generally effective in reducing the amount of lead being transported by the urban runoff. In 8 of 12 storms, the detention pond reduced the amount of total lead in the runoff. The maximum reduction observed in the pond was 73 percent. For four storms, an increase of total lead load, ranging from 26 to 190 percent, was observed through the pond. This increase may be due to short circuiting (flow moving directly from pond inlet to outlet), scouring, resuspension of pond bottom materials, high concentrations of lead in the pond water before the storm, analytical error, or other factors. The wetlands reduced the total lead load for each of the nine storms an average of about 75 percent. The combined system (pond and wetlands in series) reduced total lead loads for each of the monitored storms. The system retained an average of 72 percent of the total lead load that was introduced.

Reference:

Martin, E.H., 1985, The effectiveness of a detention pond and wetlands system in reducing the amounts of lead transported by urban stormwater runoff: Environmental Systems Engineering Institute Publication 85-1, University of Central Florida, p. 133-143.

3.8.2 Evaluation of the Stormwater Treatment Facilities at the Lake Angel Detention Pond, Orange County, Florida

Summary: This is the final report on the use of Granulated Active Carbon (GAC) beds of Filtrasorb 400 in series to reduce the Trihalomethane Formation Potential (THMFP) concentrations at the Lake Angel detention pond, Orange County, Florida. The detention pond accepts runoff from an interstate highway and a commercial area. Breakthrough time was estimated from laboratory analyses and used to design two beds in series at the detention pond. Breakthrough occurred in the first bed after treating 138,000 liters of water. Exhaustion of the first bed was reached after treating 1270 bed volumes with a sorption zone length of 1.70 feet. The TOC adsorbed per gram of GAC was 6.3 mg. The liquid flow rate averaged 0.0011 cfs. Similar breakthrough curves for Total Organic Carbon (TOC) and color were also reported. The used GAC can be disposed of by substituting it for sand in concrete mixes. An economic evaluation of the GAC system at Lake Angel demonstrated an annual cost of $4.39/1000 gallons to treat the stormwater runoff after detention and before discharge into a drainage well. The cost could be further reduced by using the stormwater to irrigate right-of-way sections of the watershed. An alternative method of pumping to another drainage basin was estimated to be more expensive. The underdrain network for the GAC system initially became clogged with the iron- and sulfur-precipitation bacteria Leptothrix, Gallionella and Thiothrix. These bacteria were substantially

reduced by altering the influent GAC system pipeline to take water directly from the lake. An alternate pipe system used a clay layer to reduce ground water inputs and did not exhibit substantial bacterial growth.

Reference:

Wanielista, M., Charba, J., Dietz, J., Russell, B., 1991, Evaluation of the Stormwater Treatment Facilities at the Lake Angel Detention Pond, Orange County, Florida, Final report, 2 Jan 90-1 Jul 91.

3.8.3 Nonpoint Source Phosphorus Control by a Combination Wet Detention/Filtration Facility in Kissimmee, Florida

Summary: Water quality investigations were conducted to assess the treatment potential (concentration reduction) of a dual component wet detention/filtration-berm stormwater management system, located in Kissimmee, Florida. Phosphorus concentrations are indicative of nonpoint source pollution in urban and commercial stormwater runoff. Therefore, orthophosphorus and total phosphorus concentrations were monitored at three different sampling stations within the system: 1) surface runoff influent channel; 2) wet detention basin standing pool; and 3) filtration-berm effluent collection box. Routine monthly data were collected to characterize prevalent ambient conditions. In addition, six distinct storm events were monitored with automatic samplers to characterize episodic phosphorus variations during the period November, 1985 to November, 1986. Statistical analyses (t-test) of routine monthly concentration data showed significant differences (p less than or equal to 0.05) between the stormwater influent and the wet detention basin standing pool samples for both orthophosphorus and total phosphorus. However, similar analyses between detention basin standing pool and filtration-berm effluent samples showed no significant differences. These results suggest positive treatment potential attained through wet detention, but significant additional treatment was not realized through berm filtration. Storm event results reinforced these conclusions, indicating wet detention treatment potential far superior to filtration-berm treatment potential. The average storm event treatment potential realized by wet detention during six events for orthophosphorus and total phosphorus was 77%. The average treatment potentials realized by filtration for orthophosphorus and total phosphorus were -91% and 16%, respectively. The average treatment potentials realized by the overall combined system for orthophosphorus and total phosphorus were 55% and 85%, respectively.

Reference:

Holler, J.D., 1990, Nonpoint Source Phosphorus Control by a Combination Wet Detention/Filtration Facility in Kissimmee, Florida, FLA. SCI., vol. 53, no. 1, pp. 28-37.

3.8.4 An Evaluation of the Lake Jackson (Florida) Filter System and Artificial Marsh on Nutrient and Particulate Removal from Stormwater Runoff

Summary: Concern over pollution caused by stormwater runoff entering Lake Jackson from the city of Tallahassee culminated in the construction of a sediment filtration plant and artificial marsh to remove suspended solids and nutrients from the runoff prior to its discharge into the lake. Water samples collected during storm events were analyzed for a wide range of particulate and dissolved parameters, including suspended solids and various N and P species. Gauging stations, located at key points in the system, provided an accurate determination of water flow during sampling periods. Accurate flow data, rarely available in natural systems, permitted mass balance and removal efficiency calculations to be made. Results from the first year of study indicate that the system is capable of removing a large fraction of both suspended solids and dissolved and particulate nutrient material.

Reference:

Tuovila, B.J., Outland, J.B., Esry, D.H., and Franklin, M., 1987, An Evaluation of the Lake Jackson (Florida) Filter system and Artificial Marsh on Nutrient and Particulate Removal from Stormwater Runoff, p. 271-278, *In:* K.R. Reddy and W. H. Smith (eds.) 1987, Aquatic Plants for Water Treatment and Resource Recovery, Magnolia Publishing, Inc.

3.8.5 Removal of Microbial Indicators from Stormwater Using Sand Filtration, Wet Detention, and Alum Treatment Best Management Practices

Summary: The Environmental Protection Agency has determined that nearly 90% of fecal coliform pollution to surface waters originated from non-point sources such as urban and agricultural stormwater runoff. In the Tampa Bay watershed, several tributaries, which receive agricultural, industrial, and urban runoff exhibit consistent, elevated total and fecal coliform bacteria concentrations which often exceed State standards for shellfish harvesting and recreational exposure. Based on State water quality standards, 45% of these tributaries did not meet their intended use for recreation and the propagation and maintenance of a healthy, well-balanced population of fish and wildlife. In urbanized areas, contaminated stormwater can impact recreational beaches in both marine and freshwater environments and can cause a number of bathing-related illnesses including eye, ear, nose, and upper respiratory ailments, skin irritation, and gastrointestinal infections. Very few studies have been conducted to determine how well stormwater management systems reduce microbial indicators from stormwater. In this study, indicators and surrogates of microbial pathogens were used to determine how well three types of stormwater systems reduced microbes using simulated storm events. The indicators used were total and fecal coliform bacteria, MS2 coliphage, and fluorescent beads representing a pathogenic protozoa. The three types of systems were: sand filtration, wet detention and alum coagulation. Samples were taken before the introduction of the surrogate or indicator organisms, right after the introduction and then ten samples at timed intervals were collected to observe die-off effects. Heavy metals, turbidity and total suspended solids were also measured using the same experimental design. Additionally, gram-negative bacteria already in the water were identified during each of the sampling steps. Significant ($p < 0.05$) reductions in total and fecal coliform bacteria, MS2, and bead concentrations were observed between inflow and outflow samples for each of the three stormwater treatment systems. On a few occasions, however, greater concentrations of total coliform bacteria, turbidity and total suspended solids were found in outflow samples than at the inflow. Using flow-weighted sampling techniques the following reductions were measured at all three systems. For beads, the reduction was greater than 90% and for MS2 coliphage, greater than 80%. Efficiencies for total and fecal coliform varied widely with total coliform removal values consistently less than 70% while fecal coliform reductions ranged from 65 to 100%. Overall, alum coagulation (dose = 10 mg/L) provided the greatest removal efficiencies under controlled laboratory conditions using jar tests. Removal efficiencies using sand filtration were generally high for turbidity, MS2, and beads but not for total or fecal coliforms. Wet detention using the current regulatory standard of a 5-day bleed-down period provided consistently high removal efficiencies for fecal coliform bacteria, MS2 and beads, and had the greatest TSS removal of the three treatment systems. Water quality standards for total coliform bacteria were exceeded more often during the 14-day trials than the 5-day trials which may have been caused by heavier than normal rainfall. A number of gram-negative bacteria were also identified in both the inflow and outflow samples taken from the wet detention ponds including several which are capable of causing human disease. Most of the bacteria were present in both the inflow and outflow samples. A small proportion of bacterial removal may have occurred as a result of heavy metal toxicity. Each of the three stormwater treatment systems evaluated in this study were capable of reducing microbial pollution and each had specific attributes that would make it more advantageous than the other for specific applications or site constraints. The use of a multiple treatment system in which several different BMPs are joined in series may offer greater reductions for a broader collection of parameters than any single BMP. Since no single BMP evaluated during this study had consistently greater removals of all the parameters, this approach would be more effective. The consistent presence of pathogenic strains of bacteria in both inflow and outflow samples from all of the three sites evaluated further stresses the importance of stormwater treatment to reduce potential public health risks. Methods commonly used for wastewater such as chlorine disinfection, ozonation, and UV light irradiation have been suggested for the removal of microbial pathogens from stormwater. Since resuspension of sediments can reduce the effectiveness of wet detention ponds, reducing flow rates at the inflow can be critical to achieving sanitary water at the outflow.

Reference:

Kurz, R. C., 1998, Removal of Microbial Indicators form Stormwater Using Sand Filtration, Wet Detention, and Alum Treatment Best Management Practices, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609, 169 pages.

3.8.6 Florida Aquarium Parking Lot: A Treatment Train Approach for Stormwater Management

Summary: Impervious surfaces such as parking lots and roof tops cause more stormwater runoff and pollutant loads than any other type of land use. Low Impact Development (LID) design criteria provide alternatives that have successfully reduced runoff and pollution loads by reducing imperviousness, conserving ecosystems, maintaining natural drainage courses, reducing the use of pipes and minimizing clearing and grading. Providing rainfall runoff storage throughout the entire drainage basin disperses runoff uniformly throughout a site's landscape by using a variety of detention, retention, and other practices. A parking lot at the Florida Aquarium in Tampa is being used as a research site and demonstration project to quantify how small alterations to parking lot designs can dramatically decrease runoff and pollutant loads. An innovative parking lot design using LID techniques has been implemented for the Florida Aquarium and utilizes the entire drainage basin for stormwater treatment. The study site is an 11.5 ac parking lot serving 700,000 visitors annually. Automatic instruments collect flow weighted water quality sample and measure flow and rainfall during storm events. The research is designed to determine pollutant load reductions measured from three elements in the treatment train: different pavement types in the parking lot, a planted strand with native wetland trees and a small wet-detention pond used for final treatment. (In this study swales are small depressions between parking rows and strands are larger swales). The parking lot research involved testing three paving surfaces as well as testing basins with and without swales. This makes four treatment types with two replicates of each type. The paving surfaces are asphalt, concrete and porous paving. A total of 59 rain events are included in the data set and represent storms that produced as little as 0.37 inches of rain to a maximum amount of 2.91 inches. The monitoring effort also investigated other processes taking place by measuring rainfall, sediments, as well as variations in pH, dissolved oxygen, temperature, turbidity, and weather conditions. The runoff coefficient is a ratio that can be converted to a percentage and for traditional parking lots a typical range is 70 to 90 percent of rain falling on the site would run off. At the Florida Aquarium site even the basins with only small garden areas and no swales measured the yearly average runoff at about 55 percent. The basins with swales and paved in asphalt or concrete reduced runoff to 30 percent and porous paving, to about 16 percent. The basins with larger garden areas reduced runoff by an additional 50 percent. When the volume of water discharged from all the different elements in the treatment train (the swales, the strand and the pond) are compared, calculations showed almost all the runoff was retained on site. Although the year sampled was during an extreme drought, it is estimated that even during a normal year, discharge would have taken place only about four or five times and the amount would have been greatly reduced. For larger storms, permeable paving did not reduce runoff much more than the other basins with swales. Phosphorus concentrations are highest in the basins with vegetated swales and phosphorus loads were actually increased in basins with swales, although porous paving and larger garden areas ameliorated this effect somewhat. Most metals (iron, lead, zinc, manganese, copper) have higher concentrations in basins paved with asphalt. Nitrate and ammonia most often enter the system directly in rainfall with a correlation coefficient of 0.84 for nitrates and 0.48 for ammonia measured at the basins with no swale. Nitrate-nitrogen and total nitrogen appear to be measured in fairly similar concentrations in all basins while ammonia concentrations are variable. Regression equations show increased concentrations of nitrate in rainfall result in increased concentrations in runoff for all basins. Sediment samples indicate that metal pollutants are not contaminating the water table and that most metals are sequestered in the surface soils. The whole basin approach for the parking lot was an excellent design alternative with no discharge off site. By flexibly interpreting stormwater regulations and taking two feet from the end of each parking space, land was provided for the swales without reducing the number of spaces. This design also did not compromise parking since the front end of the car extends over the swale rather than impermeable paving. Other sensible innovative strategies need to be implemented where land is at a premium. Permeable paving reduces runoff from small rain events, but swales are more effective for reducing runoff from all events.

Reference:

Rushton, B.T., and Hastings, R., 2001, Florida Aquarium Parking Lot: A Treatment Train Approach For Stormwater

Management, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609.

3.8.7 Stormwater Management Alternatives Demonstration Project

Summary: Better maintenance procedures and retrofits designed to improve the discharge water quality from stormwater systems are necessary if these systems are to meet State water quality goals. A demonstration project to educate the public about stormwater systems and provide professionals with innovative ideas that can be used for stormwater management will result from the project. Additionally, a monitoring program will measure pollutant loads discharged to the bay from an effluent filtration system and a modified wet detention pond. Also the water quality and flow discharged through the underground filter system on a daily basis will be quantified. A literature summary will provide concise information about stormwater management alternatives. The site is part of a low impact parking lot design, which has already demonstrated its ability to reduce runoff and pollution. During the first year of the study background data has been collected from the existing ponds. During the second year, pond improvements and maintenance alternatives will be implemented and the ponds monitored to quantify the results. The exact methods will depend on the results of the literature review but might include bubblers, pre-treatment devices, vegetation changes or minor pond alterations such as excavating a deeper permanent pool. Sediment samples and an invertebrate study have provided additional information. Chemical treatment of floating algae with copper is usually unsuccessful and often results in discharges of toxic levels of copper and higher levels of nitrate as the algae die. Phosphorus is released from the sediments into ponds at low dissolved oxygen levels (below 2-3 mg/L). The under drains in the effluent filtration system discharged constantly and indicate that on a yearly basis this runoff was a greater amount than discharged over the weir during storm events. Nitrates, ammonia and phosphorus were measured at the highest levels in the under drain pipes of the effluent filtration system. Metals and to a lesser extent phosphorus increase when total suspended solids increase. Phosphorus concentrations were highest in the pond with the highest concentrations of phosphorus in the sediments, especially when dissolved oxygen levels were low. The three ponds surveyed showed wide variations in the number of invertebrates collected. The well-oxygenated pond with no chemicals added had the greatest diversity, the anaerobic pond with only a thin layer of sediments over a cement bottom had about half as many invertebrates, and the pond treated once a month with algicide had only one invertebrate species. Fluctuating salinity levels may have also influenced these results. Ponds with nuisance plant problems need remedial solutions other than chemical treatment with copper. Some suggestions for improving the pond after cleaning out the muck include: a) maintaining a deep water permanent pool, b) planting submerged macrophytes which pump oxygen into the water, c) installing a bubbler or fountain, d) using a pre-treatment device such as a bioretention garden or sediment sump. Appropriate fish and other aquatic species stocked in the ponds might improve the ecological balance, provide a way to estimate pond health, and help control nuisance species such as mosquitoes. Effluent filtration systems should not be permitted except under exceptional conditions. They are usually not properly maintained and export higher levels of dissolved nutrients than other stormwater systems.

Reference:

Rushton, B.T., 1998, Sources and Sinks for Stormwater Pollutants, Southwest Florida Water Management District, 2379 Broad Street, Brooksville, Florida 34609.

3.8.8 Broadway Outfall Stormwater Retrofit Monitoring Project (Phase 2)

Summary: The Broadway Outfall drainage basin is approximately 132.4 acres in size and includes a 30.6 acre high intensity commercial district. The entire commercial district, which is 100% impervious, was constructed prior to the implementation of the state's stormwater discharge rule. All rainfall incident on these 30.6 acres discharges directly into the Hillsborough River reservoir untreated, resulting in virtually all the contaminants accumulated between inter-event dry periods being conveyed directly to the river. In addition to the commercial district, the Broadway Outfall drainage basin includes residential, multi-family, institutional, recreational land uses including a golf course. The retrofit project has installed a Model PSW70XX (26 cfd capacity) CDS unit in series with an excavated sediment sump immediately downstream, followed by a shallow linear marsh system extending approximately 500 feet downstream. Phase 2 of the project will collect two years of data, including most storm events, to determine the efficiency of the system to remove pollutants. The monitoring of the Broadway Outfall project includes collecting flow weighted samples before stormwater enters the CDS unit, again after it leaves the system and finally as it leaves the marsh system. Rain water will also be collected for chemical analysis.

Flow will be measured before stormwater enters the system and at the outfall structure. It is assumed that the same amount of water will leave the CDS unit as enters the sealed tank. The amount of flow that bypasses the CDS unit will also be estimated. Base flow will be collected on a consistent schedule. In addition, wells surrounding the site will analyze water table interactions, sediment samples will determine pollutants retained on site and macroinvertebrate sampling will also be conducted. The major goal of the project is to assess the efficiency (pollutant removal) of the various treatment elements. The primary constituents monitored include nutrients, metals, ions, pesticides, and priority pollutants. Since the monitoring project will not begin until March 2002 there are no results. However, some pre-construction sediment and water quality grab samples have been collected and they indicate some of the potential problems. The concentrations of semi-volatile organic pollutants in the sediments where stormwater was first discharged from the pipe into the ditch were high and some exceeded toxic standards. For example, concentrations (ug/kg) were: Fluoranthene 41,000, Benzo(a)anthracene 24,000, Chrysene 26,000, pyrene 35,000. These were reduced to undetectable levels in the middle section of the ditch and increased, but at lower levels, as the ditch receives runoff from more commercial development. Five PAHs were also detected in the water column at the inflow of the ditch, but not after water traveled further down the water course. No pesticides were detected in the sediments, but atrazine and hexazinone were measured in the water column. Anoxic conditions (low dissolved oxygen) were measured in the ditch.

References: Ongoing

3.8.9 Lake Jackson Megginnis Arm Regional Stormwater System

Summary: Studies in the mid-1970s of Lake Jackson in Leon County, Florida, determined that stormwater from the rapidly urbanizing Megginnis Arm watershed and from the construction of Interstate 10 were responsible for the lake's water quality degradation. In 1983, the NWFWMD and the FDER cooperatively designed and constructed, using EPA Clean Lakes grant and state funds, an experimental regional stormwater treatment system. The system consists of a 20 acre wet detention pond with a heavy sediment basin at the inflow, a 4.2 acre sand filter system, and a 5.7 acre, three cell constructed wetland. The pond originally was sized for 150 acre-feet of storage, representing the runoff from a 2.5 inch storm in the watershed. Continued urbanization of the watershed resulted in greater volumes of stormwater, thereby reducing the system's effectiveness. Therefore, the system was enlarged in 1989-90 to increase the storage volume by 31.7% thus providing 173.8 acre-feet of storage, or storage for 1.02 inches of runoff from the watershed. In 1992, the sand filter system was completely renovated, including new distribution pipes and sand filter media. Finally, in 1990-92, over 112,000 cubic yards of sediments which had accumulated in the bottom of Megginnis Arm were removed and the littoral areas of the arm were replanted with native macrophytes and trees. About 6,000 cubic yards of materials were dredged from the heavy sediment basin after three years of operation with additional material removed during the system's expansion. Monitoring data shows that in normal operation, the system can reduce total volume by 30% and reduce loadings by over 90% for solids, 70% for total nitrogen, 80% for total phosphorus, and 50% for orthophosphorus.

References:

Northwest Florida Water Management District, 1984, Final Construction Report – Lake Jackson Clean Lakes Restoration Project, Submitted to Florida Department of Environmental Regulation, Bureau of Operations, Tallahassee, Florida.

Northwest Florida Water Management District, 1990, Final Report on the Expansion of the Lake Jackson Stormwater Treatment Facility, Submitted to Florida Department of Environmental Regulation, Stormwater/NPS Management Section, Tallahassee, Florida.

Northwest Florida Water Management District, 1992, Lake Jackson Regional Stormwater Retrofit Plan, Water Resources Special Report 92-1, Havana, Florida.

3.8.10 Lake Greenwood Urban Wetland City of Orlando Stormwater Utility

Summary: The Greenwood Urban Wetland was built to alleviate flooding and to treat stormwater runoff prior to discharge to drainage wells which flow to the Floridan Aquifer. The system is designed to detain the runoff from 2.5 inches of rainfall. Approximately 300,000 cubic yards of material was removed to create the system which enlarged the surface area of the "lake" from four to thirteen acres. Weirs were constructed to control water levels and establish three ponds to maximize stormwater detention. The average water depth is 5.1 feet, the storage volume is 66 acre feet, and the hydraulic residence time is 22.7 days. The lakes have a 25 to 30-foot-wide littoral shelf which was planted with over 82,000 plants of ten species of native macrophytes. The lakes are connected by marsh flowways and the system also includes a "riverine floodway" that allows large storms to bypass the lake system. The floodway is planted with seven species of hardwood swamp trees. An upstream sediment/debris basin, pond aeration, and an irrigation system reusing stormwater are incorporated into the design to increase pollutant removal effectiveness. The reuse system allows the City to irrigate the park and the adjacent city-owned cemetery with stormwater instead of potable water, saving the city $25,000 per year. In addition to providing flood protection and stormwater treatment, the 26 acre Lake Greenwood Urban Wetland park includes sidewalks, bridges, and green space passive recreation which is widely used by nearby residents. Preconstruction monitoring was conducted from May 19, 1987 through October 13, 1988 to determine the trophic state of Lake Greenwood and to determine the potential loadings discharged to the lake's five drainage wells. The preconstruction Trophic State Index averaged 64 and was highly variable ranging from 12. 5 to 80.8 with five months above 70. After construction, TSI values averaged 57 but no months had values above 66 and variability was less with a range of 36.2 to 66.3. Treatment effectiveness of the system is summarized below:

	TN	NO2	NO3	NH4	TP	OP	Cd	Cu	Pb	Zn
Sed Trap	4%	-76%	4%	-100%	11%	7%	26%	19%	10%	6%
Wetland	11%	8%	-13%	10%	62%	77%	0%	59%	60%	69%

Reference:

McCann, K. and L. Olson, Orlando Stormwater Utility, 1994, Final report on Greenwood Urban Wetland Treatment Effectiveness, Submitted to Florida Department of Environmental Protection, Stormwater/NPS Management Section, Tallahassee, Florida.

3.8.11 Packed Bed Wetland Filter System

Summary: Clear Lake is 360 acres in size and stormwater loadings from its three square mile watershed have led to serious water quality problems. An innovative stormwater treatment system was needed for this basin to both reduce pollutant load and function within a limited area where multiple demands are placed on the use of land. The constructed experimental stormwater treatment train consists of: A 3.3 acre off-line wet detention pond with a sediment trap at the inlet. Construction of diversion weirs to shunt the first flush to the wet detention pond while allowing the remaining stormwater to bypass the system. Construction of 10 packed beds consisting of five crushed concrete and five granite media beds, vegetated with four differing combinations of wetland plants. Installation of two pumps to supply water to the packed beds from both the wet detention system during storms and from Clear Lake during dry periods. Control valving to allow for varied water flow rates through the packed beds. Automated flow meters and composite samplers to allow storm event sampling. Monitoring was performed on the effectiveness of the overall system, the performance of the individual beds, and the best flow rate at which to operate the system (30, 60, or 120 gal/min). Analysis of the individual beds showed consistent removal across all beds for cadmium, copper, lead, zinc, total nitrogen, TKN, nitrite, total phosphorus, TSS, VSS, and fecal coliform. Among the remaining parameters, chromium, ammonia, nitrate, orthophosphorus, TDS, and TOC, pollutant removals within bed 6 were consistently low at all three flow rates. Conversely, bed 5 exhibited consistently high removals for the same parameters. The high flow rate was determined to be the best operating rate for the system. Overall pollutant load reduction is presented below:

Parameter	% Removal	Parameter	% Removal	Parameter	%Removal
Cadmium	80	Total Nitrogen	63	Total phosphorus	82
Chromium	38	TKN	62	Orthophosphorus	14
Copper	21	Ammonia	6	TDS	8
Lead	73	Nitrate	75	TSS	81
Zinc	55	Nitrite	-9	VSS	80
Fecal Coliform	78	TOC	38		

Reference:

City of Orlando Stormwater Utility Bureau, 1995, Final Report on the Packed Bed Wetland Stormwater Treatment System, Submitted to Florida Department of Environmental Regulation, Stormwater/NPS Management Section, Tallahassee, Florida.

3.8.12 Bath Club Concourse Stormwater Rehabilitation Project Town of North Redington Beach, Pinellas County, Florida

Summary: The Bath Club Concourse is a combination roadway and parking lot connecting Bath Club Circle and Gulf Boulevard. Before the project, the Bath Club Concourse was totally impervious consisting of asphaltic pavement. Untreated runoff from the Concourse and its associated drainage area was directed by sheet flow into a single storm sewer inlet and discharged offsite, and ultimately to Boca Ciega Bay. The objectives of this project were: (1) to maximize the amount of stormwater runoff that could be infiltrated on-site, thereby reducing the annual volume that is discharged off-site without any treatment; and (2) to demonstrate innovative alternative approaches to treating stormwater in highly urbanized areas where land for traditional BMPs is scarce and very expensive. Drainage was redirected toward two new pervious concrete parking areas located in the center of the Concourse. These are separated by an unpaved landscaping island that also provides infiltration. To maximize infiltration of the pervious concrete parking areas, two 150-feet-long underdrains were installed in the eastern half of the project to facilitate the drainage of the subsurface soils immediately beneath the pervious concrete. The project improvements resulted in a significant reduction of direct discharge of stormwater runoff from the site. Calculations accounting for average annual rainfall and runoff, as well as pore space volume and subsurface water flow, indicate that the improvements caused a 33% reduction in total on-site runoff volume between the pre- and post-project conditions. Further, the volume of surface runoff discharging directly to Boca Ciega Bay was reduced by about 75%. Calculated overall removal efficiencies for the project are based on the efficiency of the underdrain/filter system to remove pollutants and are indicated as follows:

Parameter	Lead	Zinc	TSS	BOD	TP	OrthoP	TN
% Removal	73	72	73	61	49	26	65

Reference:

Bateman, M., Livingston, E.H., Cox, J., 1998, Overview of Urban Retrofit Opportunities in Florida, in National Conference on Retrofit Opportunities for Water Resource Protection in Urban Environments Proceedings Chicago, IL, February 9-12, 1998, p. 166.

3.8.13 Sunset Drive Outfall Stormwater Rehabilitation Project, City of South Pasadena, Pinellas County, Florida

Summary: The Sunset Drive drainage basin is nearly fully developed and consists of approximately 55% impervious area. Historically, stormwater was collected and discharged untreated to a local storm sewer which connects to a City of St. Petersburg storm sewer main. This storm sewer main ultimately discharges to Boca Ciega Bay. The objectives of this project were: (1) to reduce stormwater pollutant loading to Boca Ciega Bay by incorporating an inline sediment sump/oil and grease skimmer in the Sunset Drive storm sewer system before its junction with the larger storm sewer main; and (2) to demonstrate innovative alternative approaches to treating stormwater in highly urbanized areas where land for traditional BMPs is scarce and very expensive. The sump was designed, to the extent possible, to meet the current rule requirements for this type of system. Due to physical limitations, the design provided for the storm sewer flow to be diverted to the area of an existing greenspace for treatment, prior to being diverted back to the main flow path of the storm sewer. The greenspace, which is adjacent to the bay, was modified into an open, linear wet-sump, which included energy dissipaters and a skimmer baffle. The project also included an attractive boardwalk around and over the facility as well as plantings of salt marsh vegetation in the sump's littoral zone. The project provides an opportunity to trap and retain sediment and other suspended materials as small as 0.1 mm in diameter. A corresponding reduction in other urban pollutants typically associated with suspended solids such as heavy metals, bacteria, and oxygen demanding substances can also be expected. The sediment load reduction to Boca Ciega Bay is estimated to be approximately 24.5 cubic yards per year.

Reference:

Bateman, M., Livingston, E.H., Cox, J., 1998, Overview of Urban Retrofit Opportunities in Florida, in National Conference on Retrofit Opportunities for Water Resource Protection in Urban Environments Proceedings Chicago, IL, February 9-12, 1998, p. 166.

3.8.14 Jungle Lake Water Quality and Habitat Enhancement, Southwest Florida Water Management District

Summary: Walter Fuller Park is a highly used recreational/athletic park located in the western part of the city of St. Petersburg, approximately 2.5 miles east of Boca Ciega Bay. Jungle Lake was excavated about 75 years ago to provide fill for the construction of local roads. The 11.2 acre kidney-shaped lake received untreated stormwater from five inflows and discharges to the bay via a single outflow. During most storms, runoff bypassed Jungle Lake and was discharged directly to the bay. To improve the quality of water in the lake and that which is discharged to the bay, a BMP treatment train was constructed. The system includes: A diversion weir so that most stormwater is routed into the lake for treatment instead of directly into the bay, Modification of the inflow ditches to create shallow sloughs vegetated with native aquatic macrophytes. Expansion of the lake to create littoral zones vegetated with macrophytes. Two partially submerged berms which produce a longer flow path, increase residence time, provide natural habitat, and replace park uplands resulting from the lake perimeter modifications. Sediment sumps at the northeastern and southeastern inflows. An oil and grease skimmer on the outfall structure. Over 15,000 herbaceous plants consisting of 11 species, 170 trees, and 700 shrubs.

Reference:

Macrina, J. J. and D. M. Vickstorm, 1985, Jungle Lake Water Quality and Habitat Enhancement, Proceedings of the Fourth Biennial Stormwater Research Conference, SWFWMD, Brooksville, Florida.

3.8.15 BMP Treatment Train in the Florida Keys, City of Key Colony Beach, Florida

Summary: Recognizing the importance of reducing stormwater pollution in protecting its sensitive natural resources, the City included in its comprehensive plan policies requiring the retrofitting of its existing drainage system. With technical assistance from the DEP and the SFWMD, the City's consultant developed a stormwater master plan in 1993. The plan included plugging 28 existing stormwater outfalls and constructing a retention basin and swales with raised inlets and exfiltration trenches which overflow into injection wells. Implementation of the master plan began in 1995, and is scheduled for completion by the year 2000. Phase 1 has been completed and Phase 2 will be completed by the fall of 1998. The stormwater master plan calls for the construction of 82,146 linear feet of swales, 9 modified raised swale inlets, about 60,000 linear feet of exfiltration trench, 35 inlet baffle systems to direct the first flush into the exfiltration trenches, and 22 injection wells. Actual stormwater monitoring will not begin until the completion of Phase 2. By plugging the direct stormwater discharges to surface waters and providing storage and treatment for the first 1.5 inches of runoff, the stormwater volume and pollutant loadings will be substantially reduced. Modeling indicates that these will be reduced by up to 75% from pre-project conditions.

Reference:

Greiner Engineering, 1993, City of Key Colony Beach Stormwater Master Plan (Stormwater Retrofit Project).

3.8.16 Silver Star Road Detention Pond, Orlando, Florida

Summary: The study examines the efficiency of a detention pond/wetland system for temporary storage of urban stormwater runoff from a Florida Department of Transportation roadway. The system is an online temporary storage pond-wetland system in series. The study documents the regression efficiency for 22 constituents. Thirteen storms were monitored. The author concludes that the pond generally reduced suspended constituent loads (TSS, 65%, suspended Pb, 41%, suspended Zn, 37%, Suspended N, 17%, and suspended P, 21%). Additionally, the wetland was generally effective in reducing suspended constituent loads. (TSS, 66%, Pb 75%, Zn, 50%, N, 30%, P, 19%), and dissolved loads (TDS, 38%, Pb, 54%, Zn, 75%, N, 13%, P, 0%). The system was quite effective at reducing pollutant loads. One of the most interesting aspects of the article is the use of an efficiency calculation method termed the "regression efficiency". This method is carried out by regressing loads-out as a function of loads-in with the intercept of the regression constrained to the origin. The regression efficiency is thus defined as unity minus the regression slope. The regression efficiency assumes that the efficiency is the same for all storms and that the storms monitored are representative of all storms for the BMP.

Reference: International Stormwater BMP Database Basic Database

3.8.17 Lake Munson Retention Pond (Wet) - Surface Pond with a Permanent Pool Tallahassee, Florida

Summary: The study examines the long term performance of a wetland/lake system for stormwater discharge and wastewater effluent discharge. This paper studies a 255-acre wetland/lake system which has received wastewater effluent and stormwater discharges for over 30 years. Six storms were sampled upstream and three storms downstream of the lake. The study documents the constituent removal efficiency for 25 parameters. Lake Munson displays removal rates that would be commonly expected from relatively new wet detention ponds having similar dimensions and stormwater loading rates. The lake system was effective at retaining particulate material from incoming stormwaters (turbidity 87% removal, suspended solids 95% removal, total P 64% removal, total N 31% removal, BOD 20% removal, TOC 24% removal, total Cr 78% removal, total Cu 72% removal, total Pb 91% removal). Dissolved organic nitrogen and orthophosphate had negative removal rates of -15% and -50%, respectively. The following general conclusions were also made. The author suggests a design criteria to provide twice the volume of the average storm event in order to reduce the impact of any one storm on pond water quality. The Lake Munson performance was surprising because the system has received heavy nutrient loads from wastewater and stormwater discharges for over 30 years and has never been maintained. Removal efficiencies increased rapidly with increasing pond surface area up to a point of diminishing returns beyond which efficiencies improved little with increasing pond area. Removal of suspended material was insensitive to pond depths. Phosphorous removal rates were sensitive to increasing pond depths versus pond area, particularly for pond areas larger than 1.5 to 2.0 percent of the watershed.

Reference: International Stormwater BMP Database Basic Database,

3.8.18 Application of Stormwater Best Management Practices on Constrained Sites – Hunter's Spring Park Case Study

Summary: The Southwest Florida Water Management District (District) and the City of Crystal River jointly funded a stormwater Best Management Practice (BMP) demonstration project at the City's Hunter's Spring Park. Hunter's Spring Park is the only public swimming facility on Kings Bay, an Outstanding Florida Waters (OFW). Due to this limited access to the bay this small park, heavily used by local residents, provides a good opportunity for public education. The park also provides a good opportunity to carry out stormwater BMPs which will reduce sediment and trash loading to the bay. Prior to construction of the BMPs, stormwater runoff from the park parking lot and a portion of Northeast I st Ave. discharged directly into Hunter's Spring Cove. Oils and greases, sediment and trash readily washed into the cove following storm events. In addition, a portion of the parking lot and road were subject to tidal inundation at times of extreme high tides. This provided a unique challenge to the design and construction of a stormwater treatment system. The project improvements consisted of the implementation of a *treatment* train: reduction of impervious cover, vegetative conveyance swale and vegetative filter area.

Reference:

Stevens, S.E., and Flint, M.J., (date not specified) Southwest Florida Water Management District, Surface Water Improvement and Management Department, 7601 Highway 301 North, Tampa Florida 33637.

3.8.19 Infiltration Opportunities in Parking Lot Designs Reduce Runoff and Pollution

Summary: A low impact (dispersed) design demonstrated how small alterations to parking lots can reduce runoff and pollutant loads. A whole basin approach utilized the entire watershed for stormwater management. Storm runoff was treated as soon as rain hit the ground by routing it through a network of swales, strands and finally into a small wet detention pond. When the volume of water from all the different elements of the treatment train (the swales, the strand and the pond) were compared, almost all the storm runoff was retained on site. Further, the size of the wet detention pond used for final treatment could be greatly reduced because of more pervious areas. Individual basins in the parking lot, the various elements in the treatment train, and rainfall usually had significantly different water quality concentrations. Most of the nitrate and ammonia entered the system directly in rainfall and concentrations in runoff were usually reduced as it traveled through the system. Ammonia-nitrogen was highest in the runoff from the basin without a swale and organic nitrogen and phosphorus highest in the strand and pond; metal concentrations were highest in basins paved in asphalt. Polycyclic aromatic hydrocarbons (PAHs) were detected in the soils at the site and some approached the significantly toxic levels. Chlordane was the pesticide most often detected in measurable quantities in soils. Dichlorodiphenyltrichloroethante (DDT) and its daughter products were detected in almost all soils tested and DDE was found in measurable quantities.

Reference:

Rushton, B., 2002, Infiltration Opportunities in Parking Lot Designs Reduce Runoff and Pollution, In: Seventh Biennial Stormwater Research & Watershed Management Conference May 22-23, 2002, p. 146-155.

3.8.20 Stormwater Management and Implementation of BMPs at Miami International Airport

Summary: Miami-Dade Aviation Department (MDAD) began a $5.4 billion capital improvement program (CIP) at Miami International Airport (MIA) in 1990. A key element in the planning and environmental permitting is the Stormwater Master Plan (SWMP, CDM 1992) for the 5 square mile airport in urban Miami. The SWMP included comprehensive evaluations of hydrology, hydraulics, water quality, Best Management Practices (BMPs), and facility planning in phases to allow cost-effective implementation of the CIP while aircraft operations continued and increased to serve growing air traffic demands. A variety of constraints were identified including the protection of aircraft passenger safety (no fog or bird attractants) and the environment (water quality, manatees, and hazardous material cleanups). Aircraft passenger safety issues regulated by the Federal Aviation

Administration (FAA) had to be balanced versus the environmental requirements of the United States Environmental Protection Agency (USEPA), South Florida Water Management District (SFWMD), and Miami-Dade Department of Environmental Resource Management (DERM). MDAD has proactively implemented a BMP Treatment Train, which includes a series of activities to reduce nonpoint source pollutant load generation and to remove pollutants from the runoff prior to discharge. The BMP Treatment Train has been shown by water quality monitoring to cost-effectively treat runoff from the airport to meet federal, state, and local standards and permit requirements. Implementation has been coordinated with a $5.4 billion CIP to allow timely and appropriate retrofits to the system. This paper presents an overview of the MIA Stormwater Management Program and a summary of the successful implementation of the BMP Treatment Train.

Reference:

Schmidt, P.E., Pantoja, N.B., Lopez-Blazquez, L., 2002, Stormwater Management and Implementation of BMPs at Miami International Airport, Camp Dresser & McKee, Inc., Miami - Dade Aviation Department, Dade Aviation Consultants

3.8.21 Stormwater Quality Management Using a Combined Wet-Detention Sand-Filter Stormwater Facility

Summary: Due to the extent of clay soils throughout the City of Tallahassee, stormwater quality treatment has been limited to wet detention. A stormwater quality facility which combines wet detention with side-bank sand-filtration was constructed to treat stormwater in conjunction with storage and attenuation. The facility consists of a 1.21 ha (3.0 A) wet-detention facility and a 48.14 rn3 (1,700 ft) side-bank sand filter. Stormwater samples were collected during a two-year permit period to evaluate the ability of the pond and sand filter to treat selected pollutants. Mass balance sampling was conducted during the winter and summer seasons to evaluate the ability of the combined facility to retain pollutants. Attenuation event sampling was conducted throughout the period in an attempt to differentiate between pollutant concentrations from the combined treatment versus no treatment associated with flow-through discharge which occurs during excessive rainfall events. Preliminary findings of the mass balance sampling reveal that pollutants are retained to varying degrees and that retention of some pollutants is seasonal. Removal efficiency of Total Phosphorus averaged 67 percent, and maximum removal efficiency for metals ranged from 75 to 96 per cent. Preliminary findings from the attenuation sampling reveal sand filtration was effective in reducing the concentrations of most pollutants examined. Findings of project may be used in the development and calibration of pollutant loading models and establishment of realistic goals for pollution load reduction.

Reference:

Gowan, T.D., and Watkins, C.E., 1997, Stormwater Quality Management Using a Combined Wet-Detention Sand-Filter Stormwater Facility, *In*: Fifth Biennial Stormwater Research Conference November 5- 7, 1997, p. 98-106.

3.8.21 Greenwood Urban Wetland Treatment Effectiveness

Summary: The Greenwood Urban Wetland treats stormwater runoff from a 527 acre sub-basin in downtown Orlando Florida. Thirteen acres of ponds with a sediment control basin, pond aeration and an irrigation system reusing stormwater were incorporated into the design for pollutant removal efficiencies. The City of Orlando conducted a study on the Greenwood Urban

Wetland to determine the pollutant removal efficiency of the sediment basin and wetland system in removing pollutants associated with stormwater runoff. Results of the study indicated that the sediment basin removed total phosphorus and ortho phosphate at a removal efficiency of 11.4% and 7.4% respectively. The sediment basin removed total nitrogen and nitrate at removal efficiencies of 3.7% and 16.0% but exported ammonia and nitrite with removals of -100.5% and -76.2% respectively. Removal efficiencies for cadmium, copper, lead and zinc were 25.8%, 18.6%, 9.6% and -5.9% respectively. Pollutant removal efficiency of the wetland system was reduced due to high groundwater inflows. Total phosphorus and ortho phosphate had removal efficiencies in the wetland of 61.5% and 76.7% respectively. The wetland system performed poorly at removing nitrogen. Data indicated removal efficiencies for total nitrogen, ammonia, nitrate and nitrite at 11.0%, 10.2%, -13.2% and 8.1% respectively. Cadmium, copper, lead and zinc were removed in the wetland at removal efficiencies of 0.0%, 58.9%, 59.7% and 68.9% respectively.

<u>Reference</u>:

McCann, K., and Olson, L., 1994, Final Report on Greenwood Urban Wetland Treatment Effectiveness, Prepared by City of Orlando Stormwater Utility Bureau for the Florida Department of Environmental Protection, 18 p.

Palmer, C.N. and Hunt, J.D., 1989, Greenwood Urban Wetland: A man-made Stormwater Treatment Facility, p. 205-214, In: D.W. Fisk (*ed*); Wetlands: Concerns and Successes. Proceedings, American Water Resources Association Symposium in Tampa, Florida, Sept. 17-22, 1989.

3.9 Non-Structural BMPs

3.9.1 <u>Integration of the Florida Yards and Neighborhoods Program into Stormwater Planning for Nutrient Removal</u>

Summary: Stormwater from residential areas is estimated to contribute more than one-third (33%) of the total nitrogen load to Sarasota Bay. The Florida Yards and Neighborhoods Program (FYN) was developed in 1993 to promote environmentally friendly landscaping with plants suited to the Southwest Florida Climate, natural conditions, and wildlife. Using the FYN principles, homeowners can reduce fertilizer and pesticide use, possibly improving the quality of stormwater runoff. West-central Florida has been under severe drought conditions for over two years, and landscape irrigation can account for more than 40% of a homeowner's water usage. Research being conducted by the University of Florida/IFAS will provide information that demonstrates the value of the Florida Yards and Neighborhoods Program as an aid in the improvement of water quality. Current research consists of two projects: 1) a set of replicated plots at the Ft. Lauderdale IFAS center, and 2) examination of the effects of Florida Yards and Neighborhoods in actual residential communities. The FYN program is presented directly to the general public as a tool that, if implemented at large enough scale, may help improve water quality in local streams and estuarine waters. To this end, the Sarasota County (Florida) Board of County Commissioners recently approved a bill requiring FYN-type landscapes be used in any new developments built within County limits.

Reference:

Raulerson, G.E., Alderson, M., Cisar, J.L., Snyder, G.H., 2002, Integration of the Florida Yards and Neighborhoods Program into Stormwater Planning for Nutrient Removal, In: Seventh Biennial Stormwater Research & Watershed Management Conference May 22-23, 2002, p. 204-212.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Existing and ongoing studies of stormwater treatment BMPs in southwest Florida is limited at this time. Based on this literature review, BMP research is primarily being performed on detention systems, which is the most common stormwater treatment system in southwest Florida. The studies of detention system concentrate on the impact of littoral plantings, evaluation of different depths with aeration, and roadway pollutant removal efficiency. Other stormwater treatment BMP research in southwest Florida includes infiltration (*e.g.*, porous pavement evaluation), minimizing directly connected impervious surfaces (*e.g.*, green roof), and miscellaneous/vendor-supplied systems (e.g., Leitner Creek By-Pass).

A fair amount of research of stormwater treatment BMPs has been performed in other areas of Florida. The majority of the existing research has focused on detention systems and treatment trains that utilize a combination of structural BMPs. In addition, some research has been performed on the pollutant removal efficiency of wetlands and vendor-supplied systems. Very little research has been performed on non-structural BMPs in Florida. This is likely due to the inherent difficulties in measuring the success of such systems without controllable boundaries (*e.g.,* inlets and outlets).

Based on the paucity of data from existing stormwater treatment BMPs in southwest Florida, Johnson Engineering recommends that research be performed on those BMPs most commonly permitted and installed (*e.g.*, wet detention).

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APPENDIX O – RECLAIMED WATER QUALITY DATA

Fort Myers Beach Waste Water Treatment Plant
Effluent Concentrations

CDAT	ANAL	QUAL	ACOM	AUNT	Average
4/17/2006	Aluminum by ICP/MS	ELAB	34	ug/L	
3/3/2006	Ammonia, Automated Phenate		3.58	mg/L as N	4.568
3/9/2006	Ammonia, Automated Phenate		3.84	mg/L as N	
3/14/2006	Ammonia, Automated Phenate		3.74	mg/L as N	
3/21/2006	Ammonia, Automated Phenate		7.55	mg/L as N	
3/28/2006	Ammonia, Automated Phenate		4.13	mg/L as N	
4/17/2006	Antimony, AA furnace technique	U	1	µg/L	
2/16/2006	Arsenic, AA furnace technique	U	1	µg/L	
4/17/2006	Arsenic, AA furnace technique	U	1	µg/L	
2/7/2007	Arsenic, AA furnace technique	U	1	µg/L	
2/7/2007	Barium, ICP Metals	I ELAB	0.0062	mg/L	
2/16/2006	Barium, AA furnace technique		6.3	µg/L	
4/17/2006	Barium, AA furnace technique	J4	10.4	µg/L	
4/17/2006	Beryllium, AA furnace technique	U	0.2	µg/L	
3/3/2006	Biochemical Oxygen Demand 5 day	U J99	2	mg/L	
3/9/2006	Biochemical Oxygen Demand 5 day		6.6	mg/L	
3/14/2006	Biochemical Oxygen Demand 5 day		5.2	mg/L	
3/21/2006	Biochemical Oxygen Demand 5 day	I	2.1	mg/L	
3/28/2006	Biochemical Oxygen Demand 5 day		3.3	mg/L	
4/17/2006	Bromate, by Ion Chromatograph	U	0.01	mg/L	
2/16/2006	Cadmium, AA furnace technique	U	0.4	µg/L	
4/17/2006	Cadmium, AA furnace technique	U	0.4	µg/L	
2/7/2007	Cadmium, AA furnace technique	U	0.3	µg/L	
3/3/2006	Carbonaceous BOD	U J99	2	mg/L	
3/9/2006	Carbonaceous BOD	I	6.7	mg/L	
3/14/2006	Carbonaceous BOD	I	3	mg/L	
3/21/2006	Carbonaceous BOD	I	2.1	mg/L	
3/28/2006	Carbonaceous BOD	U J99	2	mg/L	
3/3/2006	Chemical Oxygen Demand	ELAB	88	mg/L	
3/9/2006	Chemical Oxygen Demand	ELAB	88	mg/L	
3/14/2006	Chemical Oxygen Demand	ELAB	79	mg/L	
3/21/2006	Chemical Oxygen Demand	ELAB	69	mg/L	
3/28/2006	Chemical Oxygen Demand	ELAB	68	mg/L	
2/16/2006	Chloride titrimetric Argentometric		135	mg/L	
4/17/2006	Chloride titrimetric Argentometric		156	mg/L	
2/7/2007	Chloride titrimetric Argentometric		151	mg/L	
2/16/2006	Chromium, AA furnace technique	U	1	µg/L	
4/17/2006	Chromium, AA furnace technique	I	1.2	µg/L	
2/7/2007	Chromium, AA furnace technique	I	2.69	µg/L	
4/17/2006	Color		42.9	CU	
4/17/2006	Copper by flame AA	U	0.01	mg/L	
2/16/2006	Copper, AA furnace technique	U	1	µg/L	
2/7/2007	Copper, AA furnace technique	U	1	µg/L	
4/17/2006	Cyanide, Total	U	0.001	mg/L	
2/16/2006	Fluoride, by Ion Chromatograph		0.4	mg/L	
4/17/2006	Fluoride, by Ion Chromatograph	I	0.25	mg/L	
2/7/2007	Fluoride, by Ion Chromatograph		0.21	mg/L	
2/16/2006	Iron by flame AA	U	0.04	mg/L	
4/17/2006	Iron by flame AA	U	0.04	mg/L	
2/7/2007	Iron by flame AA	U	0.04	mg/L	
2/16/2006	Lead, AA furnace technique	U	1	µg/L	

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Effluent Concentrations

4/17/2006	Lead, AA furnace technique	U	1	µg/L	
2/7/2007	Lead, AA furnace technique	U	1	µg/L	
2/16/2006	Manganese by flame AA	I	0.02	mg/L	
4/17/2006	Manganese by flame AA	I	0.01	mg/L	
2/7/2007	Manganese by flame AA	U	0.01	mg/L	
2/16/2006	Mercury, AA cold vapor technique	U	0.2	µg/L	
4/17/2006	Mercury, AA cold vapor technique	U	0.2	µg/L	
2/7/2007	Mercury, AA cold vapor technique	U ELAB	0.05	µg/L	
4/17/2006	Nickel, AA furnace techinque	I	1.6	µg/L	
2/16/2006	Nitrate	I	0.02	mg/L as N	0.798
3/21/2006	Nitrate		1.05	mg/L as N	
3/28/2006	Nitrate		0.76	mg/L as N	
4/17/2006	Nitrate		1.01	mg/L as N	
2/7/2007	Nitrate		1.15	mg/L as N	
2/16/2006	Nitrate + Nitrite	I	0.03	mg/L as N	1.77
3/21/2006	Nitrate + Nitrite		2.96	mg/L as N	
3/28/2006	Nitrate + Nitrite		2.71	mg/L as N	
4/17/2006	Nitrate + Nitrite		1.9	mg/L as N	
2/7/2007	Nitrate + Nitrite		1.25	mg/L as N	
2/16/2006	Nitrite		0.009	mg/L as N	0.972
3/21/2006	Nitrite		1.91	mg/L as N	
3/28/2006	Nitrite		1.95	mg/L as N	
4/17/2006	Nitrite		0.889	mg/L as N	
2/7/2007	Nitrite		0.102	mg/L as N	
3/3/2006	Nitrogen, Kjeldahl, Total	J4	6.25	mg/L as N	8.328
3/9/2006	Nitrogen, Kjeldahl, Total		8.84	mg/L as N	
3/14/2006	Nitrogen, Kjeldahl, Total		7.07	mg/L as N	
3/21/2006	Nitrogen, Kjeldahl, Total		12.74	mg/L as N	
3/28/2006	Nitrogen, Kjeldahl, Total		6.74	mg/L as N	
3/3/2006	Nitrogen, Organic		2.7	mg/L as N	
3/9/2006	Nitrogen, Organic		5	mg/L as N	
3/14/2006	Nitrogen, Organic		3.3	mg/L as N	
3/21/2006	Nitrogen, Organic		5.2	mg/L as N	
3/28/2006	Nitrogen, Organic		2.6	mg/L as N	
4/17/2006	Odor	U	1	TON	
2/16/2006	pH, Field (electrometric)		7.18	units	
4/17/2006	pH, Field (electrometric)		7.29	units	
2/16/2006	Selenium, AA furnace technique	U	1	µg/L	
4/17/2006	Selenium, AA furnace technique	U	1	µg/L	
2/7/2007	Selenium, AA furnace technique	I	2.6	µg/L	
2/16/2006	Silver, AA furnace technique	U	0.5	µg/L	
4/17/2006	Silver, AA furnace technique	U	0.5	µg/L	
2/7/2007	Silver, AA furnace technique	U	0.5	µg/L	
2/16/2006	Sodium, AA direct aspiration		118	mg/L	
4/17/2006	Sodium, AA direct aspiration		121	mg/L	
2/7/2007	Sodium, AA direct aspiration		104	mg/L	
2/16/2006	Sulfate	ELAB	96	mg/L	
4/17/2006	Sulfate		97.2	mg/L	
2/7/2007	Sulfate		106	mg/L	
2/16/2006	Surfactants calculated as LAS mol wt 320		0.1	mg MBAS/L	
4/17/2006	Surfactants calculated as LAS mol wt 320	I	0.04	mg MBAS/L	
2/7/2007	Surfactants calculated as LAS mol wt 320		0.139	mg MBAS/L	

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4/17/2006	Thallium, AA furnace technique	U	0.5	µg/L	
2/16/2006	Total Dissolved Solids/filterable		422	mg/L	
4/17/2006	Total Dissolved Solids/filterable		486	mg/L	
2/7/2007	Total Dissolved Solids/filterable		573	mg/L	
3/3/2006	Total Suspended Solids		5.3	mg/L	6.04
3/9/2006	Total Suspended Solids		10.7	mg/L	
3/14/2006	Total Suspended Solids		6.5	mg/L	
3/21/2006	Total Suspended Solids		3.2	mg/L	
3/28/2006	Total Suspended Solids		4.5	mg/L	
2/16/2006	Zinc by flame AA	I	0.011	mg/L	
4/17/2006	Zinc by flame AA	U	0.01	mg/L	
2/7/2007	Zinc by flame AA		0.023	mg/L	

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

CDAT	ANAM	ACOM	AUNT	DSCR	Average
1/5/2000	Nitrate	3.32	mg/L as N	Ft. Myers Beach Effluent	1.23
1/12/2000	Nitrate	13.9	mg/L as N	Ft. Myers Beach Effluent	
1/19/2000	Nitrate	9.01	mg/L as N	Ft. Myers Beach Effluent	
1/20/2000	Nitrate	10.3	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrate	10.3	mg/L as N	Ft. Myers Beach Effluent	
2/2/2000	Nitrate	9.62	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrate	5.56	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrate	4.01	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrate	2.98	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrate	5.45	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrate	17.64	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrate	11.9	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrate	14	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrate	21.1	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrate	7.62	mg/L as N	Ft. Myers Beach Effluent	
4/12/2000	Nitrate	17.7	mg/L as N	Ft. Myers Beach Effluent	
4/19/2000	Nitrate	12.29	mg/L as N	Ft. Myers Beach Effluent	
4/26/2000	Nitrate	7.7	mg/L as N	Ft. Myers Beach Effluent	
5/3/2000	Nitrate	2.52	mg/L as N	Ft. Myers Beach Effluent	
5/10/2000	Nitrate	2.62	mg/L as N	Ft. Myers Beach Effluent	
5/17/2000	Nitrate	1.5	mg/L as N	Ft. Myers Beach Effluent	
5/24/2000	Nitrate	2.42	mg/L as N	Ft. Myers Beach Effluent	
5/31/2000	Nitrate	4.45	mg/L as N	Ft. Myers Beach Effluent	
6/7/2000	Nitrate	2.69	mg/L as N	Ft. Myers Beach Effluent	
6/14/2000	Nitrate	3.74	mg/L as N	Ft. Myers Beach Effluent	
6/21/2000	Nitrate	5.02	mg/L as N	Ft. Myers Beach Effluent	
6/28/2000	Nitrate	2.91	mg/L as N	Ft. Myers Beach Effluent	
7/5/2000	Nitrate	1.96	mg/L as N	Ft. Myers Beach Effluent	
7/12/2000	Nitrate	1.84	mg/L as N	Ft. Myers Beach Effluent	
7/19/2000	Nitrate	3.07	mg/L as N	Ft. Myers Beach Effluent	
7/26/2000	Nitrate	3.81	mg/L as N	Ft. Myers Beach Effluent	
8/2/2000	Nitrate	2.6	mg/L as N	Ft. Myers Beach Effluent	
8/9/2000	Nitrate	3.9	mg/L as N	Ft. Myers Beach Effluent	
8/16/2000	Nitrate	5.84	mg/L as N	Ft. Myers Beach Effluent	
8/23/2000	Nitrate	7.35	mg/L as N	Ft. Myers Beach Effluent	
8/30/2000	Nitrate	5.99	mg/L as N	Ft. Myers Beach Effluent	
9/6/2000	Nitrate	4.64	mg/L as N	Ft. Myers Beach Effluent	
9/13/2000	Nitrate	3.93	mg/L as N	Ft. Myers Beach Effluent	
9/29/2000	Nitrate	5.41	mg/L as N	Ft. Myers Beach Effluent	
9/27/2000	Nitrate	4.6	mg/L as N	Ft. Myers Beach Effluent	
10/4/2000	Nitrate	4.05	mg/L as N	Ft. Myers Beach Effluent	
10/11/2000	Nitrate	1.53	mg/L as N	Ft. Myers Beach Effluent	
10/18/2000	Nitrate	2.03	mg/L as N	Ft. Myers Beach Effluent	
10/25/2000	Nitrate	1.69	mg/L as N	Ft. Myers Beach Effluent	
11/1/2000	Nitrate	1.22	mg/L as N	Ft. Myers Beach Effluent	
11/8/2000	Nitrate	1.53	mg/L as N	Ft. Myers Beach Effluent	
11/15/2000	Nitrate	1.04	mg/L as N	Ft. Myers Beach Effluent	
11/22/2000	Nitrate	1.66	mg/L as N	Ft. Myers Beach Effluent	
11/29/2000	Nitrate	1.23	mg/L as N	Ft. Myers Beach Effluent	
12/6/2000	Nitrate	1.59	mg/L as N	Ft. Myers Beach Effluent	
12/13/2000	Nitrate	1.4	mg/L as N	Ft. Myers Beach Effluent	

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12/20/2000	Nitrate	3.07	mg/L as N	Ft. Myers Beach Effluent
12/27/2000	Nitrate	1.4	mg/L as N	Ft. Myers Beach Effluent
1/3/2001	Nitrate	1.79	mg/L as N	Ft. Myers Beach Effluent
1/10/2001	Nitrate	1.12	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2001	Nitrate	1.64	mg/L as N	Ft. Myers Beach Effluent
1/11/2001	Nitrate	1.11	mg/L as N	Effluent 24-hr Composite, FMB
1/12/2001	Nitrate	0.89	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrate	0.73	mg/L as N	FMB New Dig H2
1/16/2001	Nitrate	0.73	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2001	Nitrate	1.26	mg/L as N	Ft. Myers Beach Effluent
1/17/2001	Nitrate	1.49	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2001	Nitrate	1.52	mg/L as N	Effluent 24-hr Composite, FMB
1/19/2001	Nitrate	0.72	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2001	Nitrate	1.79	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2001	Nitrate	2.07	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2001	Nitrate	1.72	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2001	Nitrate	1.62	mg/L as N	Ft. Myers Beach Effluent
1/25/2001	Nitrate	1.22	mg/L as N	Effluent 24-hr Composite, FMB
1/26/2001	Nitrate	1.15	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2001	Nitrate	1.25	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrate	1.06	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrate	0.95	mg/L as N	Ft. Myers Beach Effluent
2/1/2001	Nitrate	0.96	mg/L as N	Effluent 24-hr Composite, FMB
2/2/2001	Nitrate	0.88	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2001	Nitrate	1.37	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2001	Nitrate	1.18	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrate	1.35	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrate	0.83	mg/L as N	Ft. Myers Beach Effluent
2/8/2001	Nitrate	1.04	mg/L as N	Effluent 24-hr Composite, FMB
2/8/2001	Nitrate	1.08	mg/L as N	Effluent 24-hr Composite, FMB
2/9/2001	Nitrate	1.98	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2001	Nitrate	1.05	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2001	Nitrate	1.07	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrate	0.81	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrate	0.69	mg/L as N	Ft. Myers Beach Effluent
2/15/2001	Nitrate	0.9	mg/L as N	Effluent 24-hr Composite, FMB
2/16/2001	Nitrate	1.44	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2001	Nitrate	1.11	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2001	Nitrate	1.54	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrate	1.12	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrate	1.12	mg/L as N	Ft. Myers Beach Effluent
2/22/2001	Nitrate	1.15	mg/L as N	Effluent 24-hr Composite, FMB
2/23/2001	Nitrate	2.17	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2001	Nitrate	0.89	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2001	Nitrate	1.67	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrate	1.47	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrate	1.51	mg/L as N	Ft. Myers Beach Effluent
3/1/2001	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
3/2/2001	Nitrate	1.23	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB

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3/6/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrate	0.6	mg/L as N	Ft. Myers Beach Effluent
3/8/2001	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
3/9/2001	Nitrate	1.48	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2001	Nitrate	0.96	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2001	Nitrate	0.84	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2001	Nitrate	0.96	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2001	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
3/16/2001	Nitrate	1.24	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2001	Nitrate	0.59	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2001	Nitrate	1.11	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2001	Nitrate	1.09	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2001	Nitrate	0.81	mg/L as N	Effluent 24-hr Composite, FMB
3/23/2001	Nitrate	0.95	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2001	Nitrate	1.24	mg/L as N	Effluent 24-hr Composite, FMB
3/27/2001	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2001	Nitrate	1.18	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
3/30/2001	Nitrate	1.1	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2001	Nitrate	1.06	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2001	Nitrate	0.92	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2001	Nitrate	1.25	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2001	Nitrate	0.93	mg/L as N	Effluent 24-hr Composite, FMB
4/6/2001	Nitrate	0.91	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2001	Nitrate	0.69	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2001	Nitrate	0.8	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2001	Nitrate	1.16	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
4/13/2001	Nitrate	2	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2001	Nitrate	1.45	mg/L as N	Effluent 24-hr Composite, FMB
4/17/2001	Nitrate	1.59	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2001	Nitrate	1.37	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2001	Nitrate	1.43	mg/L as N	Effluent 24-hr Composite, FMB
4/20/2001	Nitrate	1.44	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2001	Nitrate	1.88	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2001	Nitrate	1.27	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2001	Nitrate	1.09	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2001	Nitrate	1.43	mg/L as N	Effluent 24-hr Composite, FMB
4/27/2001	Nitrate	1.35	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2001	Nitrate	1.6	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2001	Nitrate	1.68	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2001	Nitrate	2.05	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2001	Nitrate	2.19	mg/L as N	Effluent 24-hr Composite, FMB
5/4/2001	Nitrate	2.04	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2001	Nitrate	1.83	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2001	Nitrate	1.69	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2001	Nitrate	2.43	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2001	Nitrate	2.43	mg/L as N	Effluent 24-hr Composite, FMB
5/11/2001	Nitrate	0.82	mg/L as N	Effluent 24-hr Composite, FMB
5/14/2001	Nitrate	1.1	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2001	Nitrate	1.38	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

5/16/2001	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2001	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
5/18/2001	Nitrate	0.74	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2001	Nitrate	1.66	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2001	Nitrate	1.44	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2001	Nitrate	1.33	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2001	Nitrate	1.81	mg/L as N	Effluent 24-hr Composite, FMB
5/25/2001	Nitrate	1.38	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2001	Nitrate	1.67	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2001	Nitrate	1.41	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2001	Nitrate	1.18	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2001	Nitrate	1.24	mg/L as N	Effluent 24-hr Composite, FMB
6/1/2001	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2001	Nitrate	1.34	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2001	Nitrate	1.27	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2001	Nitrate	1.49	mg/L as N	Effluent 24-hr Composite, FMB
6/7/2001	Nitrate	1.48	mg/L as N	Effluent 24-hr Composite, FMB
6/8/2001	Nitrate	1.54	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2001	Nitrate	1.47	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2001	Nitrate	1.47	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2001	Nitrate	2.15	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2001	Nitrate	1.95	mg/L as N	Effluent 24-hr Composite, FMB
6/15/2001	Nitrate	1.89	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2001	Nitrate	1.75	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2001	Nitrate	1.51	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2001	Nitrate	1.43	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2001	Nitrate	1.04	mg/L as N	Effluent 24-hr Composite, FMB
6/22/2001	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2001	Nitrate	1.41	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2001	Nitrate	1.77	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2001	Nitrate	1.41	mg/L as N	Effluent 24-hr Composite, FMB
6/28/2001	Nitrate	1.7	mg/L as N	Effluent 24-hr Composite, FMB
6/29/2001	Nitrate	1.01	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2001	Nitrate	1.2	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2001	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2001	Nitrate	1.08	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2001	Nitrate	1.64	mg/L as N	Effluent 24-hr Composite, FMB
7/6/2001	Nitrate	1.47	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2001	Nitrate	1.42	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2001	Nitrate	0.77	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2001	Nitrate	2.23	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2001	Nitrate	2.88	mg/L as N	Effluent 24-hr Composite, FMB
7/13/2001	Nitrate	2.45	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2001	Nitrate	2.11	mg/L as N	Effluent Grab, FMB
7/17/2001	Nitrate	1.7	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2001	Nitrate	1.17	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2001	Nitrate	0.96	mg/L as N	Effluent 24-hr Composite, FMB
7/20/2001	Nitrate	1.27	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2001	Nitrate	0.59	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2001	Nitrate	0.67	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2001	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2001	Nitrate	1.47	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

7/27/2001	Nitrate	1.45	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2001	Nitrate	1.07	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2001	Nitrate	1.06	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2001	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2001	Nitrate	1.1	mg/L as N	Effluent 24-hr Composite, FMB
8/3/2001	Nitrate	1.09	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2001	Nitrate	0.7	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2001	Nitrate	0.68	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2001	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2001	Nitrate	1.53	mg/L as N	Effluent 24-hr Composite, FMB
8/10/2001	Nitrate	1.07	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2001	Nitrate	0.7	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2001	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2001	Nitrate	1.03	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2001	Nitrate	1.21	mg/L as N	Effluent 24-hr Composite, FMB
8/17/2001	Nitrate	1.4	mg/L as N	Effluent 24-hr Composite, FMB
8/20/2001	Nitrate	1.93	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2001	Nitrate	1.48	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2001	Nitrate	2.66	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2001	Nitrate	2.1	mg/L as N	Effluent 24-hr Composite, FMB
8/24/2001	Nitrate	1.93	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2001	Nitrate	1.25	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2001	Nitrate	1.34	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2001	Nitrate	1.68	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2001	Nitrate	1.81	mg/L as N	Effluent 24-hr Composite, FMB
8/31/2001	Nitrate	0.94	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2001	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2001	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2001	Nitrate	0.78	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2001	Nitrate	1.39	mg/L as N	Effluent 24-hr Composite, FMB
9/7/2001	Nitrate	0.69	mg/L as N	Effluent 24-hr Composite, FMB
9/10/2001	Nitrate	2.48	mg/L as N	Effluent 24-hr Composite, FMB
9/11/2001	Nitrate	2.71	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2001	Nitrate	1.2	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2001	Nitrate	2.18	mg/L as N	Effluent 24-hr Composite, FMB
9/14/2001	Nitrate	2.82	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2001	Nitrate	1.38	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2001	Nitrate	0.84	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2001	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
9/21/2001	Nitrate	1.03	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2001	Nitrate	0.23	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2001	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2001	Nitrate	1.05	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2001	Nitrate	1.27	mg/L as N	Effluent 24-hr Composite, FMB
9/28/2001	Nitrate	2.03	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2001	Nitrate	1.72	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2001	Nitrate	1.67	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2001	Nitrate	1.55	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2001	Nitrate	1.33	mg/L as N	Effluent 24-hr Composite, FMB
10/5/2001	Nitrate	0.89	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2001	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
10/9/2001	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

10/10/2001	Nitrate	0.65	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2001	Nitrate	1.4	mg/L as N	Effluent 24-hr Composite, FMB
10/12/2001	Nitrate	1.52	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2001	Nitrate	0.18	mg/L as N	EFFLUENT 24-HR COMPOSITE
10/16/2001	Nitrate	0.21	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2001	Nitrate	1.21	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2001	Nitrate	1.14	mg/L as N	Effluent 24-hr Composite, FMB
10/19/2001	Nitrate	1.54	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2001	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2001	Nitrate	1.28	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2001	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2001	Nitrate	1.14	mg/L as N	Effluent 24-hr Composite, FMB
10/26/2001	Nitrate	0.86	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2001	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2001	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB
10/31/2001	Nitrate	1.32	mg/L as N	Effluent 24-hr Composite, FMB
11/1/2001	Nitrate	1.42	mg/L as N	Effluent 24-hr Composite, FMB
11/2/2001	Nitrate	0.94	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2001	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2001	Nitrate	0.11	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2001	Nitrate	0.16	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2001	Nitrate	0.12	mg/L as N	Effluent 24-hr Composite, FMB
11/9/2001	Nitrate	0.15	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2001	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2001	Nitrate	0.18	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2001	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2001	Nitrate	0.21	mg/L as N	Effluent 24-hr Composite, FMB
11/16/2001	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2001	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2001	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2001	Nitrate	0.25	mg/L as N	Effl 24-hr Comp, FMB
11/22/2001	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
11/23/2001	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2001	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2001	Nitrate	0.3	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2001	Nitrate	0.67	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2001	Nitrate	0.77	mg/L as N	Effluent 24-hr Composite, FMB
11/30/2001	Nitrate	0.5	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2001	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2001	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2001	Nitrate	0.51	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2001	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
12/7/2001	Nitrate	0.72	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2001	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2001	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2001	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2001	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB
12/14/2001	Nitrate	0.5	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2001	Nitrate	0.33	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2001	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2001	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
12/20/2001	Nitrate	0.65	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

12/21/2001	Nitrate	0.2	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2001	Nitrate	0.2	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2001	Nitrate	0.16	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2001	Nitrate	0.08	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2001	Nitrate	0.06	mg/L as N	Effluent 24-hr Composite, FMB
12/28/2001	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2001	Nitrate	0.15	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2002	Nitrate	0.14	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2002	Nitrate	0.16	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2002	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
1/4/2002	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2002	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2002	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/11/2002	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
1/14/2002	Nitrate	0.51	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2002	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2002	Nitrate	0.81	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2002	Nitrate	1.14	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2002	Nitrate	1.29	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2002	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2002	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2002	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
1/25/2002	Nitrate	0.4	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2002	Nitrate	0.4	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2002	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
2/1/2002	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB
2/4/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2002	Nitrate	0.02	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2002	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2002	Nitrate	0.08	mg/L as N	Effluent 24-hr Composite, FMB
2/8/2002	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2002	Nitrate	0.08	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2002	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2002	Nitrate	0.3	mg/L as N	Effluent 24-hr Composite, FMB
2/15/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2002	Nitrate	0.08	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2002	Nitrate	0.38	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2002	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2002	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
2/22/2002	Nitrate	0.3	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2002	Nitrate	0.2	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2002	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2002	Nitrate	0.3	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
3/1/2002	Nitrate	0.31	mg/L as N	Effluent 24-hr Composite, FMB
3/4/2002	Nitrate	0.06	mg/L as N	Effluent 24-hr Composite, FMB

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3/5/2002	Nitrate	0.21	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2002	Nitrate	0.2	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2002	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
3/8/2002	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
3/11/2002	Nitrate	0.06	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2002	Nitrate	0.24	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2002	Nitrate	0.24	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2002	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
3/18/2002	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2002	Nitrate	0.31	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2002	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2002	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB
3/25/2002	Nitrate	0.07	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
3/27/2002	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2002	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2002	Nitrate	0.4	mg/L as N	Effluent 24-hr Composite, FMB
4/1/2002	Nitrate	0.04	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2002	Nitrate	0.45	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2002	Nitrate	0.57	mg/L as N	Effluent 24-hr Composite, FMB
4/8/2002	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2002	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2002	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2002	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2002	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB
4/15/2002	Nitrate	0.24	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
4/17/2002	Nitrate	0.49	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2002	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
4/22/2002	Nitrate	0.18	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2002	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2002	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2002	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
4/29/2002	Nitrate	0.38	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2002	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2002	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2002	Nitrate	0.42	mg/L as N	Effluent 24-hr Composite, FMB
5/6/2002	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2002	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2002	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2002	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2002	Nitrate	0.69	mg/L as N	Effluent 24-hr Composite, FMB
5/13/2002	Nitrate	0.16	mg/L as N	Effluent 24-hr Composite, FMB
5/14/2002	Nitrate	0.41	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2002	Nitrate	0.97	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

5/16/2002	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2002	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
5/20/2002	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2002	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB
5/27/2002	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2002	Nitrate	0.23	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2002	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2002	Nitrate	0.23	mg/L as N	Effluent 24-hr Composite, FMB
6/3/2002	Nitrate	0.27	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2002	Nitrate	0.38	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2002	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB
6/7/2002	Nitrate	0.78	mg/L as N	Effluent 24-hr Composite, FMB
6/10/2002	Nitrate	0.11	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2002	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2002	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2002	Nitrate	0.11	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2002	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
6/17/2002	Nitrate	0.46	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2002	Nitrate	0.41	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2002	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2002	Nitrate	1.33	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2002	Nitrate	1.04	mg/L as N	Effluent 24-hr Composite, FMB
6/24/2002	Nitrate	1.31	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2002	Nitrate	0.91	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2002	Nitrate	2.6	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2002	Nitrate	3.86	mg/L as N	Effluent 24-hr Composite, FMB
6/28/2002	Nitrate	3.08	mg/L as N	Effluent 24-hr Composite, FMB
7/1/2002	Nitrate	1.19	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2002	Nitrate	0.87	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2002	Nitrate	1.14	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2002	Nitrate	1.02	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2002	Nitrate	1.04	mg/L as N	Effluent 24-hr Composite, FMB
7/8/2002	Nitrate	0.54	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2002	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2002	Nitrate	0.7	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2002	Nitrate	1	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2002	Nitrate	3.97	mg/L as N	Effluent 24-hr Composite, FMB
7/15/2002	Nitrate	0.68	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2002	Nitrate	0.52	mg/L as N	Effluent 24-hr Composite, FMB
7/17/2002	Nitrate	0.41	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2002	Nitrate	1.16	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2002	Nitrate	1.17	mg/L as N	Effluent 24-hr Composite, FMB
7/22/2002	Nitrate	1.07	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2002	Nitrate	0.92	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2002	Nitrate	0.84	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2002	Nitrate	0.99	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2002	Nitrate	1.19	mg/L as N	Effluent 24-hr Composite, FMB

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7/29/2002	Nitrate	1.02	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2002	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2002	Nitrate	0.95	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2002	Nitrate	1.09	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2002	Nitrate	2.71	mg/L as N	Effluent 24-hr Composite, FMB
8/5/2002	Nitrate	1.16	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2002	Nitrate	1.13	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2002	Nitrate	1.15	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2002	Nitrate	1.99	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2002	Nitrate	2.26	mg/L as N	Effluent 24-hr Composite, FMB
8/12/2002	Nitrate	1.11	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2002	Nitrate	0.65	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2002	Nitrate	1.18	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2002	Nitrate	1.06	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2002	Nitrate	3.42	mg/L as N	Effluent 24-hr Composite, FMB
8/19/2002	Nitrate	0.92	mg/L as N	Effluent 24-hr Composite, FMB
8/20/2002	Nitrate	0.84	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2002	Nitrate	2.01	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2002	Nitrate	1.35	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2002	Nitrate	2.21	mg/L as N	Effluent 24-hr Composite, FMB
8/26/2002	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2002	Nitrate	0.64	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2002	Nitrate	0.46	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2002	Nitrate	1.32	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2002	Nitrate	1.35	mg/L as N	Effluent 24-hr Composite, FMB
9/2/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2002	Nitrate	0.82	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2002	Nitrate	0.89	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2002	Nitrate	1.07	mg/L as N	Effluent 24-hr Composite, FMB
9/9/2002	Nitrate	1.54	mg/L as N	Effluent 24-hr Composite, FMB
9/10/2002	Nitrate	1.66	mg/L as N	Effluent 24-hr Composite, FMB
9/11/2002	Nitrate	1.58	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2002	Nitrate	1.8	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2002	Nitrate	1.01	mg/L as N	Effluent 24-hr Composite, FMB
9/16/2002	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
9/17/2002	Nitrate	0.72	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2002	Nitrate	0.73	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2002	Nitrate	1.78	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2002	Nitrate	0.81	mg/L as N	Effluent 24-hr Composite, FMB
9/23/2002	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2002	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2002	Nitrate	0.85	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2002	Nitrate	0.71	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB
9/30/2002	Nitrate	1.26	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2002	Nitrate	1.24	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2002	Nitrate	2.54	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2002	Nitrate	0.92	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2002	Nitrate	0.76	mg/L as N	Effluent 24-hr Composite, FMB
10/7/2002	Nitrate	0.52	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB

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10/9/2002	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB
10/10/2002	Nitrate	0.65	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2002	Nitrate	0.68	mg/L as N	Effluent 24-hr Composite, FMB
10/14/2002	Nitrate	0.5	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2002	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
10/16/2002	Nitrate	0.16	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2002	Nitrate	0.1	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2002	Nitrate	0.82	mg/L as N	Effluent 24-hr Composite, FMB
10/21/2002	Nitrate	0.76	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2002	Nitrate	0.75	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2002	Nitrate	0.72	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2002	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB
10/28/2002	Nitrate	0.65	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2002	Nitrate	0.69	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2002	Nitrate	0.57	mg/L as N	Effluent 24-hr Composite, FMB
10/31/2002	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
11/1/2002	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB
11/4/2002	Nitrate	0.74	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2002	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2002	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2002	Nitrate	0.57	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2002	Nitrate	0.49	mg/L as N	Effluent 24-hr Composite, FMB
11/11/2002	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2002	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2002	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2002	Nitrate	0.45	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2002	Nitrate	0.41	mg/L as N	Effluent 24-hr Composite, FMB
11/18/2002	Nitrate	0.15	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2002	Nitrate	0.04	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2002	Nitrate	0.07	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2002	Nitrate	0.5	mg/L as N	Effluent 24-hr Composite, FMB
11/22/2002	Nitrate	0.5	mg/L as N	Effluent 24-hr Composite, FMB
11/25/2002	Nitrate	0.05	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2002	Nitrate	0.01	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2002	Nitrate	0.14	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2002	Nitrate	1.14	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2002	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
12/2/2002	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2002	Nitrate	0.68	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2002	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2002	Nitrate	0.57	mg/L as N	Effluent 24-hr Composite, FMB
12/9/2002	Nitrate	0.61	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2002	Nitrate	0.73	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2002	Nitrate	0.73	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2002	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2002	Nitrate	0.66	mg/L as N	Effluent 24-hr Composite, FMB
12/16/2002	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2002	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2002	Nitrate	0.53	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2002	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB

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12/20/2002	Nitrate	0.49	mg/L as N	Effluent 24-hr Composite, FMB
12/23/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2002	Nitrate	0.26	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2002	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2002	Nitrate	0.49	mg/L as N	Effluent 24-hr Composite, FMB
12/30/2002	Nitrate	0.19	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2002	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2003	Nitrate	0.02	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2003	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2003	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
1/6/2003	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2003	Nitrate	0.14	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2003	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2003	Nitrate	0.24	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2003	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/11/2003	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/13/2003	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
1/14/2003	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2003	Nitrate	0.3	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2003	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2003	Nitrate	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/20/2003	Nitrate	0.1	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2003	Nitrate	0.22	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2003	Nitrate	0.31	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2003	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2003	Nitrate	0.23	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrate	0.08	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrate	0.1	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2003	Nitrate	0.18	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2003	Nitrate	0.17	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2003	Nitrate	0.09	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2003	Nitrate	0.1	mg/L as N	Effluent 24-hr Composite, FMB
2/3/2003	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB
2/4/2003	Nitrate	0.05	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2003	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2003	Nitrate	0.52	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2003	Nitrate	0.46	mg/L as N	Effluent 24-hr Composite, FMB
2/10/2003	Nitrate	0.34	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2003	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2003	Nitrate	0.32	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2003	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2003	Nitrate	0.18	mg/L as N	Effluent 24-hr Composite, FMB
2/17/2003	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2003	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2003	Nitrate	0.4	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2003	Nitrate	0.45	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2003	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB
2/24/2003	Nitrate	0.11	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2003	Nitrate	0.46	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2003	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2003	Nitrate	0.56	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

2/28/2003	Nitrate	0.47	mg/L as N	Effluent 24-hr Composite, FMB	
3/3/2003	Nitrate	0.25	mg/L as N	Effluent 24-hr Composite, FMB	
3/4/2003	Nitrate	0.48	mg/L as N	Effluent 24-hr Composite, FMB	
3/5/2003	Nitrate	0.36	mg/L as N	Effluent 24-hr Composite, FMB	
3/6/2003	Nitrate	0.29	mg/L as N	Effluent 24-hr Composite, FMB	
3/7/2003	Nitrate	0.43	mg/L as N	Effluent 24-hr Composite, FMB	
3/10/2003	Nitrate	0.1	mg/L as N	Effluent 24-hr Composite, FMB	
3/11/2003	Nitrate	0.63	mg/L as N	Effluent 24-hr Composite, FMB	
3/12/2003	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB	
3/13/2003	Nitrate	0.35	mg/L as N	Effluent 24-hr Composite, FMB	
3/14/2003	Nitrate	0.37	mg/L as N	Effluent 24-hr Composite, FMB	
3/17/2003	Nitrate	0.44	mg/L as N	Effluent 24-hr Composite, FMB	
3/18/2003	Nitrate	0.39	mg/L as N	Effluent 24-hr Composite, FMB	
3/19/2003	Nitrate	0.46	mg/L as N	Effluent 24-hr Composite, FMB	
3/20/2003	Nitrate	0.6	mg/L as N	Effluent 24-hr Composite, FMB	
3/21/2003	Nitrate	0.62	mg/L as N	Effluent 24-hr Composite, FMB	
3/24/2003	Nitrate	0.96	mg/L as N	Effluent 24-hr Composite, FMB	
3/25/2003	Nitrate	2.48	mg/L as N	Effluent 24-hr Composite, FMB	
3/26/2003	Nitrate	1.61	mg/L as N	Effluent 24-hr Composite, FMB	
3/27/2003	Nitrate	3.83	mg/L as N	Effluent 24-hr Composite, FMB	
3/28/2003	Nitrate	3.96	mg/L as N	Effluent 24-hr Composite, FMB	
3/31/2003	Nitrate	0.88	mg/L as N	Effluent 24-hr Composite, FMB	
4/1/2003	Nitrate	1.3	mg/L as N	Effluent 24-hr Composite, FMB	
4/2/2003	Nitrate	1.88	mg/L as N	Effluent 24-hr Composite, FMB	
4/3/2003	Nitrate	2	mg/L as N	Effluent 24-hr Composite, FMB	
4/4/2003	Nitrate	1.73	mg/L as N	Effluent 24-hr Composite, FMB	
4/7/2003	Nitrate	1.11	mg/L as N	Effluent 24-hr Composite, FMB	
4/8/2003	Nitrate	1.12	mg/L as N	Effluent 24-hr Composite, FMB	
4/9/2003	Nitrate	0.8	mg/L as N	Effluent 24-hr Composite, FMB	
4/10/2003	Nitrate	0.82	mg/L as N	Effluent 24-hr Composite, FMB	
4/11/2003	Nitrate	1.1	mg/L as N	Effluent 24-hr Composite, FMB	
4/14/2003	Nitrate	0.91	mg/L as N	Effluent 24-hr Composite, FMB	
4/15/2003	Nitrate	1.22	mg/L as N	Effluent 24-hr Composite, FMB	
4/16/2003	Nitrate	1.22	mg/L as N	Effluent 24-hr Composite, FMB	
4/17/2003	Nitrate	1.21	mg/L as N	Effluent 24-hr Composite, FMB	
4/18/2003	Nitrate	1.1	mg/L as N	Effluent 24-hr Composite, FMB	
2/4/2004	Nitrate	5.3	mg/L as N	Effluent 24-hr Composite, FMB	
2/17/2005	Nitrate	5.12	mg/L as N	Effluent 24-hr Composite, FMB	
1/5/2000	Nitrate + Nitrite	3.32	mg/L as N	Ft. Myers Beach Effluent	1.30
1/12/2000	Nitrate + Nitrite	13.9	mg/L as N	Ft. Myers Beach Effluent	
1/19/2000	Nitrate + Nitrite	9.01	mg/L as N	Ft. Myers Beach Effluent	
1/20/2000	Nitrate + Nitrite	10.3	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrate + Nitrite	10.3	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrate + Nitrite	5.56	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrate + Nitrite	4.56	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrate + Nitrite	2.98	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrate + Nitrite	5.45	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrate + Nitrite	17.9	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrate + Nitrite	11.9	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrate + Nitrite	14	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrate + Nitrite	21.1	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrate + Nitrite	7.62	mg/L as N	Ft. Myers Beach Effluent	

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

4/12/2000	Nitrate + Nitrite	17.7	mg/L as N	Ft. Myers Beach Effluent
4/19/2000	Nitrate + Nitrite	12.3	mg/L as N	Ft. Myers Beach Effluent
4/26/2000	Nitrate + Nitrite	7.7	mg/L as N	Ft. Myers Beach Effluent
5/3/2000	Nitrate + Nitrite	2.52	mg/L as N	Ft. Myers Beach Effluent
5/10/2000	Nitrate + Nitrite	2.63	mg/L as N	Ft. Myers Beach Effluent
5/17/2000	Nitrate + Nitrite	1.8	mg/L as N	Ft. Myers Beach Effluent
5/24/2000	Nitrate + Nitrite	2.42	mg/L as N	Ft. Myers Beach Effluent
5/31/2000	Nitrate + Nitrite	4.45	mg/L as N	Ft. Myers Beach Effluent
6/7/2000	Nitrate + Nitrite	2.69	mg/L as N	Ft. Myers Beach Effluent
6/14/2000	Nitrate + Nitrite	3.89	mg/L as N	Ft. Myers Beach Effluent
6/21/2000	Nitrate + Nitrite	5.02	mg/L as N	Ft. Myers Beach Effluent
6/28/2000	Nitrate + Nitrite	2.91	mg/L as N	Ft. Myers Beach Effluent
7/5/2000	Nitrate + Nitrite	1.97	mg/L as N	Ft. Myers Beach Effluent
7/12/2000	Nitrate + Nitrite	1.84	mg/L as N	Ft. Myers Beach Effluent
7/19/2000	Nitrate + Nitrite	3.07	mg/L as N	Ft. Myers Beach Effluent
7/26/2000	Nitrate + Nitrite	3.81	mg/L as N	Ft. Myers Beach Effluent
8/2/2000	Nitrate + Nitrite	2.6	mg/L as N	Ft. Myers Beach Effluent
8/9/2000	Nitrate + Nitrite	3.9	mg/L as N	Ft. Myers Beach Effluent
8/16/2000	Nitrate + Nitrite	5.88	mg/L as N	Ft. Myers Beach Effluent
8/23/2000	Nitrate + Nitrite	7.35	mg/L as N	Ft. Myers Beach Effluent
8/30/2000	Nitrate + Nitrite	5.99	mg/L as N	Ft. Myers Beach Effluent
9/6/2000	Nitrate + Nitrite	4.64	mg/L as N	Ft. Myers Beach Effluent
9/13/2000	Nitrate + Nitrite	3.93	mg/L as N	Ft. Myers Beach Effluent
9/29/2000	Nitrate + Nitrite	5.41	mg/L as N	Ft. Myers Beach Effluent
9/27/2000	Nitrate + Nitrite	4.6	mg/L as N	Ft. Myers Beach Effluent
10/4/2000	Nitrate + Nitrite	4.05	mg/L as N	Ft. Myers Beach Effluent
10/11/2000	Nitrate + Nitrite	1.53	mg/L as N	Ft. Myers Beach Effluent
10/18/2000	Nitrate + Nitrite	2.03	mg/L as N	Ft. Myers Beach Effluent
10/25/2000	Nitrate + Nitrite	1.69	mg/L as N	Ft. Myers Beach Effluent
11/1/2000	Nitrate + Nitrite	1.22	mg/L as N	Ft. Myers Beach Effluent
11/8/2000	Nitrate + Nitrite	1.53	mg/L as N	Ft. Myers Beach Effluent
11/15/2000	Nitrate + Nitrite	1.04	mg/L as N	Ft. Myers Beach Effluent
11/22/2000	Nitrate + Nitrite	1.66	mg/L as N	Ft. Myers Beach Effluent
11/29/2000	Nitrate + Nitrite	1.23	mg/L as N	Ft. Myers Beach Effluent
12/6/2000	Nitrate + Nitrite	1.59	mg/L as N	Ft. Myers Beach Effluent
12/13/2000	Nitrate + Nitrite	1.4	mg/L as N	Ft. Myers Beach Effluent
12/20/2000	Nitrate + Nitrite	3.07	mg/L as N	Ft. Myers Beach Effluent
12/27/2000	Nitrate + Nitrite	1.4	mg/L as N	Ft. Myers Beach Effluent
1/3/2001	Nitrate + Nitrite	1.8	mg/L as N	Ft. Myers Beach Effluent
1/10/2001	Nitrate + Nitrite	1.12	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2001	Nitrate + Nitrite	1.64	mg/L as N	Ft. Myers Beach Effluent
1/11/2001	Nitrate + Nitrite	1.12	mg/L as N	Effluent 24-hr Composite, FMB
1/12/2001	Nitrate + Nitrite	0.9	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrate + Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrate + Nitrite	0.73	mg/L as N	FMB New Dig H2
1/16/2001	Nitrate + Nitrite	0.73	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2001	Nitrate + Nitrite	1.28	mg/L as N	Ft. Myers Beach Effluent
1/17/2001	Nitrate + Nitrite	1.5	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2001	Nitrate + Nitrite	1.52	mg/L as N	Effluent 24-hr Composite, FMB
1/19/2001	Nitrate + Nitrite	0.72	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2001	Nitrate + Nitrite	1.79	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2001	Nitrate + Nitrite	2.07	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

1/24/2001	Nitrate + Nitrite	1.72	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2001	Nitrate + Nitrite	1.62	mg/L as N	Ft. Myers Beach Effluent
1/25/2001	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB
1/26/2001	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2001	Nitrate + Nitrite	1.25	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2001	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrate + Nitrite	1.08	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrate + Nitrite	0.96	mg/L as N	Ft. Myers Beach Effluent
2/1/2001	Nitrate + Nitrite	0.96	mg/L as N	Effluent 24-hr Composite, FMB
2/2/2001	Nitrate + Nitrite	0.88	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2001	Nitrate + Nitrite	1.37	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2001	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrate + Nitrite	1.35	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrate + Nitrite	0.83	mg/L as N	Ft. Myers Beach Effluent
2/8/2001	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
2/8/2001	Nitrate + Nitrite	1.08	mg/L as N	Effluent 24-hr Composite, FMB
2/9/2001	Nitrate + Nitrite	1.98	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2001	Nitrate + Nitrite	1.05	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2001	Nitrate + Nitrite	1.07	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrate + Nitrite	0.81	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrate + Nitrite	0.69	mg/L as N	Ft. Myers Beach Effluent
2/15/2001	Nitrate + Nitrite	0.9	mg/L as N	Effluent 24-hr Composite, FMB
2/16/2001	Nitrate + Nitrite	1.45	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2001	Nitrate + Nitrite	1.11	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2001	Nitrate + Nitrite	1.54	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrate + Nitrite	1.13	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrate + Nitrite	1.12	mg/L as N	Ft. Myers Beach Effluent
2/22/2001	Nitrate + Nitrite	1.15	mg/L as N	Effluent 24-hr Composite, FMB
2/23/2001	Nitrate + Nitrite	2.19	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2001	Nitrate + Nitrite	0.89	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2001	Nitrate + Nitrite	1.67	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrate + Nitrite	1.48	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrate + Nitrite	1.51	mg/L as N	Ft. Myers Beach Effluent
3/1/2001	Nitrate + Nitrite	1.26	mg/L as N	Effluent 24-hr Composite, FMB
3/2/2001	Nitrate + Nitrite	1.23	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2001	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2001	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrate + Nitrite	0.62	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrate + Nitrite	0.6	mg/L as N	Ft. Myers Beach Effluent
3/8/2001	Nitrate + Nitrite	0.61	mg/L as N	Effluent 24-hr Composite, FMB
3/9/2001	Nitrate + Nitrite	1.49	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2001	Nitrate + Nitrite	0.96	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2001	Nitrate + Nitrite	0.84	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2001	Nitrate + Nitrite	0.96	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
3/16/2001	Nitrate + Nitrite	1.24	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2001	Nitrate + Nitrite	0.59	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2001	Nitrate + Nitrite	1.11	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2001	Nitrate + Nitrite	1.09	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2001	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
3/23/2001	Nitrate + Nitrite	0.95	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2001	Nitrate + Nitrite	1.24	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

3/27/2001	Nitrate + Nitrite	0.63	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2001	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2001	Nitrate + Nitrite	0.86	mg/L as N	Effluent 24-hr Composite, FMB
3/30/2001	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2001	Nitrate + Nitrite	1.09	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2001	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2001	Nitrate + Nitrite	1.26	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2001	Nitrate + Nitrite	0.93	mg/L as N	Effluent 24-hr Composite, FMB
4/6/2001	Nitrate + Nitrite	0.91	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2001	Nitrate + Nitrite	0.69	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2001	Nitrate + Nitrite	0.81	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2001	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2001	Nitrate + Nitrite	0.86	mg/L as N	Effluent 24-hr Composite, FMB
4/13/2001	Nitrate + Nitrite	2.01	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2001	Nitrate + Nitrite	1.45	mg/L as N	Effluent 24-hr Composite, FMB
4/17/2001	Nitrate + Nitrite	1.6	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2001	Nitrate + Nitrite	1.37	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2001	Nitrate + Nitrite	1.44	mg/L as N	Effluent 24-hr Composite, FMB
4/20/2001	Nitrate + Nitrite	1.45	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2001	Nitrate + Nitrite	1.89	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2001	Nitrate + Nitrite	1.28	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2001	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2001	Nitrate + Nitrite	1.43	mg/L as N	Effluent 24-hr Composite, FMB
4/27/2001	Nitrate + Nitrite	1.35	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2001	Nitrate + Nitrite	1.6	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2001	Nitrate + Nitrite	1.69	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2001	Nitrate + Nitrite	2.05	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2001	Nitrate + Nitrite	2.19	mg/L as N	Effluent 24-hr Composite, FMB
5/4/2001	Nitrate + Nitrite	2.05	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2001	Nitrate + Nitrite	1.83	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2001	Nitrate + Nitrite	1.69	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2001	Nitrate + Nitrite	2.44	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2001	Nitrate + Nitrite	2.44	mg/L as N	Effluent 24-hr Composite, FMB
5/11/2001	Nitrate + Nitrite	0.83	mg/L as N	Effluent 24-hr Composite, FMB
5/14/2001	Nitrate + Nitrite	1.13	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2001	Nitrate + Nitrite	1.39	mg/L as N	Effluent 24-hr Composite, FMB
5/16/2001	Nitrate + Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2001	Nitrate + Nitrite	0.75	mg/L as N	Effluent 24-hr Composite, FMB
5/18/2001	Nitrate + Nitrite	0.75	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2001	Nitrate + Nitrite	1.66	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2001	Nitrate + Nitrite	1.45	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2001	Nitrate + Nitrite	1.34	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2001	Nitrate + Nitrite	1.83	mg/L as N	Effluent 24-hr Composite, FMB
5/25/2001	Nitrate + Nitrite	1.39	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2001	Nitrate + Nitrite	1.67	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2001	Nitrate + Nitrite	1.41	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2001	Nitrate + Nitrite	1.19	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2001	Nitrate + Nitrite	1.25	mg/L as N	Effluent 24-hr Composite, FMB
6/1/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2001	Nitrate + Nitrite	1.34	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2001	Nitrate + Nitrite	1.49	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

6/7/2001	Nitrate + Nitrite	1.5	mg/L as N	Effluent 24-hr Composite, FMB
6/8/2001	Nitrate + Nitrite	1.55	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2001	Nitrate + Nitrite	1.47	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2001	Nitrate + Nitrite	1.47	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2001	Nitrate + Nitrite	2.15	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2001	Nitrate + Nitrite	1.95	mg/L as N	Effluent 24-hr Composite, FMB
6/15/2001	Nitrate + Nitrite	1.9	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2001	Nitrate + Nitrite	1.75	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2001	Nitrate + Nitrite	1.51	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2001	Nitrate + Nitrite	1.43	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2001	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
6/22/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2001	Nitrate + Nitrite	1.47	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2001	Nitrate + Nitrite	1.79	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2001	Nitrate + Nitrite	1.57	mg/L as N	Effluent 24-hr Composite, FMB
6/28/2001	Nitrate + Nitrite	1.99	mg/L as N	Effluent 24-hr Composite, FMB
6/29/2001	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2001	Nitrate + Nitrite	1.29	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2001	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2001	Nitrate + Nitrite	1.55	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2001	Nitrate + Nitrite	1.65	mg/L as N	Effluent 24-hr Composite, FMB
7/6/2001	Nitrate + Nitrite	1.7	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2001	Nitrate + Nitrite	1.42	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2001	Nitrate + Nitrite	0.78	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2001	Nitrate + Nitrite	2.24	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2001	Nitrate + Nitrite	2.89	mg/L as N	Effluent 24-hr Composite, FMB
7/13/2001	Nitrate + Nitrite	2.47	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2001	Nitrate + Nitrite	2.11	mg/L as N	Effluent Grab, FMB
7/17/2001	Nitrate + Nitrite	1.71	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2001	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2001	Nitrate + Nitrite	0.97	mg/L as N	Effluent 24-hr Composite, FMB
7/20/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2001	Nitrate + Nitrite	0.6	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2001	Nitrate + Nitrite	0.67	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2001	Nitrate + Nitrite	0.38	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2001	Nitrate + Nitrite	1.48	mg/L as N	Effluent 24-hr Composite, FMB
7/27/2001	Nitrate + Nitrite	1.48	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2001	Nitrate + Nitrite	1.07	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2001	Nitrate + Nitrite	1.06	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2001	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2001	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
8/3/2001	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2001	Nitrate + Nitrite	0.7	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2001	Nitrate + Nitrite	0.68	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2001	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2001	Nitrate + Nitrite	1.53	mg/L as N	Effluent 24-hr Composite, FMB
8/10/2001	Nitrate + Nitrite	1.08	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2001	Nitrate + Nitrite	0.7	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2001	Nitrate + Nitrite	0.44	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2001	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2001	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB
8/17/2001	Nitrate + Nitrite	1.41	mg/L as N	Effluent 24-hr Composite, FMB

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8/20/2001	Nitrate + Nitrite	1.93	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2001	Nitrate + Nitrite	1.48	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2001	Nitrate + Nitrite	2.67	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2001	Nitrate + Nitrite	2.1	mg/L as N	Effluent 24-hr Composite, FMB
8/24/2001	Nitrate + Nitrite	1.93	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2001	Nitrate + Nitrite	1.25	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2001	Nitrate + Nitrite	1.34	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2001	Nitrate + Nitrite	1.68	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2001	Nitrate + Nitrite	1.81	mg/L as N	Effluent 24-hr Composite, FMB
8/31/2001	Nitrate + Nitrite	0.95	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2001	Nitrate + Nitrite	0.43	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2001	Nitrate + Nitrite	0.44	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2001	Nitrate + Nitrite	0.96	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2001	Nitrate + Nitrite	1.54	mg/L as N	Effluent 24-hr Composite, FMB
9/7/2001	Nitrate + Nitrite	0.69	mg/L as N	Effluent 24-hr Composite, FMB
9/10/2001	Nitrate + Nitrite	2.48	mg/L as N	Effluent 24-hr Composite, FMB
9/11/2001	Nitrate + Nitrite	2.71	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2001	Nitrate + Nitrite	1.2	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2001	Nitrate + Nitrite	2.18	mg/L as N	Effluent 24-hr Composite, FMB
9/14/2001	Nitrate + Nitrite	2.82	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2001	Nitrate + Nitrite	1.38	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2001	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2001	Nitrate + Nitrite	0.86	mg/L as N	Effluent 24-hr Composite, FMB
9/21/2001	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2001	Nitrate + Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2001	Nitrate + Nitrite	0.83	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2001	Nitrate + Nitrite	1.05	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2001	Nitrate + Nitrite	1.28	mg/L as N	Effluent 24-hr Composite, FMB
9/28/2001	Nitrate + Nitrite	2.04	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2001	Nitrate + Nitrite	1.72	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2001	Nitrate + Nitrite	1.67	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2001	Nitrate + Nitrite	1.55	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2001	Nitrate + Nitrite	1.34	mg/L as N	Effluent 24-hr Composite, FMB
10/5/2001	Nitrate + Nitrite	0.9	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2001	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
10/9/2001	Nitrate + Nitrite	0.49	mg/L as N	Effluent 24-hr Composite, FMB
10/10/2001	Nitrate + Nitrite	0.71	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2001	Nitrate + Nitrite	1.41	mg/L as N	Effluent 24-hr Composite, FMB
10/12/2001	Nitrate + Nitrite	1.52	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2001	Nitrate + Nitrite	0.18	mg/L as N	EFFLUENT 24-HR COMPOSITI
10/16/2001	Nitrate + Nitrite	0.21	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2001	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2001	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB
10/19/2001	Nitrate + Nitrite	1.54	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2001	Nitrate + Nitrite	0.6	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2001	Nitrate + Nitrite	1.29	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2001	Nitrate + Nitrite	0.75	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2001	Nitrate + Nitrite	1.14	mg/L as N	Effluent 24-hr Composite, FMB
10/26/2001	Nitrate + Nitrite	0.86	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2001	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2001	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
10/31/2001	Nitrate + Nitrite	1.32	mg/L as N	Effluent 24-hr Composite, FMB

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11/1/2001	Nitrate + Nitrite	1.42	mg/L as N	Effluent 24-hr Composite, FMB
11/2/2001	Nitrate + Nitrite	0.95	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2001	Nitrate + Nitrite	0.09	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2001	Nitrate + Nitrite	0.11	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2001	Nitrate + Nitrite	0.16	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2001	Nitrate + Nitrite	0.13	mg/L as N	Effluent 24-hr Composite, FMB
11/9/2001	Nitrate + Nitrite	0.16	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2001	Nitrate + Nitrite	0.18	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2001	Nitrate + Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2001	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2001	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
11/16/2001	Nitrate + Nitrite	0.81	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2001	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2001	Nitrate + Nitrite	0.61	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2001	Nitrate + Nitrite	0.26	mg/L as N	Effl 24-hr Comp, FMB
11/22/2001	Nitrate + Nitrite	0.2	mg/L as N	Effluent 24-hr Composite, FMB
11/23/2001	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2001	Nitrate + Nitrite	0.19	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2001	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2001	Nitrate + Nitrite	0.67	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2001	Nitrate + Nitrite	0.77	mg/L as N	Effluent 24-hr Composite, FMB
11/30/2001	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2001	Nitrate + Nitrite	0.47	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2001	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2001	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2001	Nitrate + Nitrite	0.93	mg/L as N	Effluent 24-hr Composite, FMB
12/7/2001	Nitrate + Nitrite	0.72	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2001	Nitrate + Nitrite	0.45	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2001	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2001	Nitrate + Nitrite	0.37	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2001	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
12/14/2001	Nitrate + Nitrite	0.5	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2001	Nitrate + Nitrite	0.33	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2001	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2001	Nitrate + Nitrite	0.25	mg/L as N	Effluent 24-hr Composite, FMB
12/20/2001	Nitrate + Nitrite	0.65	mg/L as N	Effluent 24-hr Composite, FMB
12/21/2001	Nitrate + Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2001	Nitrate + Nitrite	0.23	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2001	Nitrate + Nitrite	0.18	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2001	Nitrate + Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2001	Nitrate + Nitrite	0.27	mg/L as N	Effluent 24-hr Composite, FMB
12/28/2001	Nitrate + Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2001	Nitrate + Nitrite	0.18	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2002	Nitrate + Nitrite	0.16	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2002	Nitrate + Nitrite	0.19	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2002	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/4/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2002	Nitrate + Nitrite	0.37	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2002	Nitrate + Nitrite	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2002	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2002	Nitrate + Nitrite	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/11/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

1/14/2002	Nitrate + Nitrite	0.58	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2002	Nitrate + Nitrite	0.47	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2002	Nitrate + Nitrite	0.53	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2002	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2002	Nitrate + Nitrite	1.14	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2002	Nitrate + Nitrite	1.29	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2002	Nitrate + Nitrite	0.48	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2002	Nitrate + Nitrite	0.53	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2002	Nitrate + Nitrite	0.53	mg/L as N	Effluent 24-hr Composite, FMB
1/25/2002	Nitrate + Nitrite	0.44	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2002	Nitrate + Nitrite	0.47	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2002	Nitrate + Nitrite	0.48	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2002	Nitrate + Nitrite	0.48	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2002	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
2/1/2002	Nitrate + Nitrite	0.41	mg/L as N	Effluent 24-hr Composite, FMB
2/4/2002	Nitrate + Nitrite	0.4	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2002	Nitrate + Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2002	Nitrate + Nitrite	0.41	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2002	Nitrate + Nitrite	0.4	mg/L as N	Effluent 24-hr Composite, FMB
2/8/2002	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2002	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2002	Nitrate + Nitrite	0.33	mg/L as N	Effluent 24-hr Composite, FMB
2/15/2002	Nitrate + Nitrite	0.34	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2002	Nitrate + Nitrite	1.24	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2002	Nitrate + Nitrite	0.38	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2002	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2002	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
2/22/2002	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2002	Nitrate + Nitrite	0.61	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2002	Nitrate + Nitrite	0.22	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2002	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2002	Nitrate + Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
3/1/2002	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
3/4/2002	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2002	Nitrate + Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2002	Nitrate + Nitrite	0.22	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2002	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
3/8/2002	Nitrate + Nitrite	0.25	mg/L as N	Effluent 24-hr Composite, FMB
3/11/2002	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2002	Nitrate + Nitrite	0.23	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2002	Nitrate + Nitrite	0.27	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2002	Nitrate + Nitrite	0.45	mg/L as N	Effluent 24-hr Composite, FMB
3/18/2002	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2002	Nitrate + Nitrite	1.01	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2002	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2002	Nitrate + Nitrite	0.37	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2002	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
3/25/2002	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2002	Nitrate + Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

3/27/2002	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2002	Nitrate + Nitrite	0.43	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2002	Nitrate + Nitrite	0.4	mg/L as N	Effluent 24-hr Composite, FMB
4/1/2002	Nitrate + Nitrite	0.49	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2002	Nitrate + Nitrite	0.47	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2002	Nitrate + Nitrite	0.48	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2002	Nitrate + Nitrite	0.54	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2002	Nitrate + Nitrite	0.59	mg/L as N	Effluent 24-hr Composite, FMB
4/8/2002	Nitrate + Nitrite	0.71	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2002	Nitrate + Nitrite	0.65	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2002	Nitrate + Nitrite	0.67	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2002	Nitrate + Nitrite	0.57	mg/L as N	Effluent 24-hr Composite, FMB
4/15/2002	Nitrate + Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2002	Nitrate + Nitrite	0.34	mg/L as N	Effluent 24-hr Composite, FMB
4/17/2002	Nitrate + Nitrite	0.49	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2002	Nitrate + Nitrite	0.45	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
4/22/2002	Nitrate + Nitrite	0.18	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2002	Nitrate + Nitrite	0.38	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2002	Nitrate + Nitrite	0.46	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2002	Nitrate + Nitrite	0.54	mg/L as N	Effluent 24-hr Composite, FMB
4/29/2002	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2002	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2002	Nitrate + Nitrite	0.52	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2002	Nitrate + Nitrite	0.62	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2002	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
5/6/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2002	Nitrate + Nitrite	0.27	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2002	Nitrate + Nitrite	0.29	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2002	Nitrate + Nitrite	0.69	mg/L as N	Effluent 24-hr Composite, FMB
5/13/2002	Nitrate + Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB
5/14/2002	Nitrate + Nitrite	0.46	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2002	Nitrate + Nitrite	0.97	mg/L as N	Effluent 24-hr Composite, FMB
5/16/2002	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2002	Nitrate + Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
5/20/2002	Nitrate + Nitrite	0.17	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2002	Nitrate + Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2002	Nitrate + Nitrite	0.32	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
5/27/2002	Nitrate + Nitrite	0.59	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2002	Nitrate + Nitrite	0.59	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2002	Nitrate + Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2002	Nitrate + Nitrite	0.84	mg/L as N	Effluent 24-hr Composite, FMB
6/3/2002	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2002	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2002	Nitrate + Nitrite	1.02	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2002	Nitrate + Nitrite	0.71	mg/L as N	Effluent 24-hr Composite, FMB

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6/7/2002	Nitrate + Nitrite	1.2	mg/L as N	Effluent 24-hr Composite, FMB
6/10/2002	Nitrate + Nitrite	0.52	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2002	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2002	Nitrate + Nitrite	0.65	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2002	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2002	Nitrate + Nitrite	0.4	mg/L as N	Effluent 24-hr Composite, FMB
6/17/2002	Nitrate + Nitrite	0.46	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2002	Nitrate + Nitrite	0.41	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2002	Nitrate + Nitrite	0.69	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2002	Nitrate + Nitrite	1.33	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2002	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
6/24/2002	Nitrate + Nitrite	1.43	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2002	Nitrate + Nitrite	1.15	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2002	Nitrate + Nitrite	2.73	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2002	Nitrate + Nitrite	3.93	mg/L as N	Effluent 24-hr Composite, FMB
6/28/2002	Nitrate + Nitrite	3.22	mg/L as N	Effluent 24-hr Composite, FMB
7/1/2002	Nitrate + Nitrite	1.19	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2002	Nitrate + Nitrite	0.87	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2002	Nitrate + Nitrite	1.15	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2002	Nitrate + Nitrite	1.02	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2002	Nitrate + Nitrite	1.04	mg/L as N	Effluent 24-hr Composite, FMB
7/8/2002	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2002	Nitrate + Nitrite	0.7	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2002	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2002	Nitrate + Nitrite	1.13	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2002	Nitrate + Nitrite	3.98	mg/L as N	Effluent 24-hr Composite, FMB
7/15/2002	Nitrate + Nitrite	0.91	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2002	Nitrate + Nitrite	0.84	mg/L as N	Effluent 24-hr Composite, FMB
7/17/2002	Nitrate + Nitrite	0.77	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2002	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2002	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
7/22/2002	Nitrate + Nitrite	1.07	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2002	Nitrate + Nitrite	1.03	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2002	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2002	Nitrate + Nitrite	0.99	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2002	Nitrate + Nitrite	1.21	mg/L as N	Effluent 24-hr Composite, FMB
7/29/2002	Nitrate + Nitrite	1.02	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2002	Nitrate + Nitrite	1.27	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2002	Nitrate + Nitrite	0.95	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2002	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2002	Nitrate + Nitrite	2.72	mg/L as N	Effluent 24-hr Composite, FMB
8/5/2002	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2002	Nitrate + Nitrite	1.13	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2002	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2002	Nitrate + Nitrite	1.99	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2002	Nitrate + Nitrite	2.26	mg/L as N	Effluent 24-hr Composite, FMB
8/12/2002	Nitrate + Nitrite	1.11	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2002	Nitrate + Nitrite	1.18	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2002	Nitrate + Nitrite	1.06	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2002	Nitrate + Nitrite	3.44	mg/L as N	Effluent 24-hr Composite, FMB
8/19/2002	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB

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8/20/2002	Nitrate + Nitrite	0.84	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2002	Nitrate + Nitrite	2.01	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2002	Nitrate + Nitrite	1.35	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2002	Nitrate + Nitrite	2.22	mg/L as N	Effluent 24-hr Composite, FMB
8/26/2002	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2002	Nitrate + Nitrite	1.19	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2002	Nitrate + Nitrite	0.96	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2002	Nitrate + Nitrite	1.32	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2002	Nitrate + Nitrite	1.36	mg/L as N	Effluent 24-hr Composite, FMB
9/2/2002	Nitrate + Nitrite	0.47	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2002	Nitrate + Nitrite	0.88	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2002	Nitrate + Nitrite	1.01	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2002	Nitrate + Nitrite	1.24	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2002	Nitrate + Nitrite	1.49	mg/L as N	Effluent 24-hr Composite, FMB
9/9/2002	Nitrate + Nitrite	1.54	mg/L as N	Effluent 24-hr Composite, FMB
9/10/2002	Nitrate + Nitrite	1.66	mg/L as N	Effluent 24-hr Composite, FMB
9/11/2002	Nitrate + Nitrite	1.58	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2002	Nitrate + Nitrite	1.8	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2002	Nitrate + Nitrite	1.23	mg/L as N	Effluent 24-hr Composite, FMB
9/16/2002	Nitrate + Nitrite	0.84	mg/L as N	Effluent 24-hr Composite, FMB
9/17/2002	Nitrate + Nitrite	1.02	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2002	Nitrate + Nitrite	0.94	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2002	Nitrate + Nitrite	1.99	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2002	Nitrate + Nitrite	1.31	mg/L as N	Effluent 24-hr Composite, FMB
9/23/2002	Nitrate + Nitrite	0.75	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2002	Nitrate + Nitrite	0.8	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2002	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2002	Nitrate + Nitrite	0.9	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2002	Nitrate + Nitrite	0.83	mg/L as N	Effluent 24-hr Composite, FMB
9/30/2002	Nitrate + Nitrite	1.26	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2002	Nitrate + Nitrite	1.24	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2002	Nitrate + Nitrite	2.54	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2002	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2002	Nitrate + Nitrite	0.77	mg/L as N	Effluent 24-hr Composite, FMB
10/7/2002	Nitrate + Nitrite	0.52	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
10/9/2002	Nitrate + Nitrite	0.6	mg/L as N	Effluent 24-hr Composite, FMB
10/10/2002	Nitrate + Nitrite	0.65	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2002	Nitrate + Nitrite	0.68	mg/L as N	Effluent 24-hr Composite, FMB
10/14/2002	Nitrate + Nitrite	0.5	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2002	Nitrate + Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
10/16/2002	Nitrate + Nitrite	0.16	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2002	Nitrate + Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2002	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
10/21/2002	Nitrate + Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2002	Nitrate + Nitrite	0.75	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2002	Nitrate + Nitrite	0.72	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2002	Nitrate + Nitrite	0.68	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2002	Nitrate + Nitrite	0.68	mg/L as N	Effluent 24-hr Composite, FMB
10/28/2002	Nitrate + Nitrite	0.67	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2002	Nitrate + Nitrite	0.69	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2002	Nitrate + Nitrite	0.57	mg/L as N	Effluent 24-hr Composite, FMB

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10/31/2002	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
11/1/2002	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
11/4/2002	Nitrate + Nitrite	0.74	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2002	Nitrate + Nitrite	0.61	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2002	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2002	Nitrate + Nitrite	0.57	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2002	Nitrate + Nitrite	0.5	mg/L as N	Effluent 24-hr Composite, FMB
11/11/2002	Nitrate + Nitrite	0.45	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2002	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2002	Nitrate + Nitrite	0.44	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2002	Nitrate + Nitrite	0.45	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2002	Nitrate + Nitrite	0.42	mg/L as N	Effluent 24-hr Composite, FMB
11/18/2002	Nitrate + Nitrite	0.55	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2002	Nitrate + Nitrite	0.06	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2002	Nitrate + Nitrite	0.08	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2002	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
11/22/2002	Nitrate + Nitrite	0.52	mg/L as N	Effluent 24-hr Composite, FMB
11/25/2002	Nitrate + Nitrite	0.06	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2002	Nitrate + Nitrite	0.06	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2002	Nitrate + Nitrite	0.63	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2002	Nitrate + Nitrite	1.15	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2002	Nitrate + Nitrite	0.94	mg/L as N	Effluent 24-hr Composite, FMB
12/2/2002	Nitrate + Nitrite	0.33	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2002	Nitrate + Nitrite	0.19	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2002	Nitrate + Nitrite	0.68	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2002	Nitrate + Nitrite	0.6	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2002	Nitrate + Nitrite	0.94	mg/L as N	Effluent 24-hr Composite, FMB
12/9/2002	Nitrate + Nitrite	0.91	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2002	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2002	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2002	Nitrate + Nitrite	0.59	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2002	Nitrate + Nitrite	0.66	mg/L as N	Effluent 24-hr Composite, FMB
12/16/2002	Nitrate + Nitrite	0.54	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2002	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2002	Nitrate + Nitrite	0.53	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2002	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
12/20/2002	Nitrate + Nitrite	0.49	mg/L as N	Effluent 24-hr Composite, FMB
12/23/2002	Nitrate + Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2002	Nitrate + Nitrite	0.27	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2002	Nitrate + Nitrite	0.18	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2002	Nitrate + Nitrite	0.2	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2002	Nitrate + Nitrite	0.49	mg/L as N	Effluent 24-hr Composite, FMB
12/30/2002	Nitrate + Nitrite	0.39	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2002	Nitrate + Nitrite	0.37	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2003	Nitrate + Nitrite	0.02	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2003	Nitrate + Nitrite	0.5	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2003	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
1/6/2003	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2003	Nitrate + Nitrite	0.34	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2003	Nitrate + Nitrite	0.29	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2003	Nitrate + Nitrite	0.25	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2003	Nitrate + Nitrite	0.29	mg/L as N	Effluent 24-hr Composite, FMB

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1/11/2003	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/13/2003	Nitrate + Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
1/14/2003	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2003	Nitrate + Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2003	Nitrate + Nitrite	0.36	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2003	Nitrate + Nitrite	0.28	mg/L as N	Effluent 24-hr Composite, FMB
1/20/2003	Nitrate + Nitrite	0.4	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2003	Nitrate + Nitrite	0.38	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2003	Nitrate + Nitrite	0.31	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2003	Nitrate + Nitrite	0.25	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2003	Nitrate + Nitrite	0.23	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrate + Nitrite	0.33	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrate + Nitrite	0.38	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2003	Nitrate + Nitrite	0.19	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2003	Nitrate + Nitrite	0.19	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2003	Nitrate + Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2003	Nitrate + Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
2/3/2003	Nitrate + Nitrite	0.63	mg/L as N	Effluent 24-hr Composite, FMB
2/4/2003	Nitrate + Nitrite	0.05	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2003	Nitrate + Nitrite	0.48	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2003	Nitrate + Nitrite	0.53	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2003	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
2/10/2003	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2003	Nitrate + Nitrite	0.56	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2003	Nitrate + Nitrite	0.62	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2003	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2003	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB
2/17/2003	Nitrate + Nitrite	0.85	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2003	Nitrate + Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2003	Nitrate + Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2003	Nitrate + Nitrite	0.67	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2003	Nitrate + Nitrite	0.73	mg/L as N	Effluent 24-hr Composite, FMB
2/24/2003	Nitrate + Nitrite	0.86	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2003	Nitrate + Nitrite	0.61	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2003	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2003	Nitrate + Nitrite	0.63	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2003	Nitrate + Nitrite	0.51	mg/L as N	Effluent 24-hr Composite, FMB
3/3/2003	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
3/4/2003	Nitrate + Nitrite	0.62	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2003	Nitrate + Nitrite	0.63	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2003	Nitrate + Nitrite	0.58	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2003	Nitrate + Nitrite	0.57	mg/L as N	Effluent 24-hr Composite, FMB
3/10/2003	Nitrate + Nitrite	0.93	mg/L as N	Effluent 24-hr Composite, FMB
3/11/2003	Nitrate + Nitrite	0.64	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2003	Nitrate + Nitrite	0.62	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2003	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2003	Nitrate + Nitrite	0.83	mg/L as N	Effluent 24-hr Composite, FMB
3/17/2003	Nitrate + Nitrite	1.11	mg/L as N	Effluent 24-hr Composite, FMB
3/18/2003	Nitrate + Nitrite	0.74	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2003	Nitrate + Nitrite	0.92	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2003	Nitrate + Nitrite	1.36	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2003	Nitrate + Nitrite	1.71	mg/L as N	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

3/24/2003	Nitrate + Nitrite	2.34	mg/L as N	Effluent 24-hr Composite, FMB	
3/25/2003	Nitrate + Nitrite	2.49	mg/L as N	Effluent 24-hr Composite, FMB	
3/26/2003	Nitrate + Nitrite	2.74	mg/L as N	Effluent 24-hr Composite, FMB	
3/27/2003	Nitrate + Nitrite	5.14	mg/L as N	Effluent 24-hr Composite, FMB	
3/28/2003	Nitrate + Nitrite	4.25	mg/L as N	Effluent 24-hr Composite, FMB	
3/31/2003	Nitrate + Nitrite	0.88	mg/L as N	Effluent 24-hr Composite, FMB	
4/1/2003	Nitrate + Nitrite	1.3	mg/L as N	Effluent 24-hr Composite, FMB	
4/2/2003	Nitrate + Nitrite	1.88	mg/L as N	Effluent 24-hr Composite, FMB	
4/3/2003	Nitrate + Nitrite	2	mg/L as N	Effluent 24-hr Composite, FMB	
4/4/2003	Nitrate + Nitrite	1.73	mg/L as N	Effluent 24-hr Composite, FMB	
4/7/2003	Nitrate + Nitrite	1.11	mg/L as N	Effluent 24-hr Composite, FMB	
4/8/2003	Nitrate + Nitrite	1.12	mg/L as N	Effluent 24-hr Composite, FMB	
4/9/2003	Nitrate + Nitrite	0.8	mg/L as N	Effluent 24-hr Composite, FMB	
4/10/2003	Nitrate + Nitrite	0.82	mg/L as N	Effluent 24-hr Composite, FMB	
4/11/2003	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB	
4/14/2003	Nitrate + Nitrite	0.91	mg/L as N	Effluent 24-hr Composite, FMB	
4/15/2003	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB	
4/16/2003	Nitrate + Nitrite	1.22	mg/L as N	Effluent 24-hr Composite, FMB	
4/17/2003	Nitrate + Nitrite	1.21	mg/L as N	Effluent 24-hr Composite, FMB	
4/18/2003	Nitrate + Nitrite	1.1	mg/L as N	Effluent 24-hr Composite, FMB	
2/4/2004	Nitrate + Nitrite	5.3	mg/L as N	Effluent 24-hr Composite, FMB	
2/17/2005	Nitrate + Nitrite	5.12	mg/L as N	Effluent 24-hr Composite, FMB	
1/5/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	0.10
1/12/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
1/19/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
1/20/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
2/2/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrite	0.546	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrite	0.258	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
4/12/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
4/19/2000	Nitrite	0.006	mg/L as N	Ft. Myers Beach Effluent	
4/26/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
5/3/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
5/10/2000	Nitrite	0.009	mg/L as N	Ft. Myers Beach Effluent	
5/17/2000	Nitrite	0.301	mg/L as N	Ft. Myers Beach Effluent	
5/24/2000	Nitrite	0.004	mg/L as N	Ft. Myers Beach Effluent	
5/31/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
6/7/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
6/14/2000	Nitrite	0.153	mg/L as N	Ft. Myers Beach Effluent	
6/21/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
6/28/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
7/5/2000	Nitrite	0.015	mg/L as N	Ft. Myers Beach Effluent	
7/12/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	
7/19/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent	

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7/26/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
8/2/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
8/9/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
8/16/2000	Nitrite	0.036	mg/L as N	Ft. Myers Beach Effluent
8/23/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
8/30/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
9/6/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
9/13/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
9/29/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
9/27/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
10/4/2000	Nitrite	0.001	mg/L as N	Ft. Myers Beach Effluent
10/11/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
10/18/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
10/25/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
11/1/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
11/8/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
11/15/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
11/22/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
11/29/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
12/6/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
12/13/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
12/20/2000	Nitrite	0.005	mg/L as N	Ft. Myers Beach Effluent
12/27/2000	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
1/3/2001	Nitrite	0.011	mg/L as N	Ft. Myers Beach Effluent
1/10/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
1/11/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
1/12/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2001	Nitrite	Not detec	mg/L as N	FMB New Dig H2
1/16/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2001	Nitrite	0.018	mg/L as N	Ft. Myers Beach Effluent
1/17/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
1/19/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
1/25/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/26/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrite	0.018	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2001	Nitrite	0.009	mg/L as N	Ft. Myers Beach Effluent
2/1/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/2/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
2/8/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB

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2/8/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/9/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
2/15/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
2/16/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
2/22/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
2/23/2001	Nitrite	0.022	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2001	Nitrite	Not detec	mg/L as N	Ft. Myers Beach Effluent
3/1/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/2/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2001	Nitrite	0.005	mg/L as N	Ft. Myers Beach Effluent
3/8/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/9/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
3/16/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
3/23/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/27/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
3/30/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2001	Nitrite	0.033	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
4/6/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
4/13/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB

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4/17/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
4/20/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
4/27/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/4/2001	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2001	Nitrite	0.014	mg/L as N	Effluent 24-hr Composite, FMB
5/11/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
5/14/2001	Nitrite	0.027	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
5/16/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
5/18/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2001	Nitrite	0.012	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2001	Nitrite	0.018	mg/L as N	Effluent 24-hr Composite, FMB
5/25/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/1/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/7/2001	Nitrite	0.019	mg/L as N	Effluent 24-hr Composite, FMB
6/8/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/15/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
6/22/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2001	Nitrite	0.055	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2001	Nitrite	0.019	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2001	Nitrite	0.162	mg/L as N	Effluent 24-hr Composite, FMB

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6/28/2001	Nitrite	0.29	mg/L as N	Effluent 24-hr Composite, FMB
6/29/2001	Nitrite	0.15	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2001	Nitrite	0.094	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2001	Nitrite	0.367	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2001	Nitrite	0.467	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/6/2001	Nitrite	0.23	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
7/13/2001	Nitrite	0.017	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2001	Nitrite	0.003	mg/L as N	Effluent Grab, FMB
7/17/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/20/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
7/27/2001	Nitrite	0.027	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/3/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/10/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
8/17/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
8/20/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/24/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/31/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2001	Nitrite	0.072	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2001	Nitrite	0.088	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2001	Nitrite	0.178	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2001	Nitrite	0.145	mg/L as N	Effluent 24-hr Composite, FMB
9/7/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB

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9/10/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
9/11/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/14/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2001	Nitrite	0.013	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2001	Nitrite	0.014	mg/L as N	Effluent 24-hr Composite, FMB
9/21/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2001	Nitrite	0.029	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2001	Nitrite	0.075	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
9/28/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
10/5/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2001	Nitrite	0.032	mg/L as N	Effluent 24-hr Composite, FMB
10/9/2001	Nitrite	0.072	mg/L as N	Effluent 24-hr Composite, FMB
10/10/2001	Nitrite	0.061	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
10/12/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2001	Nitrite	0.004	mg/L as N	EFFLUENT 24-HR COMPOSITE,FMB
10/16/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2001	Nitrite	0.075	mg/L as N	Effluent 24-hr Composite, FMB
10/19/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/26/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
10/31/2001	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
11/1/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/2/2001	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
11/9/2001	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2001	Nitrite	0.015	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2001	Nitrite	0.064	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2001	Nitrite	0.083	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2001	Nitrite	0.153	mg/L as N	Effluent 24-hr Composite, FMB
11/16/2001	Nitrite	0.558	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2001	Nitrite	0.909	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2001	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2001	Nitrite	0.007	mg/L as N	Effl 24-hr Comp, FMB

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11/22/2001	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
11/23/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2001	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2001	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2001	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
11/30/2001	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2001	Nitrite	0.33	mg/L as N	Effluent 24-hr Composite, FMB
12/7/2001	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2001	Nitrite	0.034	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/14/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2001	Nitrite	0.013	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/20/2001	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/21/2001	Nitrite	0.15	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2001	Nitrite	0.025	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2001	Nitrite	0.025	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2001	Nitrite	0.162	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2001	Nitrite	0.212	mg/L as N	Effluent 24-hr Composite, FMB
12/28/2001	Nitrite	0.025	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2001	Nitrite	0.032	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2002	Nitrite	0.017	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2002	Nitrite	0.026	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2002	Nitrite	0.057	mg/L as N	Effluent 24-hr Composite, FMB
1/4/2002	Nitrite	0.026	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/11/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/14/2002	Nitrite	0.07	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2002	Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2002	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
1/18/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/25/2002	Nitrite	0.04	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2002	Nitrite	0.075	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2002	Nitrite	0.012	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2002	Nitrite	0.053	mg/L as N	Effluent 24-hr Composite, FMB
1/31/2002	Nitrite	0.036	mg/L as N	Effluent 24-hr Composite, FMB
2/1/2002	Nitrite	0.118	mg/L as N	Effluent 24-hr Composite, FMB

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2/4/2002	Nitrite	0.141	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2002	Nitrite	0.08	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2002	Nitrite	0.045	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2002	Nitrite	0.321	mg/L as N	Effluent 24-hr Composite, FMB
2/8/2002	Nitrite	0.059	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2002	Nitrite	0.282	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2002	Nitrite	0.013	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2002	Nitrite	0.031	mg/L as N	Effluent 24-hr Composite, FMB
2/15/2002	Nitrite	0.147	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2002	Nitrite	1.16	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
2/22/2002	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2002	Nitrite	0.412	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2002	Nitrite	0.092	mg/L as N	Effluent 24-hr Composite, FMB
3/1/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
3/4/2002	Nitrite	0.24	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2002	Nitrite	0.028	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2002	Nitrite	0.016	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2002	Nitrite	0.035	mg/L as N	Effluent 24-hr Composite, FMB
3/8/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
3/11/2002	Nitrite	0.239	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2002	Nitrite	0.044	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2002	Nitrite	0.031	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2002	Nitrite	0.078	mg/L as N	Effluent 24-hr Composite, FMB
3/15/2002	Nitrite	0.17	mg/L as N	Effluent 24-hr Composite, FMB
3/18/2002	Nitrite	0.304	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2002	Nitrite	0.825	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
3/22/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
3/25/2002	Nitrite	0.232	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
3/27/2002	Nitrite	0.037	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
3/29/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
4/1/2002	Nitrite	0.446	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2002	Nitrite	0.026	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2002	Nitrite	0.074	mg/L as N	Effluent 24-hr Composite, FMB
4/5/2002	Nitrite	0.018	mg/L as N	Effluent 24-hr Composite, FMB
4/8/2002	Nitrite	0.535	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2002	Nitrite	0.045	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2002	Nitrite	0.053	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2002	Nitrite	0.065	mg/L as N	Effluent 24-hr Composite, FMB
4/12/2002	Nitrite	0.151	mg/L as N	Effluent 24-hr Composite, FMB
4/15/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/16/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB

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4/17/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
4/18/2002	Nitrite	0.165	mg/L as N	Effluent 24-hr Composite, FMB
4/19/2002	Nitrite	0.063	mg/L as N	Effluent 24-hr Composite, FMB
4/22/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/23/2002	Nitrite	0.1	mg/L as N	Effluent 24-hr Composite, FMB
4/24/2002	Nitrite	0.033	mg/L as N	Effluent 24-hr Composite, FMB
4/25/2002	Nitrite	0.016	mg/L as N	Effluent 24-hr Composite, FMB
4/26/2002	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
4/29/2002	Nitrite	0.045	mg/L as N	Effluent 24-hr Composite, FMB
4/30/2002	Nitrite	0.078	mg/L as N	Effluent 24-hr Composite, FMB
5/1/2002	Nitrite	0.05	mg/L as N	Effluent 24-hr Composite, FMB
5/2/2002	Nitrite	0.014	mg/L as N	Effluent 24-hr Composite, FMB
5/3/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
5/6/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/7/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
5/8/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
5/9/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/10/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
5/13/2002	Nitrite	0.097	mg/L as N	Effluent 24-hr Composite, FMB
5/15/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/16/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/17/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
5/20/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
5/21/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
5/22/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
5/23/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
5/24/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
5/27/2002	Nitrite	0.107	mg/L as N	Effluent 24-hr Composite, FMB
5/28/2002	Nitrite	0.271	mg/L as N	Effluent 24-hr Composite, FMB
5/29/2002	Nitrite	0.434	mg/L as N	Effluent 24-hr Composite, FMB
5/30/2002	Nitrite	0.493	mg/L as N	Effluent 24-hr Composite, FMB
5/31/2002	Nitrite	0.612	mg/L as N	Effluent 24-hr Composite, FMB
6/3/2002	Nitrite	0.547	mg/L as N	Effluent 24-hr Composite, FMB
6/4/2002	Nitrite	0.72	mg/L as N	Effluent 24-hr Composite, FMB
6/5/2002	Nitrite	0.635	mg/L as N	Effluent 24-hr Composite, FMB
6/6/2002	Nitrite	0.319	mg/L as N	Effluent 24-hr Composite, FMB
6/7/2002	Nitrite	0.423	mg/L as N	Effluent 24-hr Composite, FMB
6/10/2002	Nitrite	0.414	mg/L as N	Effluent 24-hr Composite, FMB
6/11/2002	Nitrite	0.3	mg/L as N	Effluent 24-hr Composite, FMB
6/12/2002	Nitrite	0.555	mg/L as N	Effluent 24-hr Composite, FMB
6/13/2002	Nitrite	0.533	mg/L as N	Effluent 24-hr Composite, FMB
6/14/2002	Nitrite	0.179	mg/L as N	Effluent 24-hr Composite, FMB
6/17/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/18/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/19/2002	Nitrite	0.094	mg/L as N	Effluent 24-hr Composite, FMB
6/20/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
6/21/2002	Nitrite	0.121	mg/L as N	Effluent 24-hr Composite, FMB
6/24/2002	Nitrite	0.121	mg/L as N	Effluent 24-hr Composite, FMB
6/25/2002	Nitrite	0.242	mg/L as N	Effluent 24-hr Composite, FMB
6/26/2002	Nitrite	0.129	mg/L as N	Effluent 24-hr Composite, FMB
6/27/2002	Nitrite	0.07	mg/L as N	Effluent 24-hr Composite, FMB
6/28/2002	Nitrite	0.138	mg/L as N	Effluent 24-hr Composite, FMB

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7/1/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
7/2/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
7/3/2002	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
7/4/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
7/5/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
7/8/2002	Nitrite	0.103	mg/L as N	Effluent 24-hr Composite, FMB
7/9/2002	Nitrite	0.136	mg/L as N	Effluent 24-hr Composite, FMB
7/10/2002	Nitrite	0.152	mg/L as N	Effluent 24-hr Composite, FMB
7/11/2002	Nitrite	0.134	mg/L as N	Effluent 24-hr Composite, FMB
7/12/2002	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
7/15/2002	Nitrite	0.233	mg/L as N	Effluent 24-hr Composite, FMB
7/16/2002	Nitrite	0.318	mg/L as N	Effluent 24-hr Composite, FMB
7/17/2002	Nitrite	0.358	mg/L as N	Effluent 24-hr Composite, FMB
7/18/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
7/19/2002	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/22/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
7/23/2002	Nitrite	0.115	mg/L as N	Effluent 24-hr Composite, FMB
7/24/2002	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
7/25/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
7/26/2002	Nitrite	0.023	mg/L as N	Effluent 24-hr Composite, FMB
7/29/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
7/30/2002	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
7/31/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/1/2002	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
8/2/2002	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
8/5/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/6/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/7/2002	Nitrite	0.012	mg/L as N	Effluent 24-hr Composite, FMB
8/8/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/9/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
8/12/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/13/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
8/14/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
8/15/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
8/16/2002	Nitrite	0.019	mg/L as N	Effluent 24-hr Composite, FMB
8/19/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
8/20/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
8/21/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
8/22/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/23/2002	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
8/26/2002	Nitrite	0.209	mg/L as N	Effluent 24-hr Composite, FMB
8/27/2002	Nitrite	0.547	mg/L as N	Effluent 24-hr Composite, FMB
8/28/2002	Nitrite	0.496	mg/L as N	Effluent 24-hr Composite, FMB
8/29/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
8/30/2002	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
9/2/2002	Nitrite	0.133	mg/L as N	Effluent 24-hr Composite, FMB
9/3/2002	Nitrite	0.059	mg/L as N	Effluent 24-hr Composite, FMB
9/4/2002	Nitrite	0.121	mg/L as N	Effluent 24-hr Composite, FMB
9/5/2002	Nitrite	0.578	mg/L as N	Effluent 24-hr Composite, FMB
9/6/2002	Nitrite	0.418	mg/L as N	Effluent 24-hr Composite, FMB
9/9/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
9/10/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB

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9/11/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
9/12/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
9/13/2002	Nitrite	0.218	mg/L as N	Effluent 24-hr Composite, FMB
9/16/2002	Nitrite	0.232	mg/L as N	Effluent 24-hr Composite, FMB
9/17/2002	Nitrite	0.296	mg/L as N	Effluent 24-hr Composite, FMB
9/18/2002	Nitrite	0.212	mg/L as N	Effluent 24-hr Composite, FMB
9/19/2002	Nitrite	0.213	mg/L as N	Effluent 24-hr Composite, FMB
9/20/2002	Nitrite	0.504	mg/L as N	Effluent 24-hr Composite, FMB
9/23/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
9/24/2002	Nitrite	0.173	mg/L as N	Effluent 24-hr Composite, FMB
9/25/2002	Nitrite	0.068	mg/L as N	Effluent 24-hr Composite, FMB
9/26/2002	Nitrite	0.185	mg/L as N	Effluent 24-hr Composite, FMB
9/27/2002	Nitrite	0.17	mg/L as N	Effluent 24-hr Composite, FMB
9/30/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/1/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/2/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/3/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/4/2002	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
10/7/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/8/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/9/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/10/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
10/11/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/14/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/15/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
10/16/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/17/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/18/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/21/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/22/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/23/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
10/24/2002	Nitrite	0.017	mg/L as N	Effluent 24-hr Composite, FMB
10/25/2002	Nitrite	0.056	mg/L as N	Effluent 24-hr Composite, FMB
10/28/2002	Nitrite	0.016	mg/L as N	Effluent 24-hr Composite, FMB
10/29/2002	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
10/30/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
10/31/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/1/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/4/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/5/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/6/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
11/7/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/8/2002	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
11/11/2002	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
11/12/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
11/13/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/14/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
11/15/2002	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
11/18/2002	Nitrite	0.404	mg/L as N	Effluent 24-hr Composite, FMB
11/19/2002	Nitrite	0.019	mg/L as N	Effluent 24-hr Composite, FMB
11/20/2002	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
11/21/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB

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11/22/2002	Nitrite	0.022	mg/L as N	Effluent 24-hr Composite, FMB
11/25/2002	Nitrite	0.007	mg/L as N	Effluent 24-hr Composite, FMB
11/26/2002	Nitrite	0.052	mg/L as N	Effluent 24-hr Composite, FMB
11/27/2002	Nitrite	0.485	mg/L as N	Effluent 24-hr Composite, FMB
11/28/2002	Nitrite	0.012	mg/L as N	Effluent 24-hr Composite, FMB
11/29/2002	Nitrite	0.462	mg/L as N	Effluent 24-hr Composite, FMB
12/2/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
12/3/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
12/4/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
12/5/2002	Nitrite	0.123	mg/L as N	Effluent 24-hr Composite, FMB
12/6/2002	Nitrite	0.373	mg/L as N	Effluent 24-hr Composite, FMB
12/9/2002	Nitrite	0.303	mg/L as N	Effluent 24-hr Composite, FMB
12/10/2002	Nitrite	0.091	mg/L as N	Effluent 24-hr Composite, FMB
12/11/2002	Nitrite	0.087	mg/L as N	Effluent 24-hr Composite, FMB
12/12/2002	Nitrite	0.146	mg/L as N	Effluent 24-hr Composite, FMB
12/13/2002	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
12/16/2002	Nitrite	0.014	mg/L as N	Effluent 24-hr Composite, FMB
12/17/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
12/18/2002	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
12/19/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
12/20/2002	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
12/23/2002	Nitrite	0.003	mg/L as N	Effluent 24-hr Composite, FMB
12/24/2002	Nitrite	0.008	mg/L as N	Effluent 24-hr Composite, FMB
12/25/2002	Nitrite	0.012	mg/L as N	Effluent 24-hr Composite, FMB
12/26/2002	Nitrite	0.013	mg/L as N	Effluent 24-hr Composite, FMB
12/27/2002	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
12/30/2002	Nitrite	0.201	mg/L as N	Effluent 24-hr Composite, FMB
12/31/2002	Nitrite	0.032	mg/L as N	Effluent 24-hr Composite, FMB
1/1/2003	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/2/2003	Nitrite	0.025	mg/L as N	Effluent 24-hr Composite, FMB
1/3/2003	Nitrite	0.132	mg/L as N	Effluent 24-hr Composite, FMB
1/6/2003	Nitrite	0.222	mg/L as N	Effluent 24-hr Composite, FMB
1/7/2003	Nitrite	0.203	mg/L as N	Effluent 24-hr Composite, FMB
1/8/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/9/2003	Nitrite	0.009	mg/L as N	Effluent 24-hr Composite, FMB
1/10/2003	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
1/11/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/13/2003	Nitrite	0.26	mg/L as N	Effluent 24-hr Composite, FMB
1/14/2003	Nitrite	0.215	mg/L as N	Effluent 24-hr Composite, FMB
1/15/2003	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/16/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
1/17/2003	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/20/2003	Nitrite	0.295	mg/L as N	Effluent 24-hr Composite, FMB
1/21/2003	Nitrite	0.162	mg/L as N	Effluent 24-hr Composite, FMB
1/22/2003	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
1/23/2003	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
1/24/2003	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrite	0.247	mg/L as N	Effluent 24-hr Composite, FMB
1/27/2003	Nitrite	0.284	mg/L as N	Effluent 24-hr Composite, FMB
1/28/2003	Nitrite	0.011	mg/L as N	Effluent 24-hr Composite, FMB
1/29/2003	Nitrite	0.019	mg/L as N	Effluent 24-hr Composite, FMB
1/30/2003	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB

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1/31/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
2/3/2003	Nitrite	0.261	mg/L as N	Effluent 24-hr Composite, FMB
2/4/2003	Nitrite	0.002	mg/L as N	Effluent 24-hr Composite, FMB
2/5/2003	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
2/6/2003	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
2/7/2003	Nitrite	0.054	mg/L as N	Effluent 24-hr Composite, FMB
2/10/2003	Nitrite	0.585	mg/L as N	Effluent 24-hr Composite, FMB
2/11/2003	Nitrite	0.208	mg/L as N	Effluent 24-hr Composite, FMB
2/12/2003	Nitrite	0.302	mg/L as N	Effluent 24-hr Composite, FMB
2/13/2003	Nitrite	0.472	mg/L as N	Effluent 24-hr Composite, FMB
2/14/2003	Nitrite	0.921	mg/L as N	Effluent 24-hr Composite, FMB
2/17/2003	Nitrite	0.409	mg/L as N	Effluent 24-hr Composite, FMB
2/18/2003	Nitrite	0.695	mg/L as N	Effluent 24-hr Composite, FMB
2/19/2003	Nitrite	0.359	mg/L as N	Effluent 24-hr Composite, FMB
2/20/2003	Nitrite	0.222	mg/L as N	Effluent 24-hr Composite, FMB
2/21/2003	Nitrite	0.108	mg/L as N	Effluent 24-hr Composite, FMB
2/24/2003	Nitrite	0.752	mg/L as N	Effluent 24-hr Composite, FMB
2/25/2003	Nitrite	0.151	mg/L as N	Effluent 24-hr Composite, FMB
2/26/2003	Nitrite	0.157	mg/L as N	Effluent 24-hr Composite, FMB
2/27/2003	Nitrite	0.069	mg/L as N	Effluent 24-hr Composite, FMB
2/28/2003	Nitrite	0.041	mg/L as N	Effluent 24-hr Composite, FMB
3/3/2003	Nitrite	0.675	mg/L as N	Effluent 24-hr Composite, FMB
3/4/2003	Nitrite	0.136	mg/L as N	Effluent 24-hr Composite, FMB
3/5/2003	Nitrite	0.267	mg/L as N	Effluent 24-hr Composite, FMB
3/6/2003	Nitrite	0.293	mg/L as N	Effluent 24-hr Composite, FMB
3/7/2003	Nitrite	0.14	mg/L as N	Effluent 24-hr Composite, FMB
3/10/2003	Nitrite	0.834	mg/L as N	Effluent 24-hr Composite, FMB
3/11/2003	Nitrite	0.006	mg/L as N	Effluent 24-hr Composite, FMB
3/12/2003	Nitrite	0.004	mg/L as N	Effluent 24-hr Composite, FMB
3/13/2003	Nitrite	0.472	mg/L as N	Effluent 24-hr Composite, FMB
3/14/2003	Nitrite	0.457	mg/L as N	Effluent 24-hr Composite, FMB
3/17/2003	Nitrite	0.674	mg/L as N	Effluent 24-hr Composite, FMB
3/18/2003	Nitrite	0.35	mg/L as N	Effluent 24-hr Composite, FMB
3/19/2003	Nitrite	0.46	mg/L as N	Effluent 24-hr Composite, FMB
3/20/2003	Nitrite	0.76	mg/L as N	Effluent 24-hr Composite, FMB
3/21/2003	Nitrite	1.09	mg/L as N	Effluent 24-hr Composite, FMB
3/24/2003	Nitrite	1.38	mg/L as N	Effluent 24-hr Composite, FMB
3/25/2003	Nitrite	0.01	mg/L as N	Effluent 24-hr Composite, FMB
3/26/2003	Nitrite	1.13	mg/L as N	Effluent 24-hr Composite, FMB
3/27/2003	Nitrite	1.31	mg/L as N	Effluent 24-hr Composite, FMB
3/28/2003	Nitrite	0.294	mg/L as N	Effluent 24-hr Composite, FMB
3/31/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/1/2003	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
4/2/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/3/2003	Nitrite	0.001	mg/L as N	Effluent 24-hr Composite, FMB
4/4/2003	Nitrite	0.005	mg/L as N	Effluent 24-hr Composite, FMB
4/7/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/8/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/9/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/10/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/11/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB
4/14/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB

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4/15/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
4/16/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
4/17/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
4/18/2003	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
2/4/2004	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
2/17/2005	Nitrite	Not detec	mg/L as N	Effluent 24-hr Composite, FMB	
1/5/2000	Nitrogen, Kjeldahl, Total	2.19	mg/L as N	Ft. Myers Beach Effluent	4.35
1/12/2000	Nitrogen, Kjeldahl, Total	2.53	mg/L as N	Ft. Myers Beach Effluent	
1/19/2000	Nitrogen, Kjeldahl, Total	2.2	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrogen, Kjeldahl, Total	1.78	mg/L as N	Ft. Myers Beach Effluent	
2/2/2000	Nitrogen, Kjeldahl, Total	3.4	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrogen, Kjeldahl, Total	5.38	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrogen, Kjeldahl, Total	0.81	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrogen, Kjeldahl, Total	3.15	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrogen, Kjeldahl, Total	8.25	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrogen, Kjeldahl, Total	1.86	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrogen, Kjeldahl, Total	3.95	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrogen, Kjeldahl, Total	2.17	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrogen, Kjeldahl, Total	5.78	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrogen, Kjeldahl, Total	4.56	mg/L as N	Ft. Myers Beach Effluent	
4/12/2000	Nitrogen, Kjeldahl, Total	16.8	mg/L as N	Ft. Myers Beach Effluent	
4/19/2000	Nitrogen, Kjeldahl, Total	2.97	mg/L as N	Ft. Myers Beach Effluent	
4/26/2000	Nitrogen, Kjeldahl, Total	4.07	mg/L as N	Ft. Myers Beach Effluent	
5/3/2000	Nitrogen, Kjeldahl, Total	3.33	mg/L as N	Ft. Myers Beach Effluent	
5/10/2000	Nitrogen, Kjeldahl, Total	1.17	mg/L as N	Ft. Myers Beach Effluent	
5/17/2000	Nitrogen, Kjeldahl, Total	1.3	mg/L as N	Ft. Myers Beach Effluent	
5/24/2000	Nitrogen, Kjeldahl, Total	1.06	mg/L as N	Ft. Myers Beach Effluent	
5/31/2000	Nitrogen, Kjeldahl, Total	1.57	mg/L as N	Ft. Myers Beach Effluent	
6/7/2000	Nitrogen, Kjeldahl, Total	0.75	mg/L as N	Ft. Myers Beach Effluent	
6/14/2000	Nitrogen, Kjeldahl, Total	2.92	mg/L as N	Ft. Myers Beach Effluent	
6/21/2000	Nitrogen, Kjeldahl, Total	8.58	mg/L as N	Ft. Myers Beach Effluent	
6/28/2000	Nitrogen, Kjeldahl, Total	10.9	mg/L as N	Ft. Myers Beach Effluent	
7/5/2000	Nitrogen, Kjeldahl, Total	4.82	mg/L as N	Ft. Myers Beach Effluent	
7/12/2000	Nitrogen, Kjeldahl, Total	3.94	mg/L as N	Ft. Myers Beach Effluent	
7/19/2000	Nitrogen, Kjeldahl, Total	21.8	mg/L as N	Ft. Myers Beach Effluent	
7/26/2000	Nitrogen, Kjeldahl, Total	9.8	mg/L as N	Ft. Myers Beach Effluent	
8/2/2000	Nitrogen, Kjeldahl, Total	4.94	mg/L as N	Ft. Myers Beach Effluent	
8/9/2000	Nitrogen, Kjeldahl, Total	7.03	mg/L as N	Ft. Myers Beach Effluent	
8/16/2000	Nitrogen, Kjeldahl, Total	11.2	mg/L as N	Ft. Myers Beach Effluent	
8/23/2000	Nitrogen, Kjeldahl, Total	6.64	mg/L as N	Ft. Myers Beach Effluent	
8/30/2000	Nitrogen, Kjeldahl, Total	6.69	mg/L as N	Ft. Myers Beach Effluent	
9/6/2000	Nitrogen, Kjeldahl, Total	1.85	mg/L as N	Ft. Myers Beach Effluent	
9/13/2000	Nitrogen, Kjeldahl, Total	2.29	mg/L as N	Ft. Myers Beach Effluent	
9/29/2000	Nitrogen, Kjeldahl, Total	4.98	mg/L as N	Ft. Myers Beach Effluent	
9/27/2000	Nitrogen, Kjeldahl, Total	10.6	mg/L as N	Ft. Myers Beach Effluent	
10/4/2000	Nitrogen, Kjeldahl, Total	6.81	mg/L as N	Ft. Myers Beach Effluent	
10/11/2000	Nitrogen, Kjeldahl, Total	21.2	mg/L as N	Ft. Myers Beach Effluent	
10/18/2000	Nitrogen, Kjeldahl, Total	5.47	mg/L as N	Ft. Myers Beach Effluent	
10/25/2000	Nitrogen, Kjeldahl, Total	2.01	mg/L as N	Ft. Myers Beach Effluent	
11/1/2000	Nitrogen, Kjeldahl, Total	1.12	mg/L as N	Ft. Myers Beach Effluent	
11/8/2000	Nitrogen, Kjeldahl, Total	1.32	mg/L as N	Ft. Myers Beach Effluent	
11/15/2000	Nitrogen, Kjeldahl, Total	1.37	mg/L as N	Ft. Myers Beach Effluent	

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

11/22/2000	Nitrogen, Kjeldahl, Total	1.35	mg/L as N	Ft. Myers Beach Effluent	
11/29/2000	Nitrogen, Kjeldahl, Total	1.9	mg/L as N	Ft. Myers Beach Effluent	
12/6/2000	Nitrogen, Kjeldahl, Total	5.41	mg/L as N	Ft. Myers Beach Effluent	
12/13/2000	Nitrogen, Kjeldahl, Total	3.42	mg/L as N	Ft. Myers Beach Effluent	
12/20/2000	Nitrogen, Kjeldahl, Total	11.2	mg/L as N	Ft. Myers Beach Effluent	
12/27/2000	Nitrogen, Kjeldahl, Total	5.17	mg/L as N	Ft. Myers Beach Effluent	
1/3/2001	Nitrogen, Kjeldahl, Total	2.85	mg/L as N	Ft. Myers Beach Effluent	
1/10/2001	Nitrogen, Kjeldahl, Total	0.06	mg/L as N	Ft. Myers Beach Effluent	
1/15/2001	Nitrogen, Kjeldahl, Total	1.14	mg/L as N	FMB New Dig H2	
1/17/2001	Nitrogen, Kjeldahl, Total	0.34	mg/L as N	Ft. Myers Beach Effluent	
1/24/2001	Nitrogen, Kjeldahl, Total	0.87	mg/L as N	Ft. Myers Beach Effluent	
1/31/2001	Nitrogen, Kjeldahl, Total	1.56	mg/L as N	Ft. Myers Beach Effluent	
2/7/2001	Nitrogen, Kjeldahl, Total	1.24	mg/L as N	Ft. Myers Beach Effluent	
2/14/2001	Nitrogen, Kjeldahl, Total	1.15	mg/L as N	Ft. Myers Beach Effluent	
2/21/2001	Nitrogen, Kjeldahl, Total	1.21	mg/L as N	Ft. Myers Beach Effluent	
2/28/2001	Nitrogen, Kjeldahl, Total	1.16	mg/L as N	Ft. Myers Beach Effluent	
3/7/2001	Nitrogen, Kjeldahl, Total	1.11	mg/L as N	Ft. Myers Beach Effluent	
8/21/2001	Nitrogen, Kjeldahl, Total	1.12	mg/L as N	Effluent 24-hr Composite, FMB	
8/22/2001	Nitrogen, Kjeldahl, Total	1.06	mg/L as N	Effluent 24-hr Composite, FMB	
8/23/2001	Nitrogen, Kjeldahl, Total	1.2	mg/L as N	Effluent 24-hr Composite, FMB	
8/24/2001	Nitrogen, Kjeldahl, Total	2.02	mg/L as N	Effluent 24-hr Composite, FMB	
9/5/2001	Nitrogen, Kjeldahl, Total	7.69	mg/L as N	Effluent 24-hr Composite, FMB	
9/7/2001	Nitrogen, Kjeldahl, Total	0.49	mg/L as N	Effluent 24-hr Composite, FMB	
2/6/2002	Nitrogen, Kjeldahl, Total	10.8	mg/L as N	Effluent 24-hr Composite, FMB	
1/5/2000	Nitrogen, Organic	2.19	mg/L as N	Ft. Myers Beach Effluent	4.18
1/12/2000	Nitrogen, Organic	2.53	mg/L as N	Ft. Myers Beach Effluent	
1/19/2000	Nitrogen, Organic	2.2	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrogen, Organic	1.78	mg/L as N	Ft. Myers Beach Effluent	
2/2/2000	Nitrogen, Organic	2.61	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrogen, Organic	3.55	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrogen, Organic	0.55	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrogen, Organic	1.58	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrogen, Organic	3.82	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrogen, Organic	1.83	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrogen, Organic	3.95	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrogen, Organic	2.06	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrogen, Organic	5.78	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrogen, Organic	3.52	mg/L as N	Ft. Myers Beach Effluent	
4/12/2000	Nitrogen, Organic	16.78	mg/L as N	Ft. Myers Beach Effluent	
4/19/2000	Nitrogen, Organic	2.91	mg/L as N	Ft. Myers Beach Effluent	
4/26/2000	Nitrogen, Organic	4.07	mg/L as N	Ft. Myers Beach Effluent	
5/3/2000	Nitrogen, Organic	3.33	mg/L as N	Ft. Myers Beach Effluent	
5/10/2000	Nitrogen, Organic	0.78	mg/L as N	Ft. Myers Beach Effluent	
5/17/2000	Nitrogen, Organic	0.69	mg/L as N	Ft. Myers Beach Effluent	
5/24/2000	Nitrogen, Organic	1.01	mg/L as N	Ft. Myers Beach Effluent	
5/31/2000	Nitrogen, Organic	1.57	mg/L as N	Ft. Myers Beach Effluent	
6/7/2000	Nitrogen, Organic	0.69	mg/L as N	Ft. Myers Beach Effluent	
6/14/2000	Nitrogen, Organic	2.49	mg/L as N	Ft. Myers Beach Effluent	
6/21/2000	Nitrogen, Organic	8.58	mg/L as N	Ft. Myers Beach Effluent	
6/28/2000	Nitrogen, Organic	9.53	mg/L as N	Ft. Myers Beach Effluent	
7/5/2000	Nitrogen, Organic	3.11	mg/L as N	Ft. Myers Beach Effluent	
7/12/2000	Nitrogen, Organic	2.47	mg/L as N	Ft. Myers Beach Effluent	

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

7/19/2000	Nitrogen, Organic	21.8	mg/L as N	Ft. Myers Beach Effluent	
7/26/2000	Nitrogen, Organic	9.77	mg/L as N	Ft. Myers Beach Effluent	
8/2/2000	Nitrogen, Organic	4.94	mg/L as N	Ft. Myers Beach Effluent	
8/9/2000	Nitrogen, Organic	6.99	mg/L as N	Ft. Myers Beach Effluent	
8/16/2000	Nitrogen, Organic	10.59	mg/L as N	Ft. Myers Beach Effluent	
8/23/2000	Nitrogen, Organic	6.64	mg/L as N	Ft. Myers Beach Effluent	
8/30/2000	Nitrogen, Organic	6.65	mg/L as N	Ft. Myers Beach Effluent	
9/6/2000	Nitrogen, Organic	1.83	mg/L as N	Ft. Myers Beach Effluent	
9/13/2000	Nitrogen, Organic	2.26	mg/L as N	Ft. Myers Beach Effluent	
9/29/2000	Nitrogen, Organic	4.94	mg/L as N	Ft. Myers Beach Effluent	
9/27/2000	Nitrogen, Organic	10.6	mg/L as N	Ft. Myers Beach Effluent	
10/4/2000	Nitrogen, Organic	6.81	mg/L as N	Ft. Myers Beach Effluent	
10/11/2000	Nitrogen, Organic	21.2	mg/L as N	Ft. Myers Beach Effluent	
10/18/2000	Nitrogen, Organic	5.45	mg/L as N	Ft. Myers Beach Effluent	
10/25/2000	Nitrogen, Organic	2.01	mg/L as N	Ft. Myers Beach Effluent	
11/1/2000	Nitrogen, Organic	1.11	mg/L as N	Ft. Myers Beach Effluent	
11/8/2000	Nitrogen, Organic	1.29	mg/L as N	Ft. Myers Beach Effluent	
11/15/2000	Nitrogen, Organic	1.31	mg/L as N	Ft. Myers Beach Effluent	
11/22/2000	Nitrogen, Organic	1.33	mg/L as N	Ft. Myers Beach Effluent	
11/29/2000	Nitrogen, Organic	1.9	mg/L as N	Ft. Myers Beach Effluent	
12/6/2000	Nitrogen, Organic	5.37	mg/L as N	Ft. Myers Beach Effluent	
12/13/2000	Nitrogen, Organic	3.42	mg/L as N	Ft. Myers Beach Effluent	
12/20/2000	Nitrogen, Organic	11.2	mg/L as N	Ft. Myers Beach Effluent	
12/27/2000	Nitrogen, Organic	5.17	mg/L as N	Ft. Myers Beach Effluent	
1/3/2001	Nitrogen, Organic	2.85	mg/L as N	Ft. Myers Beach Effluent	
1/10/2001	Nitrogen, Organic	0.06	mg/L as N	Ft. Myers Beach Effluent	
1/15/2001	Nitrogen, Organic	1.14	mg/L as N	FMB New Dig H2	
1/17/2001	Nitrogen, Organic	0.34	mg/L as N	Ft. Myers Beach Effluent	
1/24/2001	Nitrogen, Organic	0.87	mg/L as N	Ft. Myers Beach Effluent	
1/31/2001	Nitrogen, Organic	1.56	mg/L as N	Ft. Myers Beach Effluent	
2/7/2001	Nitrogen, Organic	1.24	mg/L as N	Ft. Myers Beach Effluent	
2/14/2001	Nitrogen, Organic	1.15	mg/L as N	Ft. Myers Beach Effluent	
2/21/2001	Nitrogen, Organic	1.21	mg/L as N	Ft. Myers Beach Effluent	
2/28/2001	Nitrogen, Organic	1.16	mg/L as N	Ft. Myers Beach Effluent	
3/7/2001	Nitrogen, Organic	1.11	mg/L as N	Ft. Myers Beach Effluent	
1/5/2000	Nitrogen, Total	5.51	mg/L as N	Ft. Myers Beach Effluent	
1/12/2000	Nitrogen, Total	16.43	mg/L as N	Ft. Myers Beach Effluent	10.26
1/19/2000	Nitrogen, Total	11.21	mg/L as N	Ft. Myers Beach Effluent	
1/26/2000	Nitrogen, Total	12.08	mg/L as N	Ft. Myers Beach Effluent	
2/2/2000	Nitrogen, Total	13.02	mg/L as N	Ft. Myers Beach Effluent	
2/9/2000	Nitrogen, Total	10.94	mg/L as N	Ft. Myers Beach Effluent	
2/16/2000	Nitrogen, Total	5.37	mg/L as N	Ft. Myers Beach Effluent	
2/23/2000	Nitrogen, Total	6.13	mg/L as N	Ft. Myers Beach Effluent	
3/1/2000	Nitrogen, Total	13.7	mg/L as N	Ft. Myers Beach Effluent	
3/8/2000	Nitrogen, Total	19.76	mg/L as N	Ft. Myers Beach Effluent	
3/15/2000	Nitrogen, Total	15.85	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Nitrogen, Total	16.17	mg/L as N	Ft. Myers Beach Effluent	
3/28/2000	Nitrogen, Total	26.88	mg/L as N	Ft. Myers Beach Effluent	
4/5/2000	Nitrogen, Total	12.18	mg/L as N	Ft. Myers Beach Effluent	
4/12/2000	Nitrogen, Total	34.5	mg/L as N	Ft. Myers Beach Effluent	
4/19/2000	Nitrogen, Total	15.27	mg/L as N	Ft. Myers Beach Effluent	
4/26/2000	Nitrogen, Total	11.77	mg/L as N	Ft. Myers Beach Effluent	

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

5/3/2000	Nitrogen, Total	5.85	mg/L as N	Ft. Myers Beach Effluent	
5/10/2000	Nitrogen, Total	3.8	mg/L as N	Ft. Myers Beach Effluent	
5/17/2000	Nitrogen, Total	3.1	mg/L as N	Ft. Myers Beach Effluent	
5/24/2000	Nitrogen, Total	3.48	mg/L as N	Ft. Myers Beach Effluent	
5/31/2000	Nitrogen, Total	6.02	mg/L as N	Ft. Myers Beach Effluent	
6/7/2000	Nitrogen, Total	3.44	mg/L as N	Ft. Myers Beach Effluent	
6/14/2000	Nitrogen, Total	6.81	mg/L as N	Ft. Myers Beach Effluent	
6/21/2000	Nitrogen, Total	13.6	mg/L as N	Ft. Myers Beach Effluent	
6/28/2000	Nitrogen, Total	13.81	mg/L as N	Ft. Myers Beach Effluent	
7/5/2000	Nitrogen, Total	6.79	mg/L as N	Ft. Myers Beach Effluent	
7/12/2000	Nitrogen, Total	5.78	mg/L as N	Ft. Myers Beach Effluent	
7/19/2000	Nitrogen, Total	24.9	mg/L as N	Ft. Myers Beach Effluent	
7/26/2000	Nitrogen, Total	13.61	mg/L as N	Ft. Myers Beach Effluent	
8/2/2000	Nitrogen, Total	7.54	mg/L as N	Ft. Myers Beach Effluent	
8/9/2000	Nitrogen, Total	10.93	mg/L as N	Ft. Myers Beach Effluent	
8/16/2000	Nitrogen, Total	17.08	mg/L as N	Ft. Myers Beach Effluent	
8/23/2000	Nitrogen, Total	13.99	mg/L as N	Ft. Myers Beach Effluent	
8/30/2000	Nitrogen, Total	12.68	mg/L as N	Ft. Myers Beach Effluent	
9/6/2000	Nitrogen, Total	6.49	mg/L as N	Ft. Myers Beach Effluent	
9/13/2000	Nitrogen, Total	6.22	mg/L as N	Ft. Myers Beach Effluent	
9/29/2000	Nitrogen, Total	10.39	mg/L as N	Ft. Myers Beach Effluent	
9/27/2000	Nitrogen, Total	15.2	mg/L as N	Ft. Myers Beach Effluent	
10/4/2000	Nitrogen, Total	10.86	mg/L as N	Ft. Myers Beach Effluent	
10/11/2000	Nitrogen, Total	22.73	mg/L as N	Ft. Myers Beach Effluent	
10/18/2000	Nitrogen, Total	7.5	mg/L as N	Ft. Myers Beach Effluent	
10/25/2000	Nitrogen, Total	3.7	mg/L as N	Ft. Myers Beach Effluent	
11/1/2000	Nitrogen, Total	2.34	mg/L as N	Ft. Myers Beach Effluent	
11/8/2000	Nitrogen, Total	2.85	mg/L as N	Ft. Myers Beach Effluent	
11/15/2000	Nitrogen, Total	2.41	mg/L as N	Ft. Myers Beach Effluent	
11/22/2000	Nitrogen, Total	3.01	mg/L as N	Ft. Myers Beach Effluent	
11/29/2000	Nitrogen, Total	3.13	mg/L as N	Ft. Myers Beach Effluent	
12/6/2000	Nitrogen, Total	7	mg/L as N	Ft. Myers Beach Effluent	
12/13/2000	Nitrogen, Total	4.82	mg/L as N	Ft. Myers Beach Effluent	
12/20/2000	Nitrogen, Total	14.27	mg/L as N	Ft. Myers Beach Effluent	
12/27/2000	Nitrogen, Total	6.57	mg/L as N	Ft. Myers Beach Effluent	
1/3/2001	Nitrogen, Total	4.65	mg/L as N	Ft. Myers Beach Effluent	
1/10/2001	Nitrogen, Total	1.7	mg/L as N	Ft. Myers Beach Effluent	
1/15/2001	Nitrogen, Total	1.87	mg/L as N	FMB New Dig H2	
1/17/2001	Nitrogen, Total	1.62	mg/L as N	Ft. Myers Beach Effluent	
1/24/2001	Nitrogen, Total	74.22	mg/L as N	Ft. Myers Beach Effluent	
1/31/2001	Nitrogen, Total	2.52	mg/L as N	Ft. Myers Beach Effluent	
2/7/2001	Nitrogen, Total	2.07	mg/L as N	Ft. Myers Beach Effluent	
2/14/2001	Nitrogen, Total	1.84	mg/L as N	Ft. Myers Beach Effluent	
2/21/2001	Nitrogen, Total	2.33	mg/L as N	Ft. Myers Beach Effluent	
2/28/2001	Nitrogen, Total	2.67	mg/L as N	Ft. Myers Beach Effluent	
3/7/2001	Nitrogen, Total	1.71	mg/L as N	Ft. Myers Beach Effluent	
3/22/2000	Phosphorus, Total	3.48	mg/L as P	Ft. Myers Beach Effluent	2.52
3/28/2000	Phosphorus, Total	5.55	mg/L as P	Ft. Myers Beach Effluent	
4/5/2000	Phosphorus, Total	4.47	mg/L as P	Ft. Myers Beach Effluent	
4/12/2000	Phosphorus, Total	5.49	mg/L as P	Ft. Myers Beach Effluent	
4/19/2000	Phosphorus, Total	2.57	mg/L as P	Ft. Myers Beach Effluent	
4/26/2000	Phosphorus, Total	3.95	mg/L as P	Ft. Myers Beach Effluent	

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5/3/2000	Phosphorus, Total	4.83	mg/L as P	Ft. Myers Beach Effluent	
5/10/2000	Phosphorus, Total	2.51	mg/L as P	Ft. Myers Beach Effluent	
5/17/2000	Phosphorus, Total	3.69	mg/L as P	Ft. Myers Beach Effluent	
5/24/2000	Phosphorus, Total	2.14	mg/L as P	Ft. Myers Beach Effluent	
5/31/2000	Phosphorus, Total	2.18	mg/L as P	Ft. Myers Beach Effluent	
6/7/2000	Phosphorus, Total	1.39	mg/L as P	Ft. Myers Beach Effluent	
6/14/2000	Phosphorus, Total	2.05	mg/L as P	Ft. Myers Beach Effluent	
6/21/2000	Phosphorus, Total	1.55	mg/L as P	Ft. Myers Beach Effluent	
6/28/2000	Phosphorus, Total	0.1	mg/L as P	Ft. Myers Beach Effluent	
7/5/2000	Phosphorus, Total	0.57	mg/L as P	Ft. Myers Beach Effluent	
7/12/2000	Phosphorus, Total	0.68	mg/L as P	Ft. Myers Beach Effluent	
7/19/2000	Phosphorus, Total	Not detec	mg/L as P	Ft. Myers Beach Effluent	
7/26/2000	Phosphorus, Total	Not detec	mg/L as P	Ft. Myers Beach Effluent	
8/2/2000	Phosphorus, Total	3.12	mg/L as P	Ft. Myers Beach Effluent	
8/9/2000	Phosphorus, Total	4.82	mg/L as P	Ft. Myers Beach Effluent	
8/16/2000	Phosphorus, Total	1.7	mg/L as P	Ft. Myers Beach Effluent	
8/23/2000	Phosphorus, Total	4.01	mg/L as P	Ft. Myers Beach Effluent	
8/30/2000	Phosphorus, Total	3.39	mg/L as P	Ft. Myers Beach Effluent	
9/6/2000	Phosphorus, Total	Not detec	mg/L as P	Ft. Myers Beach Effluent	
9/13/2000	Phosphorus, Total	5.47	mg/L as P	Ft. Myers Beach Effluent	
9/29/2000	Phosphorus, Total	1.54	mg/L as P	Ft. Myers Beach Effluent	
9/27/2000	Phosphorus, Total	2.3	mg/L as P	Ft. Myers Beach Effluent	
10/4/2000	Phosphorus, Total	1.93	mg/L as P	Ft. Myers Beach Effluent	
10/11/2000	Phosphorus, Total	0.72	mg/L as P	Ft. Myers Beach Effluent	
10/18/2000	Phosphorus, Total	4.39	mg/L as P	Ft. Myers Beach Effluent	
10/25/2000	Phosphorus, Total	0.19	mg/L as P	Ft. Myers Beach Effluent	
11/1/2000	Phosphorus, Total	2.99	mg/L as P	Ft. Myers Beach Effluent	
11/8/2000	Phosphorus, Total	1.79	mg/L as P	Ft. Myers Beach Effluent	
11/15/2000	Phosphorus, Total	0.35	mg/L as P	Ft. Myers Beach Effluent	
11/22/2000	Phosphorus, Total	0.19	mg/L as P	Ft. Myers Beach Effluent	
11/29/2000	Phosphorus, Total	0.35	mg/L as P	Ft. Myers Beach Effluent	
12/6/2000	Phosphorus, Total	1.71	mg/L as P	Ft. Myers Beach Effluent	
12/13/2000	Phosphorus, Total	1.71	mg/L as P	Ft. Myers Beach Effluent	
12/20/2000	Phosphorus, Total	1.89	mg/L as P	Ft. Myers Beach Effluent	
12/27/2000	Phosphorus, Total	1.06	mg/L as P	Ft. Myers Beach Effluent	
1/3/2001	Phosphorus, Total	0.35	mg/L as P	Ft. Myers Beach Effluent	
1/10/2001	Phosphorus, Total	0.11	mg/L as P	Ft. Myers Beach Effluent	
1/15/2001	Phosphorus, Total	0.59	mg/L as P	FMB New Dig H2	
1/17/2001	Phosphorus, Total	0.32	mg/L as P	Ft. Myers Beach Effluent	
1/24/2001	Phosphorus, Total	3.18	mg/L as P	Ft. Myers Beach Effluent	
1/31/2001	Phosphorus, Total	0.91	mg/L as P	Ft. Myers Beach Effluent	
2/7/2001	Phosphorus, Total	0.83	mg/L as P	Ft. Myers Beach Effluent	
2/14/2001	Phosphorus, Total	1.21	mg/L as P	Ft. Myers Beach Effluent	
2/21/2001	Phosphorus, Total	3.2	mg/L as P	Ft. Myers Beach Effluent	
2/28/2001	Phosphorus, Total	0.62	mg/L as P	Ft. Myers Beach Effluent	
3/7/2001	Phosphorus, Total	0.35	mg/L as P	Ft. Myers Beach Effluent	
8/21/2001	Phosphorus, Total	4.87	mg/L as P	Effluent 24-hr Composite, FMB	
8/22/2001	Phosphorus, Total	9.85	mg/L as P	Effluent 24-hr Composite, FMB	
8/23/2001	Phosphorus, Total	7.88	mg/L as P	Effluent 24-hr Composite, FMB	
8/24/2001	Phosphorus, Total	6.39	mg/L as P	Effluent 24-hr Composite, FMB	
1/10/2001	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB	2.87
1/11/2001	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB	

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1/12/2001	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
1/15/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
1/16/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
1/17/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
1/18/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/19/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/22/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/23/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
1/24/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
1/25/2001	Total Suspended Solids	3.25	mg/L	Effluent 24-hr Composite, FMB
1/26/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
1/29/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/30/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/31/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
2/1/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
2/2/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/5/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/6/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/7/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/8/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/9/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/12/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
2/13/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
2/14/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/15/2001	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
2/16/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/19/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/20/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
2/21/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
2/22/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
2/23/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
2/26/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
2/27/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/28/2001	Total Suspended Solids	4.75	mg/L	Effluent 24-hr Composite, FMB
3/1/2001	Total Suspended Solids	1.45	mg/L	Effluent 24-hr Composite, FMB
3/2/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
3/5/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
3/6/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/7/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/8/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/9/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
3/12/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/13/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/14/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/15/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
3/16/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/19/2001	Total Suspended Solids	8	mg/L	Effluent 24-hr Composite, FMB
3/20/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/21/2001	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
3/22/2001	Total Suspended Solids	7	mg/L	Effluent 24-hr Composite, FMB
3/23/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
3/26/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB

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3/27/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
3/28/2001	Total Suspended Solids	1.45	mg/L	Effluent 24-hr Composite, FMB
3/29/2001	Total Suspended Solids	2.25	mg/L	Effluent 24-hr Composite, FMB
3/30/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/2/2001	Total Suspended Solids	17	mg/L	Effluent 24-hr Composite, FMB
4/3/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/4/2001	Total Suspended Solids	14	mg/L	Effluent 24-hr Composite, FMB
4/5/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/6/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
4/9/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
4/10/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
4/11/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/12/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/13/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
4/16/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
4/17/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
4/18/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
4/19/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/20/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/23/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
4/24/2001	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
4/25/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
4/26/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/27/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/30/2001	Total Suspended Solids	6	mg/L	Effluent 24-hr Composite, FMB
5/1/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/2/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/3/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/4/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/7/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/8/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
5/9/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/10/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/11/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/14/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
5/15/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
5/16/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
5/17/2001	Total Suspended Solids	9	mg/L	Effluent 24-hr Composite, FMB
5/18/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
5/21/2001	Total Suspended Solids	6	mg/L	Effluent 24-hr Composite, FMB
5/22/2001	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
5/23/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/24/2001	Total Suspended Solids	9	mg/L	Effluent 24-hr Composite, FMB
5/25/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/28/2001	Total Suspended Solids	7.65	mg/L	Effluent 24-hr Composite, FMB
5/29/2001	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
5/30/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/31/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
6/1/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/4/2001	Total Suspended Solids	7	mg/L	Effluent 24-hr Composite, FMB
6/5/2001	Total Suspended Solids	6	mg/L	Effluent 24-hr Composite, FMB
6/6/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB

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6/7/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
6/8/2001	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
6/11/2001	Total Suspended Solids	8	mg/L	Effluent 24-hr Composite, FMB
6/12/2001	Total Suspended Solids	10	mg/L	Effluent 24-hr Composite, FMB
6/13/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/14/2001	Total Suspended Solids	9	mg/L	Effluent 24-hr Composite, FMB
6/15/2001	Total Suspended Solids	6	mg/L	Effluent 24-hr Composite, FMB
6/18/2001	Total Suspended Solids	10	mg/L	Effluent 24-hr Composite, FMB
6/19/2001	Total Suspended Solids	25	mg/L	Effluent 24-hr Composite, FMB
6/20/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/21/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/22/2001	Total Suspended Solids	11	mg/L	Effluent 24-hr Composite, FMB
6/25/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/26/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
6/27/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
6/28/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
6/29/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
7/2/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
7/3/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
7/4/2001	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
7/5/2001	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
7/6/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
7/9/2001	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
7/10/2001	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
7/11/2001	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
7/12/2001	Total Suspended Solids	7.1	mg/L	Effluent 24-hr Composite, FMB
7/13/2001	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
7/16/2001	Total Suspended Solids	2.2	mg/L	Effluent Grab, FMB
7/17/2001	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
7/18/2001	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
7/19/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
7/20/2001	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
7/23/2001	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
7/24/2001	Total Suspended Solids	3.2	mg/L	Effluent 24-hr Composite, FMB
7/25/2001	Total Suspended Solids	7.6	mg/L	Effluent 24-hr Composite, FMB
7/26/2001	Total Suspended Solids	4.1	mg/L	Effluent 24-hr Composite, FMB
7/27/2001	Total Suspended Solids	7.9	mg/L	Effluent 24-hr Composite, FMB
7/30/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
7/31/2001	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
8/1/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
8/2/2001	Total Suspended Solids	4.9	mg/L	Effluent 24-hr Composite, FMB
8/3/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
8/6/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
8/7/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
8/8/2001	Total Suspended Solids	4.1	mg/L	Effluent 24-hr Composite, FMB
8/9/2001	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
8/10/2001	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
8/13/2001	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
8/14/2001	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
8/15/2001	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
8/16/2001	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
8/17/2001	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB

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8/20/2001	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
8/21/2001	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
8/22/2001	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/23/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
8/24/2001	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
8/27/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
8/28/2001	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
8/29/2001	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
8/30/2001	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
8/31/2001	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
9/3/2001	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
9/4/2001	Total Suspended Solids	2.7	mg/L	Effluent 24-hr Composite, FMB
9/5/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
9/6/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
9/7/2001	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
9/10/2001	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
9/11/2001	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
9/12/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
9/13/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
9/14/2001	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
9/18/2001	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
9/19/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
9/20/2001	Total Suspended Solids	6.8	mg/L	Effluent 24-hr Composite, FMB
9/21/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
9/24/2001	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
9/25/2001	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
9/26/2001	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
9/27/2001	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
9/28/2001	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
10/1/2001	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
10/2/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
10/3/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
10/4/2001	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
10/5/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
10/8/2001	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
10/9/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
10/10/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
10/11/2001	Total Suspended Solids	3.3	mg/L	Effluent 24-hr Composite, FMB
10/12/2001	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
10/15/2001	Total Suspended Solids	3.9	mg/L	EFFLUENT 24-HR COMPOSITE,FMB
10/16/2001	Total Suspended Solids	3.2	mg/L	Effluent 24-hr Composite, FMB
10/17/2001	Total Suspended Solids	4.7	mg/L	Effluent 24-hr Composite, FMB
10/18/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
10/19/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
10/22/2001	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
10/23/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
10/24/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
10/25/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
10/26/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
10/29/2001	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
10/30/2001	Total Suspended Solids	6	mg/L	Effluent 24-hr Composite, FMB
10/31/2001	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB

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11/1/2001	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
11/2/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
11/5/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
11/6/2001	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
11/7/2001	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
11/8/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
11/9/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
11/12/2001	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
11/13/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
11/14/2001	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
11/15/2001	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
11/16/2001	Total Suspended Solids	4.1	mg/L	Effluent 24-hr Composite, FMB
11/19/2001	Total Suspended Solids	3.1	mg/L	Effluent 24-hr Composite, FMB
11/20/2001	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
11/21/2001	Total Suspended Solids	1.8	mg/L	Effl 24-hr Comp, FMB
11/22/2001	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
11/23/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
11/26/2001	Total Suspended Solids	4.2	mg/L	Effluent 24-hr Composite, FMB
11/27/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
11/28/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
11/29/2001	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
11/30/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
12/3/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
12/4/2001	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
12/5/2001	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
12/6/2001	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
12/7/2001	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
12/10/2001	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
12/11/2001	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
12/12/2001	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
12/13/2001	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
12/14/2001	Total Suspended Solids	3.8	mg/L	Effluent 24-hr Composite, FMB
12/17/2001	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
12/18/2001	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
12/19/2001	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
12/20/2001	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
12/21/2001	Total Suspended Solids	2.7	mg/L	Effluent 24-hr Composite, FMB
12/24/2001	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
12/25/2001	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
12/26/2001	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
12/27/2001	Total Suspended Solids	3.4	mg/L	Effluent 24-hr Composite, FMB
12/28/2001	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
12/31/2001	Total Suspended Solids	PENDINC	mg/L	Effluent 24-hr Composite, FMB
1/1/2002	Total Suspended Solids	2.7	mg/L	Effluent 24-hr Composite, FMB
1/2/2002	Total Suspended Solids	3.7	mg/L	Effluent 24-hr Composite, FMB
1/3/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
1/4/2002	Total Suspended Solids	3.5	mg/L	Effluent 24-hr Composite, FMB
1/7/2002	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
1/8/2002	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
1/9/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
1/10/2002	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
1/11/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB

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1/14/2002	Total Suspended Solids	3.7	mg/L	Effluent 24-hr Composite, FMB
1/15/2002	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
1/16/2002	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
1/17/2002	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
1/18/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
1/21/2002	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
1/22/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
1/23/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
1/24/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
1/25/2002	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
1/28/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/29/2002	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
1/30/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
1/31/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
2/1/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
2/4/2002	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
2/5/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
2/6/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
2/7/2002	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
2/8/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
2/11/2002	Total Suspended Solids	4.1	mg/L	Effluent 24-hr Composite, FMB
2/12/2002	Total Suspended Solids	5.8	mg/L	Effluent 24-hr Composite, FMB
2/13/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
2/14/2002	Total Suspended Solids	8.8	mg/L	Effluent 24-hr Composite, FMB
2/15/2002	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
2/18/2002	Total Suspended Solids	4.4	mg/L	Effluent 24-hr Composite, FMB
2/19/2002	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
2/20/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
2/21/2002	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
2/22/2002	Total Suspended Solids	3.7	mg/L	Effluent 24-hr Composite, FMB
2/25/2002	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
2/26/2002	Total Suspended Solids	11.4	mg/L	Effluent 24-hr Composite, FMB
2/27/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
2/28/2002	Total Suspended Solids	11.8	mg/L	Effluent 24-hr Composite, FMB
3/1/2002	Total Suspended Solids	10.5	mg/L	Effluent 24-hr Composite, FMB
3/4/2002	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
3/5/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
3/6/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
3/7/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
3/8/2002	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
3/11/2002	Total Suspended Solids	3.1	mg/L	Effluent 24-hr Composite, FMB
3/12/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
3/13/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
3/14/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/15/2002	Total Suspended Solids	9.2	mg/L	Effluent 24-hr Composite, FMB
3/18/2002	Total Suspended Solids	5.8	mg/L	Effluent 24-hr Composite, FMB
3/19/2002	Total Suspended Solids	8.4	mg/L	Effluent 24-hr Composite, FMB
3/20/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
3/21/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/22/2002	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
3/25/2002	Total Suspended Solids	14	mg/L	Effluent 24-hr Composite, FMB
3/26/2002	Total Suspended Solids	8	mg/L	Effluent 24-hr Composite, FMB

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3/27/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/28/2002	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
3/29/2002	Total Suspended Solids	3.8	mg/L	Effluent 24-hr Composite, FMB
4/1/2002	Total Suspended Solids	3.2	mg/L	Effluent 24-hr Composite, FMB
4/2/2002	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
4/3/2002	Total Suspended Solids	4.8	mg/L	Effluent 24-hr Composite, FMB
4/4/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
4/5/2002	Total Suspended Solids	3.4	mg/L	Effluent 24-hr Composite, FMB
4/8/2002	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
4/9/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
4/10/2002	Total Suspended Solids	3.5	mg/L	Effluent 24-hr Composite, FMB
4/11/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
4/12/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/15/2002	Total Suspended Solids	3.5	mg/L	Effluent 24-hr Composite, FMB
4/16/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/17/2002	Total Suspended Solids	3.7	mg/L	Effluent 24-hr Composite, FMB
4/18/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
4/19/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
4/22/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
4/23/2002	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
4/24/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
4/25/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/26/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/29/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
4/30/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
5/1/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
5/2/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
5/3/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
5/6/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
5/7/2002	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
5/8/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
5/9/2002	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
5/10/2002	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
5/13/2002	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
5/14/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
5/15/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
5/16/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
5/17/2002	Total Suspended Solids	2.7	mg/L	Effluent 24-hr Composite, FMB
5/20/2002	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
5/21/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
5/22/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
5/23/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
5/24/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
5/27/2002	Total Suspended Solids	5.2	mg/L	Effluent 24-hr Composite, FMB
5/28/2002	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
5/29/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
5/30/2002	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
5/31/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
6/3/2002	Total Suspended Solids	4.2	mg/L	Effluent 24-hr Composite, FMB
6/4/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
6/5/2002	Total Suspended Solids	4.8	mg/L	Effluent 24-hr Composite, FMB
6/6/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB

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6/7/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
6/10/2002	Total Suspended Solids	7	mg/L	Effluent 24-hr Composite, FMB
6/11/2002	Total Suspended Solids	6.3	mg/L	Effluent 24-hr Composite, FMB
6/12/2002	Total Suspended Solids	7.6	mg/L	Effluent 24-hr Composite, FMB
6/13/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
6/14/2002	Total Suspended Solids	8.8	mg/L	Effluent 24-hr Composite, FMB
6/17/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
6/18/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
6/19/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
6/20/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
6/21/2002	Total Suspended Solids	4.7	mg/L	Effluent 24-hr Composite, FMB
6/24/2002	Total Suspended Solids	3.95	mg/L	Effluent 24-hr Composite, FMB
6/25/2002	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
6/26/2002	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
6/27/2002	Total Suspended Solids	2.7	mg/L	Effluent 24-hr Composite, FMB
6/28/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
7/1/2002	Total Suspended Solids	3.5	mg/L	Effluent 24-hr Composite, FMB
7/2/2002	Total Suspended Solids	3.9	mg/L	Effluent 24-hr Composite, FMB
7/3/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
7/4/2002	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
7/5/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
7/8/2002	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
7/9/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
7/10/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
7/11/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
7/12/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
7/15/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
7/16/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
7/17/2002	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
7/18/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
7/19/2002	Total Suspended Solids	0.55	mg/L	Effluent 24-hr Composite, FMB
7/22/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
7/23/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
7/24/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
7/25/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
7/26/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
7/29/2002	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
7/30/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
7/31/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
8/1/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
8/2/2002	Total Suspended Solids	12.8	mg/L	Effluent 24-hr Composite, FMB
8/5/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
8/6/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/7/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
8/8/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
8/9/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
8/12/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
8/13/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
8/14/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
8/15/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
8/16/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/19/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB

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8/20/2002	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
8/21/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
8/22/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/23/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/26/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
8/27/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
8/28/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
8/29/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
8/30/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
9/2/2002	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
9/3/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
9/4/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
9/5/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
9/6/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
9/9/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
9/10/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
9/11/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
9/12/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
9/13/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
9/16/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
9/17/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
9/18/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
9/19/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
9/20/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
9/23/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
9/24/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
9/25/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
9/26/2002	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
9/27/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
9/30/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
10/1/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
10/2/2002	Total Suspended Solids	0.3	mg/L	Effluent 24-hr Composite, FMB
10/3/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
10/4/2002	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
10/7/2002	Total Suspended Solids	1.05	mg/L	Effluent 24-hr Composite, FMB
10/8/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
10/9/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
10/10/2002	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
10/11/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
10/14/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
10/15/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
10/16/2002	Total Suspended Solids	0.4	mg/L	Effluent 24-hr Composite, FMB
10/17/2002	Total Suspended Solids	0.5	mg/L	Effluent 24-hr Composite, FMB
10/18/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
10/21/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
10/22/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
10/23/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
10/24/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
10/25/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
10/28/2002	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
10/29/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
10/30/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB

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10/31/2002	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
11/1/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
11/4/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
11/5/2002	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
11/6/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
11/7/2002	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
11/8/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
11/11/2002	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
11/12/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
11/13/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
11/14/2002	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
11/15/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
11/18/2002	Total Suspended Solids	3.4	mg/L	Effluent 24-hr Composite, FMB
11/19/2002	Total Suspended Solids	23	mg/L	Effluent 24-hr Composite, FMB
11/20/2002	Total Suspended Solids	14	mg/L	Effluent 24-hr Composite, FMB
11/21/2002	Total Suspended Solids	4.4	mg/L	Effluent 24-hr Composite, FMB
11/22/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
11/25/2002	Total Suspended Solids	13.3	mg/L	Effluent 24-hr Composite, FMB
11/26/2002	Total Suspended Solids	62	mg/L	Effluent 24-hr Composite, FMB
11/27/2002	Total Suspended Solids	6.4	mg/L	Effluent 24-hr Composite, FMB
11/28/2002	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
11/29/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
12/2/2002	Total Suspended Solids	9	mg/L	Effluent 24-hr Composite, FMB
12/3/2002	Total Suspended Solids	3.9	mg/L	Effluent 24-hr Composite, FMB
12/4/2002	Total Suspended Solids	5.6	mg/L	Effluent 24-hr Composite, FMB
12/5/2002	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
12/6/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
12/9/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
12/10/2002	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
12/11/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
12/12/2002	Total Suspended Solids	4	mg/L	Effluent 24-hr Composite, FMB
12/13/2002	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
12/16/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
12/17/2002	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
12/18/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
12/19/2002	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
12/20/2002	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
12/23/2002	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
12/24/2002	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
12/25/2002	Total Suspended Solids	4.3	mg/L	Effluent 24-hr Composite, FMB
12/26/2002	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
12/27/2002	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
12/30/2002	Total Suspended Solids	4.4	mg/L	Effluent 24-hr Composite, FMB
12/31/2002	Total Suspended Solids	4.3	mg/L	Effluent 24-hr Composite, FMB
1/1/2003	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
1/2/2003	Total Suspended Solids	17	mg/L	Effluent 24-hr Composite, FMB
1/3/2003	Total Suspended Solids	25.3	mg/L	Effluent 24-hr Composite, FMB
1/6/2003	Total Suspended Solids	64	mg/L	Effluent 24-hr Composite, FMB
1/7/2003	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
1/8/2003	Total Suspended Solids	1.7	mg/L	Effluent 24-hr Composite, FMB
1/9/2003	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
1/10/2003	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

1/11/2003	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
1/13/2003	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
1/14/2003	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
1/15/2003	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
1/16/2003	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
1/17/2003	Total Suspended Solids	3.1	mg/L	Effluent 24-hr Composite, FMB
1/20/2003	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
1/21/2003	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
1/22/2003	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
1/23/2003	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
1/24/2003	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
1/27/2003	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
1/28/2003	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB
1/29/2003	Total Suspended Solids	2.1	mg/L	Effluent 24-hr Composite, FMB
1/30/2003	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
1/31/2003	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
2/3/2003	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
2/4/2003	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
2/5/2003	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
2/6/2003	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
2/7/2003	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
2/10/2003	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
2/11/2003	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
2/12/2003	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
2/13/2003	Total Suspended Solids	1.1	mg/L	Effluent 24-hr Composite, FMB
2/14/2003	Total Suspended Solids	0.8	mg/L	Effluent 24-hr Composite, FMB
2/17/2003	Total Suspended Solids	2.6	mg/L	Effluent 24-hr Composite, FMB
2/18/2003	Total Suspended Solids	3.3	mg/L	Effluent 24-hr Composite, FMB
2/19/2003	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
2/20/2003	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
2/21/2003	Total Suspended Solids	2.2	mg/L	Effluent 24-hr Composite, FMB
2/24/2003	Total Suspended Solids	6.4	mg/L	Effluent 24-hr Composite, FMB
2/25/2003	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
2/26/2003	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
2/27/2003	Total Suspended Solids	1.2	mg/L	Effluent 24-hr Composite, FMB
2/28/2003	Total Suspended Solids	2.5	mg/L	Effluent 24-hr Composite, FMB
3/3/2003	Total Suspended Solids	3.3	mg/L	Effluent 24-hr Composite, FMB
3/4/2003	Total Suspended Solids	2.3	mg/L	Effluent 24-hr Composite, FMB
3/5/2003	Total Suspended Solids	5.3	mg/L	Effluent 24-hr Composite, FMB
3/6/2003	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
3/7/2003	Total Suspended Solids	5	mg/L	Effluent 24-hr Composite, FMB
3/10/2003	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
3/11/2003	Total Suspended Solids	3	mg/L	Effluent 24-hr Composite, FMB
3/12/2003	Total Suspended Solids	2.8	mg/L	Effluent 24-hr Composite, FMB
3/13/2003	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
3/14/2003	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/17/2003	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/18/2003	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
3/19/2003	Total Suspended Solids	2.9	mg/L	Effluent 24-hr Composite, FMB
3/20/2003	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
3/21/2003	Total Suspended Solids	1.8	mg/L	Effluent 24-hr Composite, FMB
3/24/2003	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB

Fort Myers Beach Waster Water Treatment Plan Effluent Concentrations

3/25/2003	Total Suspended Solids	1.4	mg/L	Effluent 24-hr Composite, FMB
3/26/2003	Total Suspended Solids	3.3	mg/L	Effluent 24-hr Composite, FMB
3/27/2003	Total Suspended Solids	3.4	mg/L	Effluent 24-hr Composite, FMB
3/28/2003	Total Suspended Solids	3.6	mg/L	Effluent 24-hr Composite, FMB
3/31/2003	Total Suspended Solids	4.6	mg/L	Effluent 24-hr Composite, FMB
4/1/2003	Total Suspended Solids	3.4	mg/L	Effluent 24-hr Composite, FMB
4/2/2003	Total Suspended Solids	5.1	mg/L	Effluent 24-hr Composite, FMB
4/3/2003	Total Suspended Solids	2	mg/L	Effluent 24-hr Composite, FMB
4/4/2003	Total Suspended Solids	2.4	mg/L	Effluent 24-hr Composite, FMB
4/7/2003	Total Suspended Solids	1.9	mg/L	Effluent 24-hr Composite, FMB
4/8/2003	Total Suspended Solids	1.6	mg/L	Effluent 24-hr Composite, FMB
4/9/2003	Total Suspended Solids	1.5	mg/L	Effluent 24-hr Composite, FMB
4/10/2003	Total Suspended Solids	1.3	mg/L	Effluent 24-hr Composite, FMB
4/11/2003	Total Suspended Solids	0.9	mg/L	Effluent 24-hr Composite, FMB
4/14/2003	Total Suspended Solids	0.7	mg/L	Effluent 24-hr Composite, FMB
4/15/2003	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
4/16/2003	Total Suspended Solids	0.6	mg/L	Effluent 24-hr Composite, FMB
4/17/2003	Total Suspended Solids	Not detec	mg/L	Effluent 24-hr Composite, FMB
4/18/2003	Total Suspended Solids	1	mg/L	Effluent 24-hr Composite, FMB

Photos by Johnson Engineering staff
Front: Automated sampling equipment with rain bucket and solar panel at the Laguna Lakes site.
Back: Outfall control structure at The Brooks monitoring site.

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