

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY **BLUE SHEET NO: 20021228-UTL**

1. REQUESTED MOTION:

ACTION REQUESTED:

1) Approve South Florida Water Management District (SFWMD) Funding Agreement for Olga Water Treatment Plant Expansion Project (Contract #C-15923). The total SFWMD grant funds are \$150,000.00 and the total project cost is \$11,030,800.00. Remaining funds are from Lee County Utilities (LCU) CIP budgeted funds; 2) Approve a Budget Amendment Resolution for \$150,000.00 and amend FY 02/03-06/07 C.I.P. accordingly.

WHY ACTION IS NECESSARY:

To establish the responsibilities and funding obligations of the County as this partially grant-funded project is completed.

WHAT ACTION ACCOMPLISHES:

Allows Lee County to work cooperatively with SFWMD to complete the project that will provide additional alternative water supply within the Lee County Utilities system.

2. DEPARTMENTAL CATEGORY: 10 - UTILITIES
COMMISSION DISTRICT #: 4

C10C

3. MEETING DATE:

11-19-2002

4. AGENDA:

- CONSENT
- ADMINISTRATIVE
- APPEALS
- PUBLIC
- WALK ON
- TIME REQUIRED: _____

5. REQUIREMENT/PURPOSE:

(Specify)
 STATUTE _____
 ORDINANCE _____
 ADMIN. CODE _____
 OTHER Funding Agreement/
Budget Amendment Res

6. REQUESTOR OF INFORMATION:

A. COMMISSIONER: _____
 B. DEPARTMENT: Lee County - Public Works
 C. DIVISION/SECTION: Utilities Division
 BY: Rick Diaz, Utilities Director
 DATE: *10/25/02*

7. BACKGROUND:

Last year this planned capital project for increasing the capacity of Lee County Utilities' potable water system was identified as potentially qualifying for grant funding under the SFWMD Alternative Water Supply Program, as established under Florida Statutes 373.1961.

Lee County Utilities staff prepared the grant application for this and other projects. This project was approved by the SFWMD. Lee County Utilities is responsible for the engineering, construction and operation of the project, as well as

(CONT'D.)

8. MANAGEMENT RECOMMENDATIONS:

9. RECOMMENDED APPROVAL

(A) DEPARTMENT DIRECTOR	(B) PURCH. OR CONTRACTS	(C) HUMAN RESOURCES	(D) OTHER	(E) COUNTY ATTORNEY	(F) BUDGET SERVICES				(G) COUNTY MANAGER
					OA	OM	Risk	GC	
<i>J. Lavender</i> Date: <i>10.25.02</i>	N/A Date:	N/A Date:	B. Dearborn Date:	<i>D. Owen</i> Date: <i>10/08/02</i>	<i>10-30-02</i>	<i>10/31/02</i>	<i>10/31/02</i>	<i>10-30-02</i>	<i>J. Lavender</i> Date: <i>10.25.02</i>

10. COMMISSION ACTION:

- _____ APPROVED
- _____ DENIED
- _____ DEFERRED
- _____ OTHER

Rec. by CoAtty
 Date: *10/28/02*
 Time: *11:17 am*
 Forwarded To: _____

**RECEIVED BY
 COUNTY ADMIN.** *EN*
10/28 2:10
**COUNTY ADMIN.
 FORWARDED TO:** *PL*
10/31/02
2:30 PM



2002 - 2003 SOUTH FLORIDA WATER MANAGEMENT DISTRICT AWS FUNDING PROGRAM AGREEMENT

Recipient: Lee County Utilities	Contract Number: <u>C-15923</u>
Recipient's Project Manager: Rick Diaz, P.E.	Governing Board Approval Date:
Address: P.O.Box 398 Fort Myers, Florida 33902-0398	District Funding Amount: \$ 150,000.00 Not to Exceed 50% of total project cost
Telephone No: (941) 479-8181	
Fax No: (941) 479-8176	
SFWMD Project Manager: Clyde Dabbs	
Address: 2301 McGregor Boulevard Ft. Myers, FL 33901	
Telephone No: (941) 338-2929	
Fax No: (941) 338-2936	
Insurance: <u>Applicable/Not Applicable</u>	
Federal Employer Identification Number:	
Project Title: Olga Water Treatment Plant Expansion	
Description: Develop higher production by expanding the capacity of the Olga Water Treatment Plant	

This **Agreement** is entered into between "the Parties", the South Florida Water Management **District**, the "**District**", and the undersigned Applicant, hereinafter referred to as the "**Recipient**". The **Recipient** warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms and conditions of this **Agreement**, and shall abide by all legal, financial, and reporting requirements, such as matching funds and final reports for all funding received by the **Recipient** from the **District**.

ARTICLE 1 – PROJECT

- 1.1 The **Recipient** shall, to the satisfaction of the **District**, fully and timely construct and perform all work items described in the "Detailed Description of the Project," attached hereto as Attachment "A", and made a part of this **Agreement**.
- 1.2 As part of the services to be provided by the **Recipient** under this **Agreement**, the **Recipient** shall substantiate, in whatever forum reasonably requested by the **District**, any supporting documentation utilized as a basis for payment by the **District**. This paragraph shall survive the expiration or termination of this **Agreement**.
- 1.3 The **Recipient** shall submit to the **District**, proof of Florida Department of Environmental Protection (FLDEP) and South Florida Water Management District permit applications prior to September 1st of the current fiscal year, to ensure timely completion of the project.
- 1.4 The **Recipient** shall submit to the **District** notification of *complete* permit applications from FLDEP and SFWMD prior to September 1st of the *next* fiscal year, to demonstrate proposed project readiness. Should the permitting element of an application for a construction project not be completed by the **District's** required deadline, the **District** will deem the project ineligible for funding.

ARTICLE 2 - TERM OF THE AGREEMENT

- 2.1 The period of performance of this **Agreement** shall commence on the Construction Start Date stated by the **Recipient** on the last page of this **Agreement** and shall continue for a period of one (1) year.
- 2.2 The Parties agree that time is of the essence in the performance of each and every obligation under this **Agreement**.

ARTICLE 3 – COMPENSATION/CONSIDERATION

- 3.1 As consideration for providing the goods and services required by this **Agreement**, the **District** shall pay the **Recipient** the funding amount as specified on front page. Such amount is a not to exceed amount and therefore, no additional consideration shall be authorized. **Recipient** must provide at least fifty (50) percent of the total project cost.

- 3.2 The **Recipient** assumes sole responsibility for all work, which is performed pursuant to Attachment "A." By providing funding hereunder, the **District** does not make any warranty, guaranty, or any representation whatsoever regarding any of the work performed hereunder, including but not limited to the adequacy or sufficiency of all or any part of work described in Attachment "A".
- 3.3 The **Recipient** hereby agrees that it shall use other sources of funding for all work associated with the design and permitting aspects of the Project. **District** funds shall only be used for capital or infrastructure costs for the construction activities described in Attachment "A".

ARTICLE 4 – FUNDING PAYMENTS AND REPORTING

- 4.1 The **District** shall make payment to the **Recipient** upon completion and acceptance of the Project. The **Recipient** shall provide certification that all construction has been completed in accordance with Attachment "A" of this **Agreement**.
- 4.2 The **Recipient's** invoice shall reference the **District's** Contract Number and shall be sent to the Project Manager at the address stated on the first page of this **Agreement**. The **Recipient** shall not submit an invoice to any other address at the **District**.
- 4.3 The **District** shall inspect all work and review final reports before authorization of payment is made to the **Recipient**. The **District** shall pay the full amount of the invoice within thirty (30) days of receipt and acceptance, provided the **Recipient** has performed the work according to the terms and conditions of this **Agreement**. Funding will be withheld if the **Recipient** has not submitted required reports or met all of the administrative requirements.
- 4.4 Upon award of the **Agreement**, the **Recipient** shall provide to the **District** a detailed schedule of the Project. The **Recipient** shall provide three (3) copies of progress reports on a quarterly basis to the **District**, which shall describe the extent of Project completion. Upon request by the **District**, the **Recipient** shall provide as supporting documentation, all work products associated with the completion of the tasks designated in the Work Breakdown Structure and Deliverable Schedule of Attachment "A", attached hereto to this **Agreement**.
- 4.5 However, failure by the **Recipient** to follow the foregoing instructions may result in an unavoidable delay of payment by the **District**.

ARTICLE 5 - PROJECT MANAGEMENT

- 5.1 The Parties shall direct all matters arising in connection with the performance of this **Agreement**, other than invoices and notices, to the attention of the Project Managers for attempted resolution or action. The Project Managers shall be responsible for overall coordination and oversight relating to the performance of this **Agreement**.

5.2 All notices, demands, or other communications to the **Recipient** under this **Agreement** shall be in writing and shall be deemed received if sent by certified mail, return receipt requested, to the address stated.

All notices to the **District** under this **Agreement** shall be in writing and sent by certified mail to:

South Florida Water Management **District**
Attn: (Project Manager's name as stated on the first page of the **Agreement**)
(Address as stated on the first page of the **Agreement**)

5.3 All notices required by this **Agreement** shall be considered delivered *upon receipt*. Should either Party change its address, written notice of such new address shall promptly be sent to the other Party.

5.4 All correspondence to the **District** under this **Agreement** shall reference the District's Contract Number.

ARTICLE 6 - TERMINATION/REMEDIES

6.1 If **Recipient** fails to fulfill its obligations under this **Agreement** in a timely and proper manner, the **District** shall have the right to terminate this **Agreement** by giving written notice of any deficiency. The **Recipient** in default shall then have ten (10) calendar days from receipt of notice to correct the deficiency. If the **Recipient** fails to correct the deficiency within this time, the **District** shall have the option to terminate this **Agreement** at the expiration of the ten (10) day time period.

6.2 The **District** may terminate this **Agreement** at any time for convenience upon thirty (30) calendar days prior written notice to the **Recipient**. The performance of work under this **Agreement** may be terminated by the **District** in accordance with this clause in whole, or from time to time in part, whenever the **District** shall determine that such termination is in the best interest of the **District**. Any such termination shall be effected by delivery to the **Recipient** of a Notice of Termination specifying the extent to which performance of work under the **Agreement** is terminated, and the date upon which such termination becomes effective.

6.3 In the event of termination, the **District** shall compensate the **Recipient** for all authorized and accepted work performed through the termination date. The **District** shall be relieved of any and all future obligations hereunder, including but not limited to, lost profits and consequential damages under this **Agreement**. The **District** may withhold all payments to the **Recipient** for such work until such time as the **District** determines the exact amount due to the **Recipient**.

6.4 If either Party initiates legal action, including appeals, to enforce this **Agreement**, the prevailing Party shall be entitled to recover a reasonable attorney's fee, based upon the fair market value of the services provided.

6.5 In the event the **Recipient's** funding becomes unavailable, that shall be good and sufficient cause for the **District** to terminate the **Agreement**, pursuant to Paragraph 6.2, above.

6.6 In the event a dispute arises which the Project Managers cannot resolve between themselves, the Parties shall have the option to submit to non-binding mediation. The mediator or mediators shall be impartial, shall be selected by the Parties, and the cost of the mediation shall be borne equally by the Parties. The mediation process shall be confidential to the extent permitted by law.

ARTICLE 7 - RECORDS RETENTION

7.1 The **Recipient** shall maintain records and the **District** shall have inspection and audit rights as follows:

A. Maintenance of Records. The **Recipient** shall maintain all financial and non-financial records and reports directly or indirectly related to the negotiation or performance of this **Agreement**, including supporting documentation for any service rates, expenses, research or reports. Such records shall be maintained and made available for inspection for a period of five (5) years from completing performance and receiving final payment under this **Agreement**.

B. Examination of Records. The **District** or its designated agent shall have the right to examine in accordance with generally accepted governmental auditing standards all records directly or indirectly related to this **Agreement**. Such examination may be made only within five (5) years from the date of final payment under this **Agreement** and upon reasonable notice, time and place.

C. Extended Availability of Records for Legal Disputes. In the event that the **District** should become involved in a legal dispute with a third party arising from performance under this **Agreement**, the **Recipient** shall extend the period of maintenance for all records relating to the **Agreement** until the final disposition of the legal dispute, and all such records shall be made readily available to the **District**.

ARTICLE 8 - STANDARDS OF COMPLIANCE

8.1 The **Recipient**, its employees, subcontractors or assigns, shall comply with all applicable federal, state, and local laws and regulations relating to the performance of this **Agreement**. The **District** undertakes no duty to ensure such compliance, but will attempt to advise the **Recipient**, upon request, as to any such laws of which it has present knowledge.

8.2 The laws of the State of Florida shall govern all aspects of this **Agreement**. In the event it is necessary for either party to initiate legal action regarding this **Agreement**,

venue shall be in the Fifteenth Judicial Circuit for claims under state law and in the Southern **District** of Florida for any claims which are justiciable in federal court.

- 8.3 The **Recipient** shall allow public access to all Project documents and materials in accordance with the provisions of Chapter 119, Florida Statutes. Should the **Recipient** assert any exemptions to the requirements of Chapter 119 and related Statutes, the burden of establishing such exemption, by way of injunctive or other relief as provided by law, shall be upon the **Recipient**.
- 8.4 Pursuant to Section 216.347, Florida Statutes, the **Recipient** is prohibited from the expenditure of any funds under this **Agreement** to lobby the Legislature, the judicial branch, or another state agency.
- 8.5 The **Recipient** shall obtain, at its sole expense, all necessary licenses, authorizations and permits from the appropriate private party or federal, state, municipal or local agency, and other governmental approvals, prior to commencing performance of this **Agreement**.
- 8.6 The **Recipient** hereby assures that no person shall be excluded on the grounds of race, color, creed, national origin, handicap, age, or sex, from participation in, denied the benefits of, or is otherwise subjected to discrimination in any activity under this **Agreement**. The **Recipient** shall take all measures necessary to effectuate these assurances.

ARTICLE 9 - INDEMNIFICATION AND INSURANCE

- 9.1 *The following indemnification clause shall only be applicable to Investor-owned Utilities or Private Entities*

For value received, which is hereby acknowledged, the **Recipient** shall defend, indemnify, save, and hold the **District**, its agents, assigns, and employees, harmless from any and all claims or causes of action, including without limitation, all damages, losses, liabilities, expenses, costs, and attorney's fees related to such claims, resulting from any negligent or intentional act or omission, or the violation of any federal, state, or local law or regulation, by the **Recipient**, its subcontractors, agents, assigns, invitees, or employees in connection with this **Agreement**. The **Recipient** further acknowledges that it is solely responsible for ensuring its compliance and the compliance of its subcontractors, agents, assigns, invitees and employees with the terms of this **Agreement**. The provisions of this paragraph survive the termination or expiration of this **Agreement**.

- 9.2 *The following shall only apply if the work is being performed on **District** property.*

The **Recipient** shall procure and maintain, through the term of this **Agreement**, insurance coverage reflecting, at a minimum, the limits and coverage conditions identified on the **District's** Certificate of Insurance, attached and made a part of this

Agreement. The coverage required shall extend to all employees and subcontractors of the **Recipient**. The attached **District's** Certificate of Insurance shall be completed in full, indicating the producer, insured, carrier's name and Best rating, policy numbers and effective and expiration dates of each type of coverage required. The Certificate shall be signed by the insurance carrier's authorized representative.

ARTICLE 10 - RELATIONSHIP BETWEEN THE PARTIES

- 10.1 The **Recipient** is an independent contractor and is not an employee or agent of the **District**. Nothing in this **Agreement** shall be interpreted to establish any relationship other than that of an independent contractor between the **District** and the **Recipient**, its employees, agents, subcontractors, or assigns, during or after the performance of this **Agreement**. The **Recipient** is free to provide similar services for others.
- 10.2 The **Recipient** shall not assign, delegate, or otherwise transfer its rights and obligations as set forth in this **Agreement** without the prior written consent of the **District**. Any attempted assignment in violation of this provision shall be void.
- 10.3 It is the intent and understanding of the Parties that this **Agreement** is solely for the benefit of the **Recipient** and the **District**. No person or entity other than the **Recipient** or the **District** shall have any rights or privileges under this **Agreement** in any capacity whatsoever, either as third-party beneficiary or otherwise.

ARTICLE 11 - GENERAL PROVISIONS

- 11.1 Notwithstanding any provisions of this **Agreement** to the contrary, the Parties shall not be held liable for any failure or delay in the performance of this **Agreement** that arises from fires, floods, strikes, embargoes, acts of the public enemy, unusually severe weather, outbreak of war, restraint of Government, riots, civil commotion, force majeure, act of God, or for any other cause of the same character which is unavoidable through the exercise of due care and beyond the control of the Parties. Failure to perform shall be excused during the continuance of such circumstances, but this **Agreement** shall otherwise remain in effect. This provision shall not apply if the Detailed Description of Work - Attachment "A" of this **Agreement** specifies that performance by the **Recipient** is specifically required during the occurrence of any of the events herein mentioned.
- 11.2 In the event any provisions of this **Agreement** shall conflict, or appear to conflict, the **Agreement**, including all Attachments, and all documents specifically incorporated by reference, shall be interpreted as a whole to resolve any inconsistency.
- 11.3 Failures or waivers to insist on strict performance of any covenant, condition, or provision of this **Agreement** by the Parties, their successors and assigns shall not be deemed a waiver of any of its rights or remedies, nor shall it relieve the other Party from performing any subsequent obligations strictly in accordance with the terms of this **Agreement**. No waiver shall be effective unless in writing and signed by the Party

against whom enforcement is sought. Such waiver shall be limited to provisions of this **Agreement** specifically referred to therein and shall not be deemed a waiver of any other provision. No waiver shall constitute a continuing waiver unless the writing states otherwise.

- 11.4 Should any term or provision of this **Agreement** be held, to any extent, invalid or unenforceable, as against any person, entity or circumstance during the term hereof, by force of any statute, law, or ruling of any forum of competent jurisdiction, such invalidity shall not affect any other term or provision of this **Agreement**, to the extent that the **Agreement** shall remain operable, enforceable and in full force and effect to the extent permitted by law.
- 11.5 This **Agreement** may be amended only with the written approval of the Parties.
- 11.6 This **Agreement** states the entire understanding and **Agreement** between the Parties and supersedes any and all written or oral representations, statements, negotiations or **Agreements** previously existing between the Parties with respect to the subject matter of this **Agreement**. The **Recipient** recognizes that any representations, statements or negotiations made by **District** staff do not suffice to legally bind the **District** in a contractual relationship unless they have been reduced to writing and signed by an authorized **District** representative. This **Agreement** shall inure to the benefit of and shall be binding upon the parties, their respective assigns, and successors in interest.

IN WITNESS WHEREOF, the Parties or their duly authorized representatives hereby execute this **Agreement** on the date written below.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

By: _____
Frank Hayden, Procurement Director

Date: _____

Recipient's Legal Name: _____

By Authorized Official: _____

Title: _____

Date: _____

Construction Project Start Date: _____

SFWMD Procurement approved:

By: _____ Date: _____

Exhibit "A"

C-15923

Lee County Utilities

Olga Water Treatment Expansion

**2002-2003 SOUTH FLORIDA WATER MANAGEMENT DISTRICT
FUNDING PROGRAM APPLICATION FORM**



Application No: **AWS - 03** C-15923
(District to provide)

<p>The undersigned Applicant has read all of the terms and conditions of the Alternative Water Supply Funding Program Guidelines And Application, and certify that all of the information contained within this Application and subsequent Attachments is true and correct to the best of its knowledge.</p>	
<p>Applicant's Legal Name: Lee County Utilities (State Div./Dept. if applicable)</p>	<p>Applicant's Address: 1500 Monroe Street 3rd Floor Fort Myers, FL 33901</p>
<p>Project Title: Olga Water Treatment Plant Expansion Description: Construction of a 5 M.G.D. expansion to the existing Olga Water Treatment Plant to include up to 4ASR wells to seasonally store water.</p>	<p>Funding Amount Requested: \$5,515,400.00 County in which Project will be Built: Lee</p>
<p>Type of Organization: County Government</p>	<p>Date of Incorporation: State of Incorporation: Federal ID No.: 46-0705210453C</p>
<p>Has your organization ever received funding under the Alternative Water Supply Program? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Year last received: <u>2000</u> Amount of Funding Received: <u>\$100,000.00</u> Is the project(s) still ongoing? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> District's contract number(s): <u>C-12123</u> Expected completion date(s): <u>December 2002</u> Current status on the project(s): <u>Obtaining easements design 30% complete</u></p>	
<p>Authorized Person's Name: Rick Diaz, P.E. Signature: <u><i>Rick Diaz</i></u> Title: <u>Utilities Director</u></p>	<p>Telephone Area Code /Number: (941) 479-8181 Fax Number: (941) 479-8176</p>



1. INTRODUCTION

The Division of Lee County Utilities is proposing an expansion to the existing Olga Water Treatment Plant. The expansion will increase the capacity of the plant from 5.0 MGD to 10.0 MGD and utilize Aquifer Storage and Recovery (ASR) wells to store finished water. This increase in capacity is needed to satisfy future water demands created by the County's rapid growth. At the present time, Lee County Utilities operates four main water treatment facilities with a total treatment capacity of 25.0 MGD. The raw water sources used by these plants are mainly the Caloosahatchee River, surficial and sandstone aquifers. The proposed expansion to the Olga Water Treatment Plant will treat water drawn from the Caloosahatchee River and seasonally store finished water in existing and proposed Aquifer Storage and Recovery (ASR) wells. Currently the Olga Water Treatment Plant utilizes one ASR at the plant. Due to the success of this well Lee County Utilities plans to expand the use of ASR technology to store water as part of the proposed plant expansion. The proposed project is consistent with the Lower West Coast Water Supply Plan (LWCWSP) which states "utilities should explore ASR, among other options, to extend the use of current resources in order to meet future demands".

2. SCOPE

The project consists of the expansion of the existing Olga Water Treatment Plant to increase its capacity from the existing 5.0 MGD to between 7.0 and 10.0 MGD. This expansion will include an upgrade to treatment plant components and the installation of up to four ASR wells (in addition to the one existing) to treat and store finished water during periods when there is excess flow in the Caloosahatchee River. This project will utilize ASR to help maintain established Minimum Flows and Levels in the Caloosahatchee River and provide a benefit to the environment.

3. WORK BREAKDOWN STRUCTURE

Description of Project Elements

This project consists of the following primary elements:

1. Raw water intake/pump improvements
 - possible replacement of existing raw water pumps to increase pumping capacity
 - improve hydraulics at the existing intake structure opening in the river
 - reduce floatables/vegetation/algae interference at the intake opening

2. Improve the PAC injection system
 - replace the existing PAC bag hopper system with a new silo and automatic feeder system
 - promote additional PAC mixing and detention time at the raw water intake channel by adding a baffling system
3. Replace Aerators
 - the existing 2 cascade aerators will be replaced with new aerators
 - additional access walk will be provided to get to the new aerators
4. Improve Accelerator No. 1 and 2
 - consider replacing the existing static mixers, motors and drives as necessary
 - modify existing piping and add new piping to install a bypass line around Accelerator No. 2
5. Add Ion Exchange process
 - consider adding an ion exchange process utilizing a proprietary resin (Miex) to reduce natural organic matter and DBPs
6. Replace existing Filtration System
 - increase filtration capacity by converting the existing dual media filters to high rate filters or submerged membrane filters to increase solids removal and gain up to 10 MGD treatment capacity
7. Improve disinfection system
 - sodium hypochlorite and chlorine dioxide are currently the primary disinfectants. Consider alternate primary disinfectants including chloramines to meet increased treatment capacity.
 - modify the disinfectant feed room to improve ventilation and safety
 - improve disinfectant delivery system as necessary
 - provide secondary containment for existing sodium hypochlorite storage tanks
8. Replace existing Alum system with Ferric Sulfate system
 - existing alum system will be removed
 - install ferric sulfate feed system, including bulk storage tanks, feed pumps, day tank, and piping to provide for up to 10 MGD treatment
9. Chemical feed system improvements
 - upgrade chemical feed building to improve safety and chemical delivery
 - segregate non-compatible chemicals
 - install new chemical feed pumps, meters and controls
10. Add ferric sludge handling system
 - consider adding sludge thickening process, including thickening tanks
 - add dewatering facilities and sludge drying facilities
 - final sludge product of approximately 30% solids will be reclaimed by others

11. Add two 2.5 MG storage tanks
 - install two prestressed concrete ground storage tanks to increase finished water storage capacity onsite from 1 MG to 5 MG
 - tank foundations may require pilings support
 - provide necessary piping, valving, and controls
12. Replace high service pumps
 - construct a new high service pump station building
 - install 3 new vertical turbine pumps with VFDs
 - install new header piping and connections to existing distribution main
 - add a new finished water distribution meter
 - decommission existing high service pumps
13. Improve various electrical, instrumentation and controls
 - provide new electrical service and motor control center as needed for increased treatment capacity and new components
 - increase emergency standby power generator capacity as needed
 - add PLC controls to water and chemical pumps and meters for remote operation at control room
 - improve site security with lighting, monitoring cameras, etc.
14. Site improvements
 - provide improved stormwater management and drainage onsite
15. Add ASR wells
 - install additional ASR wells, increasing ASR capability for treated water storage and recovery
 - install one additional well onsite
 - install 2 to 3 additional wells offsite on other County property
 - install wellheads/pumps
 - provide piping, valving and remote telemetry controls to connect the proposed ASR wells to the Olga WTP system
 - provide associated observation/monitoring wells
 - consider ability to blend recovered ASR water with finished water for distribution or raw water for treatment at the Olga facility

Project Description of Design

The purpose of this project is two-fold: first to provide an additional water resource for the existing Olga WTP, and second to improve the treatment facility and increase capacity. The existing facility has one ASR well onsite which is proving to be successful. It is intended to expand this alternative water resource by installing additional ASR wells.

The existing WTP has a 5 MGD treatment capacity. Given the current and future water use demands in our growing Lee County, additional water supply is required. Providing improvements and additional treatment capacity at the Olga WTP will assist. However, additional ASR wells are a key to sustaining the water supply by providing large storage reservoirs for treated water. The Olga WTP will then be able to reduce raw water demands on the Caloosahatchee River during dry periods and rely on stored water from the ASR wells to meet demands. In addition, the additional ASR wells will provide an alternative water resource during periods where the river water quality is extremely poor and/or algae blooms are present.

In order to take full advantage of the proposed additional ASR wells as an alternate water resource, the treatment capacity at the Olga WTP needs to be increased. Then, during wet periods where the river flow is abundant, the facility will be able to treat additional water for storage in the ASR system while still meeting system demands.

Project Justification and Cost/Benefit Analysis

This project is critical to developing a long term sustainable water supply at the Olga WTP, where the Caloosahatchee River is its only raw water source. The facility currently operates at or near capacity during seasonal peak demands. Providing additional ASR wells and at the same time increasing treatment capacity is a solid drought management strategy, taking full advantage of an alternative water resource. Storing excess treated water in the ASR system during wet periods provides for retrieval during dry periods. It will also help to reduce raw water demand on the river during dry periods.

ASR is a cost effective technology, providing large volumes of storage which would be cost prohibitive in conventional storage tanks.

Potential for Significant and Lasting Benefits

Utilizing ASR will provide a means for capturing and storing excess flows of fresh surface water from the Caloosahatchee River, water that would normally be lost to tide, and recover this water to meet public water supply demands during low flow periods. This project will benefit the citizens of Lee County by providing a cost effective means for storing water while benefiting the environment by limiting the withdrawal of fresh surface water during times of drought.

4. LOCATION OF PROJECT

The Olga Water Treatment Plant is located along the Caloosahatchee River approximately one mile east of the Franklin Locks.

Figure 1 shows the project location.

5. DELIVERABLE SCHEDULE

See attached project schedule.

Olga WTP Improvements

ID	Task Name	Duration	Start	Finish
1	Engineering Design Contract Finalization	60 edays	3/1/02	4/30/02
2	Preliminary Engineering Design	120 edays	4/30/02	8/28/02
3	60% Engineering Design	100 edays	8/28/02	12/6/02
4	90% Engineering Design	60 edays	12/6/02	2/4/03
5	Final Engineering Design	70 edays	2/4/03	4/15/03
6	Permitting	230 edays	8/28/02	4/15/03
7	Construction Management Contract	90 edays	12/6/02	3/6/03
8	Value Engineering	30 edays	3/6/03	4/5/03
9	Final Construction Bidding by CM	30 edays	4/15/03	5/15/03
10	Construction of WTP Improvements	365 edays	5/15/03	5/14/04
11	Site prep/grading/drainage	60 edays	5/15/03	7/14/03
12	Construct Storage Tanks	150 edays	7/14/03	12/11/03
13	Construct & Develop ASR wells	180 edays	7/14/03	1/10/04
14	ASR well operational testing	365 edays	1/10/04	1/9/05
15	Project close out	60 edays	1/9/05	3/10/05

