

Lee County Cabana City Services Including Septic-to-Sewer Conversion Project Description (LeeCountyPD_GPS2)

Lee County proposes to hire a consultant to provide a high-level, conceptual approach to assess impacts of surface water quality and flood control on affordable housing stock in the low- and moderate-income neighborhood known as Cabana City in unincorporated Lee. This will include planning for septic-to-sewer conversion; related street, sidewalk and drainage improvements; and other improved services designed to preserve the value of affordable housing stock while lessening the risk of surface water contamination and residential flooding in the Caloosahatchee estuary basin. This planning effort will be coordinated with current County initiatives for storm and coastal surge and for regional water quality.

1. A. Project purpose

Lee County proposes a plan to specifically assess neighborhood-wide upgrades that will:

- Extend the safe, habitable lifetime and preserve the economic attainability of residences in Cabana City, a 32.7-acre neighborhood that is a valuable source of affordable housing stock;
- Serve as a septic-to-sewer conversion pilot program for neighborhood projects that will impact water quality of the Caloosahatchee estuary, which is subject to a Florida Department of Environmental Protection (FDEP) Basin Management Action Plan (BMAP);
- Mitigate the risk of septic field contamination due to riverine flooding, tidal influence or coastal surge;
- Provide the County with a framework to budget for capital improvement and major maintenance projects; and
- Efficiently coordinate this initiative with current County planning for storm and coastal surge and regional water quality.

This planning effort will complement Lee County's current water quality and storm mitigation planning, which already includes:

- Assessment of water quality risks impacting the Caloosahatchee River and Estuary – The proposed assessment will act upon findings from the study “The Caloosahatchee River – North Fort Myers Nutrient and Bacteria Source Identification Study.” This two-year microbial source tracking study completed in early 2020 combined surface water and groundwater sampling to better identify factors contributing to bacteria and nutrient loading to the estuary. The multiple lines of evidence collected for this study (including chemical tracers, nutrients, stable isotopes, bacterial abundance and molecular markers) indicated a widespread influence of human wastewater on local water quality in North Fort Myers and this area of the Caloosahatchee Estuary. Since 2000, Lee County has completed more than \$28 million in water quality projects, including construction of filter marshes, littoral zones, preserves and restorations of creeks and channels. Another \$23 million is being sought for planning, design and construction of proposed projects.

- Assessment of Riverine Flood risk and Mitigation Project Recommendation – In response to rainy season and Hurricane Irma flooding in 2017, Lee County Commissioners have invested nearly \$6 million in short-term and long-term flood resiliency efforts that include:
 - \$1.9 million for a Southern Lee County Flood Mitigation Plan, which includes modeling to determine the value of potential projects;
 - \$3 million in capital investment projects including sediment removal in canals and ditches;
 - Administrative changes to the East Mulloch Water Control District, including Lee County assuming responsibility for a \$7.1 million CDBG-DR grant to replace sidewalks and drainage systems in the San Carlos Park area; and
 - A maintenance agreement with the South Florida Water Management District for 13 rivers and creeks.
- Assessment of Coastal Storm Surge Risk – FEMA has issued preliminary Lee County Flood Insurance Rate maps resulting from state-of-the-art coastal analysis. These maps will likely become effective in 2021. For mitigation strategy and project recommendations, Lee County continues to participate in the FEMA/NFIP Community Rating System (CRS) and the requirements of the Florida Department of Emergency Management for Local Mitigation Strategy and Comprehensive Emergency Management plans and projects.

Lee County is looking for a conceptual pilot plan that would specifically examine delivering vital public and social services under FEMA’s Community Lifelines:

- **Health and Medical**, specifically ensuring against the spread of water-borne contaminants by replacing potentially failing septic tanks with compliant and reliable water and sewer systems to be provided by the Florida Governmental Utility Authority (FGUA);
- **Transportation**, specifically assessing street and sidewalk upgrades that would be designed along with the roadside installation of water and sewer lines; and
- **Hazardous Materials**, specifically assessing any potential for spills or other exposure.

1. B. Area of Benefit

Generally, the area of benefit is known as Cabana City, however, the consultant will be instructed to define the exact boundaries of the study area to include downstream wastewater connections. Offsite improvements may need to be identified, particularly for tie-ins to force mains and gravity sewers and avoid adverse impacts to existing utility infrastructure.

Cabana City, was platted in 1937 (PG 8, PG 61) with a traditional grid pattern and 10-foot wide lots. The most notable structures in this subdivision are coral rock cottages that were originally part of a motel. These units have a coral rock foundation and asphalt shingle roofs.

Cabana City is identified on the Lee Plan’s Future Land Use Map as Intensive Development. Intensive Development areas are described in Policy 1.1.2. By virtue of their location, the county's current development patterns, and the available and potential levels of public services, they are well suited to accommodate high densities and intensities.

Cabana City is located within the Coastal High Hazard Area. Lee County is directed by Lee Plan Policy 95.1.2 to design new public facilities and infrastructure to address high tide events, storm surge, flash floods, storm water runoff, and the related impacts of sea level rise in Coastal High Hazard Areas.

1. C. Description of the proposed activity

Selection of a consultant will be through a Request for Proposal process that will encourage the bidder to enhance and refine these proposed activities:

- Kick-off meeting to identify needed materials (master plans, existing county reports, plats, easements, etc.) and staff input to:
 - Identify the study area;
 - Finalize the scope of the planning project;
 - Finalize the timeline, deliverables and tasks;
- Review of utility master plans, other county plans and reports;
- Engineering review of FGUA and Lee County Utilities (LCU) current assets (wastewater mains, laterals and other structures), specifically flow demands and water quality issues to make recommendations for accommodating septic-to-sewer conversion with recommendations for placement of lines and methods of conveyance (gravity and force mains);
- Provide guidance on a cost/benefit methodology to assess the value of preserving affordable housing stock against the costs of investing in non-compliant housing;
- Create the overall concept for septic-to-sewer conversion; and
- Identify adaptation alternatives and recommendations.

Against this framework, there are four overarching issues to be addressed in valuing or prioritizing planning recommendations:

First, the plan will be mindful of cost/benefit assessments that value providing solutions to the greatest number of residents that will be effective for the longest period of time. This plan will consider Cabana City's overall potential for safe and reasonable investment in housing revitalization, primarily including septic-to-sewer conversion and drainage options for flood mitigation.

Second, the plan will identify particular risks and the relative value of those risks on the housing, on the general economic issues faced by residents, and on access to service needs of Cabana City's low- and moderate-income households. About 86% of Cabana City's population – about 450 people – qualify as LMI.

Lee County is a HUD-determined MID community, with 42% of its population – approximately 277,000 people, qualified LMI to HUD standards. Of Lee's 517 Census block groups, 32% are designated LMI. Of the total LMI population here, nearly 40% – including Cabana City residents – live in FEMA's designated Special Flood Hazard Area (SFHA).

This community along the Caloosahatchee Estuary includes 100 residences, 96 of which were built before Lee County joined the NFIP in 1984 and before post-Hurricane Andrew advances in the Florida Building Code. These non-compliant structures are part of the county's stock of affordable and attainable housing. This planning effort will consider the relative cost of the loss of this housing stock

and the cost of providing social and other government services resulting from the displacement of LMI populations.

This is particularly a problem in Cabana City where investments valued at 50% or more than the value of the home require that the entire structure be brought up to current regulations of the National Flood Insurance Program. This results in a narrow opportunity for investment that extends the habitable life of a property. As a result, this regulation is often a barrier to the rehabilitation of housing by low- and moderate-income households. These households are more likely to complete bandaid-type repairs and improvements than to take on the expense of an entire upgrade-to-code. As a result, neighborhoods sink into non-compliant decay.

Another particular concern for Cabana City is access to mass transit. Currently, LeeTran operates the Route 595 bus route every 60 minutes on Pondella Road, north of the community. LeeTran does not currently have service or plans to extend service on Business 41 from the Edison Bridge to Pondella Road, which would serve Cabana City. However, LeeTran is considering whether this neighborhood would benefit from a new on-demand model being reviewed for the larger North Fort Myers area. These changes are two to three years away from materializing.

Third, maintain or improve Lee County's Class 5 membership in the CRS. Lee County requires that this study and its expected outcomes comply with CRS guidelines and will identify possible opportunities for gaining additional points in the system. In conjunction with this issue, Lee County will consider compliance to Florida Building Codes and recommended updates to the Lee Plan, Lee County's DEO-approved comprehensive plan and any other changes to Lee County Administrative Code or policy.

Finally, recommendations of this planning study will include options for communicating the objectives recommended by the study to Lee County staff who will assume tasks to implement plans and strategies and to the general public which may be affected by the plan.

2. Risk Mitigation

The primary objective is to assess risks and suggest mitigation guidelines for:

- Impacts on surface water from septic systems;
- Compliance to BMAP and water quality objectives;
- Mitigate the risk of septic field contamination due to riverine flooding, tidal influence, coastal surge or sea level rise; and
- Specifically assessing any potential for exposure to hazardous materials.

3. Tasks and Team

Major tasks and team members associated with this proposal include:

- Response to DEO requests for information including participation in a site visit – Joan LaGuardia, Lee County Performance Analyst, jlguardia@leegov.com, primary point of contact;
- Review, negotiation and signing of the grant agreement document – Joan LaGuardia;
- Processing of forms and assurances for RFP preparation – Lindsay Cepero, Lee County Procurement Manager, lcepero@legov.com;
- Review of the RFP submission and awarding of the contract – Lindsay Cepero;

- Project management and monitoring – Mark Sunyak; Lee County Utilities Engineering Manager, MSunyak@leegov.com;
- Quarterly reporting and invoicing to DEO for the grant management process – Richard Kolk, Lee County Utilities Fiscal Manager, rkolk@leegov.com;
- Project liaison to the Southern Lee County Flood Protection Study – Luis Molina, Lee County Natural Resources Engineering Manager, LMolina@leegov.com.
- Project liaison to LMI communities and services – Clare Dennehy, Lee County Human and Veteran Services Grants Compliance Coordinator, CDennehy@leegov.com;
- Project liaison for Public Safety and Emergency Management – Britton Holdaway, Emergency Management Planner, bholdaway@leegov.com; and
- Grant project closeout – Richard Kolk.

4. Determination of Funding Requirements

Lee County estimates the cost of this study to be \$115,575 based on these sources and comparable planning contracts:

- Proposal for Professional Services: Naples Manor Stormwater Improvements Preliminary Engineering Study, 2020;
- Collier County: Concept Plan for Palm River Neighborhood Water, Stormwater, and Irrigation Infrastructure Improvements, 2020;
- Lee County Miscellaneous Planning Services for the Green Meadow Road Community Facility Planned Development, 2018;
- Lee County Professional Planning Services for Burnt Store Road, 2018; and
- Lee County Professional Planning Services for LeeTran EEO Plan Update, 2017.

This total also includes:

- An estimate of administrative costs at 5% of the direct planning costs; and
- A contingency of 10% of the direct planning costs to account for unforeseen costs, including potential accommodation of doing business during the COVID-19 pandemic.

The required budget document specifically breaks out estimated costs for tasks.

5. Anticipated Outcomes

Specific outcomes will include recommendations for:

- A high-level, conceptual approach to assess impacts of surface water quality and flood control on affordable housing stock in Cabana City, Lee County;
- Prioritizing the approach to mitigating the risk and suggestion of general mitigation options;
- Specific planning for septic-to-sewer conversion, related street, sidewalk and drainage – if and where feasible;
- Possible options for achieving TMDLs and other compliance objectives of the Caloosahatchee River and Estuary BMAP;

- Coordination with current County initiatives for storm and coastal surge and for regional water quality;
- Compliance with all state, NFIP, CRS and FEMA guidance.

6. Compliance to Existing Comprehensive Plan

The Lee Plan specifically addresses Cabana City, which is a residential subdivisions located in the North Fort Myers Community Plan area of Lee County. The North Fort Myers Community Plan is described in Goal 30 of the Lee County Comprehensive Plan (the Lee Plan):

GOAL 30: NORTH FORT MYERS COMMUNITY PLAN. *Improve the livability and economic vitality in the North Fort Myers Community Plan area by: promoting compact, mixed use development in the form of town and neighborhood centers; attracting appropriate investment to revitalize older neighborhoods and commercial corridors; stabilizing and enhancing, existing neighborhoods; and preserving natural resources.*

An objective of Goal 30 is to support the creation and preservation of affordable housing options in safe and attractive neighborhoods and is supported by the following Lee Plan policies:

POLICY 30.1.1: *Continue to implement Neighborhood District Revitalization Plans utilizing Community Development Block Grant (CDBG) funds, as available.*

POLICY 30.1.2: *Explore opportunities to expand programs designed to help maintain, repair, and improve existing owner-occupied housing.*

POLICY 30.4.2: *Support the concept of a single source of sewage service to the North Fort Myers Community Plan area.*

Additional Relevant Lee Plan Policies

POLICY 56.2.1: *Maintain programs and regulations to abate and cease use of septic tanks and wastewater treatment package plants where and when central sewer is available and in areas where assessment districts are established for upgrading sewer availability.*

POLICY 60.1.8: *Water management projects will be evaluated and ranked according to the priorities adopted into this plan. Major emphasis will be given to improving existing drainage facilities in and around future urban areas as shown on the Future Land Use Map, and to enhancing or restoring environmental quality.*

POLICY 135.3.3: *The County will conserve existing residential areas by enforcing codes, providing appropriate capital improvements, providing funding for the Neighborhood Districts Program and disseminating information on the availability of housing programs.*

POLICY 135.9.4: *Schedule and concentrate public infrastructure and supporting facilities and services to upgrade the quality of existing neighborhoods.*

In addition to complying with the Lee Plan, recommendations of this planning effort will consider and comply with:

- The Lee County Local Mitigation Strategy (LMS), approved by the Florida Department of Emergency Management (FEDM);
- The Lee County Comprehensive Emergency Management Plan (CEMP), also approved by FDEM;
- The Lee County Utilities Risk and Resiliency Study being delivered to the Environmental Protection Agency as part of the 2018 America's Water Infrastructure Act;
- Lee County's Flood Hazard Ordinance, which is based on the requirements of membership in the National Flood Insurance Program and its CRS.