

SALES TAX PROJECTS

Project Number: 40
Project Name: Woodville Water Quality
Total Project Cost: \$25,800,000

Total Project Cost Notes

This project cost is only for the sanitary sewer mainline construction only. Funding regarding landowner assistance for sewer hookups is addressed in Project #45.

Executive Project Summary:

This project implements direction provided in the Comprehensive Plan and external reports on the protection of Wakulla Springs.

The proposed project includes three components to help reduce existing nitrate loading and manage flooding issues for future development in the area. This project involves two major features:

- 1) The Woodville Recharge Basin Flood Study to document areas susceptible to closed depression flooding and to protect these areas from further development.
- 2) Construct sanitary sewer lines in the Woodville Rural Community to provide access to nitrogen-reducing central sewer facilities. Access to central sewer will address high nitrogen loads from existing septic tanks as well as allow for higher density new development, redevelopment, and expanded commercial opportunities in Woodville Rural Community.

Actions Taken by the Committee:

March 28, 2013: Moved the project to a second round for consideration.

April 26, 2013: Placed into Project #49 Water Quality/Stormwater Funding for funding consideration.

Themes

- | | |
|---|---|
| <input type="checkbox"/> Regional Mobility/Transportation | <input checked="" type="checkbox"/> Economic Vitality |
| <input type="checkbox"/> Sense of Community | <input type="checkbox"/> Ecotourism/Parks |
| <input checked="" type="checkbox"/> Environmental/Water Quality | <input type="checkbox"/> Vertical Infrastructure |
| <input type="checkbox"/> Connectivity | <input type="checkbox"/> Gateways |

Detail Project Description

Septic systems in the Woodville area of Leon County have been identified as a major source of nitrate loading to the groundwater and Wakulla Springs. Wakulla Springs is a first magnitude spring and is the longest and deepest known submerged freshwater cave system in the world. Located just five miles south of the Leon County line, Wakulla Springs is an important part of the regional culture and recreational economy.

1. Woodville Recharge Basin Flood Study

The flood study will evaluate closed-depression flooding throughout the Woodville Recharge Basin following high-volume storm events to ensure that future development occurs in appropriate locations. Leon County's experience in 1994 was that smaller closed depression areas were overwhelmed during tropical storms and began cascading to adjacent depressions. The product of this study will be a map indicating high water elevations and susceptible areas to be protected from development.

2. Woodville Rural Community Advanced Wastewater Treatment Service

The Woodville Rural Community begins three miles south of Capital Circle Southeast and includes approximately 2,600 acres. The proposed project will provide the rural community with access to sewer facilities designed to achieve Advanced Wastewater Treatment standards. This project would allow for higher density new development, redevelopment, and expanded commercial opportunities. Additionally, Advanced Wastewater Treatment reduces potential nitrate loading to the groundwater by approximately a factor of ten. Reducing the nitrate load helps to protect groundwater and achieve restoration goals for Wakulla Springs.

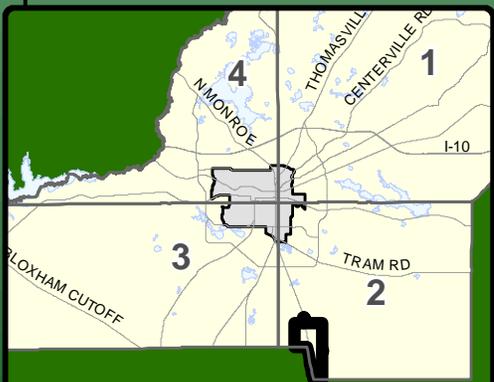
The County and City may choose to develop a landowner connection incentive program and financing option to address the financial burden and allow for sufficient connections to ensure that maximum benefits are achieved from the public capital investment in the sewer system. This incentive program is described in Project 45.

The Urban Fringe area west of the Rural Community will be evaluated for onsite nitrogen-reducing technology in lieu of central sewer due to the reduced development density.

Cost By Themes

	Regional Mobility/Transportation
	Sense of Community
\$25,800,000	Environmental/Water Quality
	Connectivity
	Economic Vitality
	Ecotourism/Parks
	Vertical Infrastructure
	Gateways

Woodville Water Quality*



Quadrant: 2

Project #40



Previous Project Information for:

Project #40

Woodville Water Quality

Note: Based on direction from the Committee at the March 28, 2013 Sales Tax Committee meeting, below is a list of previous project(s) that were merged or modified to create a holistic project for the Committee's consideration.

Project Name: Woodville Water Quality (*Previously Project #63*)

Proposed Projects for the Sales Tax Extension

Project #10: Woodville Water Quality

Estimated Project Cost: \$59.2 Million

Project Criteria:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Comprehensive Plan | <input checked="" type="checkbox"/> Water Quality Enhancements and Green Infrastructure |
| <input checked="" type="checkbox"/> Regional Mobility | <input checked="" type="checkbox"/> Stormwater/Sewer Capacity Improvements |
| <input type="checkbox"/> Greenway Master Plan | <input type="checkbox"/> Transportation Capacity Improvements |
| <input type="checkbox"/> Connectivity | <input checked="" type="checkbox"/> Core Infrastructure |
| <input type="checkbox"/> Complements BP2000 Project | |

Project Description:

This project implements direction provided in the Comprehensive Plan and external reports on the protection of Wakulla Springs. Septic systems in the Woodville area of Leon County have been identified as a major source of nitrate loading to the groundwater and Wakulla Springs. Wakulla Springs is a first magnitude spring and is the longest and deepest known submerged freshwater cave system in the world. Located just five miles south of the Leon County line, Wakulla Springs is an important part of the regional culture and recreational economy. This project may also include the acquisition of the Chason Wood property for environmental preservation. However, the Intergovernmental Agency may wish to acquire this property through the existing Blueprint 2000's Sensitive Lands account.

The proposed project includes three components to help reduce existing nitrate loading and manage flooding issues for future development in the area. These components are detailed in the Stormwater/Sewer Capacity Improvements under the Project Criteria details.

1. *Woodville Recharge Basin Flood Study (\$1.3 million):* An evaluation necessary to document areas susceptible to closed depression flooding and to plan for protection.
2. *Woodville Rural Community Advanced Wastewater Treatment Service (\$24.5 million):* Provide access to nitrogen reducing central sewer facilities and allow for higher density new development, redevelopment, and expanded commercial opportunities in Woodville Rural Community.
3. *Urban Fringe West of Woodville Advanced Wastewater Treatment Service (\$33.4 million):* Provide access to nitrogen reducing wastewater facilities.

(Note: This estimate does not include the individual landowner sewer connection costs. The County and City may choose to develop an incentive program and financing option to address the financial burden and allow for sufficient connections to ensure that maximum benefits are achieved from the public capital investment in the sewer system.)

Additional Materials Regarding the Woodville Water Quality Project:

- *Attachment #1:* February 12, 2013 Ratification of Board Actions Taken at the January 29, 2013 "Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process"*
- *Attachment #2:* March 12, 2013 Board of County Commissioners Agenda Item on the Approval of Additional Woodville Sewer Requirements for the City of Tallahassee 2030 Master Plan*

*Note: Due to the size of the attachments accompanying these agenda items, each attachment will be available to you upon request.

Project #10: Woodville Water Quality

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Project Criteria Detail:

Comprehensive Plan: This project complies with policy direction to concentrate new development in the Woodville Rural Community and utilize connection to sewer facilities designed to achieve Advanced Wastewater Treatment standards to help minimize impacts on groundwater quality. The Flood Study will ensure compliance with the policy regarding flood control level of service for the existing and new development.

Regional Mobility Plan: The Woodville Rural Community is a designated regional growth node in the Regional Mobility Plan. Wastewater infrastructure investments would allow for this growth.

Greenway Master Plan: N/A

Connectivity: N/A

Complements Blueprint 2000 Project(s): N/A

Water Quality Enhancements and Green Infrastructure: This project provides access to Advanced Wastewater Treatment. This higher level of treatment reduces potential nitrate loading to the groundwater by approximately a factor of ten. The study to identify storm volume-sensitive depressions will provide opportunities to implement low-impact development practices.

Stormwater/Sewer Capacity Improvements: This project addresses sewer target areas identified in the 2030 Master Sewer Plan. The Woodville Rural Community was identified as a target area for sewer extension in 1988 and again as part of the 2030 Master Sewer Plan. On April 26, 2011 the Board provided direction to add the Urban Fringe area west of Woodville as a target area. The Flood Study will ensure development is directed to appropriate locations in the Woodville Recharge Basin and protect existing volume-sensitive areas.

This project includes three components that will improve stormwater and sewer capacity as well as help reduce existing nitrate loading and manage future development in the area.

1. Woodville Recharge Basin Flood Study

The flood study will evaluate closed depression flooding throughout the Woodville Recharge Basin following high-volume storm events to ensure that future development occurs in appropriate locations. Leon County's experience in 1994 was that smaller closed depression areas were overwhelmed during tropical storms and began cascading to adjacent depressions. The product of this study will be a map indicating high water elevations and susceptible areas to be protected from development.

2. Woodville Rural Community Advanced Wastewater Treatment Service

The Woodville Rural Community begins three miles south of Capital Circle Southeast and includes approximately 2,600 acres. The proposed project will provide the rural community with access to sewer facilities designed to achieve Advanced Wastewater Treatment standards. This project would allow for higher density new development, redevelopment, and expanded commercial opportunities. Additionally, Advanced Wastewater Treatment reduces potential nitrate loading to the groundwater by approximately a factor of ten. Reducing the nitrate load helps to protect groundwater and achieve restoration goals for Wakulla Springs.

The Comprehensive Plan specifically recognizes the Woodville Rural Community on the Future Land Use Map and includes policy direction that “new development shall be concentrated in the urban service area plus in the Woodville Rural Community...” Policies for this area allow commercial development

Project #10: Woodville Water Quality

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and residential development up to four units per acre, with an option to achieve up to eight units per acre through a Transfer of Development Units system that requires the protection of vulnerable lands outside of the designated rural community. The Comprehensive Plan also specifically identifies connection to sewer facilities designed to achieve Advanced Wastewater Treatment standards as the preferred method of wastewater treatment within the Woodville Rural Community to help minimize impacts on the groundwater.

3. Urban Fringe West of Woodville Advanced Wastewater Treatment Service

This Urban Fringe area expands west from Woodville Rural Community to include areas around Wakulla Springs Road and Crawfordville Highway. The 3,850 acre area was designated as a target sewer area by the Board of County Commissioners on April 26, 2011. Urban Fringe development is allowed at up to one unit per three acres and the Comprehensive Plan limits the use of central sewer to existing development or new conservation subdivisions. The Comprehensive Plan would need to be amended if there is a desire to allow central sewer to be used by future conventional subdivision in the Urban Fringe. The focus of this component of the project will be conversion of existing septic systems to Advanced Wastewater Treatment service.

Both the Woodville Rural Community and the adjacent Urban Fringe area are located inside the Primary Springs Protection Zone, an area designated in the Leon County Land Development Regulations based on the high potential for contaminants such as wastewater to reach the groundwater. A 2011 septic system management report by Lombardo Associates Inc., commissioned by Leon County, Wakulla County, and The City of Tallahassee, concluded that nearly all of the septic systems in this area of Leon County will need to be converted to Advanced Wastewater Treatment in order to achieve the regulatory goal for nitrates in Wakulla Springs. The report also identified Woodville and the Urban Fringe area west of Woodville as candidates for connection to City sewer or for development of a cluster treatment system than can achieve Advanced Wastewater Treatment standards.

The table below provides basic information on the size and costs for the two project areas and separates the capital costs from the landowner connection costs for both areas. The capital cost includes engineering and construction to provide landowners with access to sewer. The connection cost includes the individual landowner expenses to abandon a septic system, provide plumbing from the street to the house, and pay system charges. These individual landowner expenses have not been included in the project cost.

Project Area	Acres	Existing Septic Systems	Capital Costs for Sewer	Landowner Connection Costs (\$12,000/system)	Capital+ Connection Costs
Woodville	2,600	1,274	\$24.5 million	\$15.3 million	\$39.8 million
Urban Fringe	3,850	1,671	\$33.4 million	\$20 million	\$53.4 million
Totals	6,450	2,945	\$57.9 million	\$35.3 million	\$93.2 million

The County and City may choose to develop an incentive program and financing option to address the financial burden of individual landowner connection costs and allow for sufficient connections to ensure that maximum benefits are achieved from the public capital investment in the sewer system. Individual landowners will also be required to pay any monthly bills from the sewer provider (approximately \$65/month).

Transportation Capacity Improvements: N/A

Core Infrastructure: This project is considered a core infrastructure project due to the sewer access improvements and water quality enhancements as detailed above.

Leon County Board of County Commissioners

Cover Sheet for Agenda #2

February 12, 2013

To: Honorable Chairman and Members of the Board

From: Vincent S. Long, County Administrator 

Title: Ratification of Board Actions Taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process”

County Administrator Review and Approval:	Vincent S. Long, County Administrator
Department/ Division Review and Approval:	Tony Park, P.E., Public Works and Community Development Director Wayne Tedder, Planning, Land Management, and Community Enhancement Director David McDevitt, Development Support and Environmental Management Director
Lead Staff/ Project Team:	Katherine G. Burke, P.E., Engineering Services Director Theresa Heiker, P.E., Stormwater Management Coordinator John Kraynak, P.E., Environmental Services Director Alex Mahon, Environmental Manager Brian Wiebler, Principal Planner, Comprehensive Planning Team Laura Youmans, Assistant County Attorney Kim Dressel, Senior Assistant to the County Administrator

Fiscal Impact:

This item does have a financial impact. Staff recommends providing \$50,000 in funding in the FY 2013/14 budget for the Leon County Health Department to complete an inventory of all septic systems within Leon County.

Staff Recommendation:

Option #1: Ratify the Board actions taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process.”

Title: Ratification of Board Actions Taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process”

February 12, 2013

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Report and Discussion

Background:

On January 29, 2013, the Board held a workshop to discuss a Phase 1 feasibility report, prepared by Lombardo Associates, Inc. (LAI), to identify wastewater treatment options to reduce nitrate load to Wakulla Springs from septic systems, where central sewer is not available, as well as associated management options. Related issues were also discussed during the workshop, including: the proposed Woodville Water Quality sales tax extension project, which would decrease the amount of nitrate reaching Wakulla Springs from septic systems; Florida Department of Environmental Protection’s Upper Wakulla River and Wakulla Springs Basin Management Action Plan process that is currently underway and, once finalized, will become binding upon the responsible parties; proposed amendments to the Comprehensive Plan and Code of Laws; the Wakulla Springs Alliance petition; and recommendations from the Science Advisory and Water Resources committees, as well as the Wakulla Springs Alliance.

The workshop item provided relevant background information regarding: the Cody Scarp; nitrate concentrations; the City’s Advanced Wastewater Treatment Project; the Leon County Aquifer Vulnerability Assessment (LAVA) and Primary Springs Protection Zone (PSPZ); actions the County has taken to limit the amount of nitrate reaching Wakulla Springs from the Leon County area; a previously-considered draft nitrogen-reducing systems ordinance; and HB 1263, which pre-empts Leon County’s ability to phase-in the replacement of failing traditional septic systems with nitrogen-reducing systems as part of an inspection program. A copy of LAI’s report and additional analysis regard the report were also included in the workshop item.

A portion of the discussion during the workshop centered upon central sewer not being the only method by which nitrogen-reducing wastewater treatment may be achieved; that decentralized wastewater treatment systems, such as cluster systems and other technologies, are viable options for certain areas; and the link between land use planning and wastewater treatment and disposal.

Title: Ratification of Board Actions Taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process”

February 12, 2013

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Analysis:

The Board provided the following directions to staff during the workshop:

1. Direct staff to continue to pursue proposed sales tax extension project #10, Woodville Water Quality.
2. Direct staff to bring back a proposed amendment of the Code of Laws to establish an Advanced Wastewater Treatment nitrogen standard for new construction within the PSPZ, with means for managing those systems not on central sewer.
3. Direct staff to remain actively engaged in the BMAP process for the Upper Wakulla River and support further sampling to identify sources’ relative nitrate loads, particularly from Inflow north of the Cody Scarp and at the state line, the scope of which will be established as part of the BMAP process.
4. Direct staff to include \$50,000 in funding in the FY 2013/14 budget for the Leon County Health Department to complete an inventory of all septic systems within Leon County, in coordination with TLC-GIS.
5. Direct staff to take no action at this time to institute a county-wide level 4 or 5 RME or Wastewater/Nutrient Management Utility.
6. Direct staff to pursue an amendment of the Code of Laws to require a county-wide 24-inch separation, between the bottom of the drainfield and wettest season water table, for the repair of failing septic systems.
7. Direct staff to initiate a Comprehensive Plan amendment in the 2014-1 cycle which maintains the goal of spring protection, but removes the technical specificity by which this can be achieved with respect to wastewater treatment.

Options:

1. Ratify the Board actions taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process.”
2. Do not ratify the Board actions taken at the January 29, 2013 “Workshop on the Septic System Management Options Report by Lombardo Associates, Inc. and Update on the BMAP Process.”
3. Board direction.

Recommendation:

Option #1.

Attachment:

1. January 29, 2013 Workshop Item

Leon County Board of County Commissioners

Cover Sheet for Agenda #24

March 12, 2013

To: Honorable Chairman and Members of the Board

From: Vincent S. Long, County Administrator 

Title: Approval of Modification of Additional Woodville Sewer Requirements for City of Tallahassee 2030 Masterplan

County Administrator Review and Approval:	Vincent S. Long, County Administrator
Department/ Division Review:	Alan Rosenzweig, Deputy County Administrator Tony Park, P.E. Director of Public Works and Community Development
Lead Staff/ Project Team:	Kathy Burke, P.E. – Director of Engineering Services

Fiscal Impact:

This item has no direct fiscal impact to the county.

Staff Recommendation:

Option #1: Approve the modification provided to the City of Tallahassee to amend their 2030 Sewer Masterplan, deleting the requirement to include the additional area west of the Woodville Rural Community.

Title: Approval of Modification of Additional Woodville Sewer Requirements for City of Tallahassee 2030 Masterplan
March 12, 2013
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Report and Discussion

Background:

The City of Tallahassee (City) is required by the Interlocal Agreement with the County to provide periodic updates to its Sewer Masterplan (Attachment #1). The Masterplan serves as the guide for the City's annual submittal of their proposed five-year Capital Improvement Program (CIP). The 2005 Water Sewer Agreement (WSA) provides that the County has reserved the right to identify areas to be considered with a higher priority for sewer service. The County is required to construct the collection system within the target area, and the City agrees to provide the conveyance connecting the system to the city. Further, the City agrees to operate and maintain the system once it is built. For each system to be built, there would be a separate Implementation Agreement executed.

Attachment #2 provides an extensive background regarding the County's input to the City's Sewer Masterplan and the associated proposed sewer capital projects. The specific area being addressed in this agenda item relates to the April 12, 2011 workshop when the Board approved the 2030 Master Sewer Plan Phase 2 to include the addition of the area west of the Woodville Rural Community for future sewer (Attachment #3).

Analysis:

Given the Comprehensive Plan designation of the Woodville Rural Community as a development node, combined with the plan's transfer of densities to within this node, it is desired that economic development occur in this designated rural community node. In order for the Comprehensive Plan densities to be possible, central sewer is required. Central sewer within Woodville Rural Community node remains a viable alternative.

However, considering that the densities of the Urban Fringe (areas west of the Woodville Rural Community) may not support central sewer, it may not be prudent to proceed with a central sewer option for the Woodville Urban Fringe. Onsite septic tank technologies continue to improve and it is expected that a cost-effective onsite system that meets Advanced Wastewater Treatment (AWT) standards could be developed in the relatively near future.

The Board's priority/focus has been the development of the Woodville Rural Community node as a vibrant economic center. Central sewer is a key factor to allow the crucial density to occur. This area has been designated in the City's Sewer Masterplan for decades for connection to its system. The Woodville Urban Fringe area, due to its more rural character, has not historically been included in the Masterplan, and staff recommends that the City not be required to amend its Masterplan to include this more rural area.

The removal of the request to amend the Sewer Masterplan to include the Woodville Urban Fringe area is consistent with all of the Board's actions to date. The Sales Tax Project #10 had three components, flood study, Woodville Rural Node Sewer, Woodville Urban Fringe Sewer. The project description is consistent with the approach being recommended in this agenda item to remove the urban fringe area from the City's 2030 Sewer Masterplan: provide central sewer to the Rural Community node and allow other AWT alternatives to be considered for the urban fringe area.

Title: Approval of Modification of Additional Woodville Sewer Requirements for City of Tallahassee 2030 Masterplan
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Options:

1. Approve the modification provided to the City of Tallahassee to amend their 2030 Sewer Masterplan deleting the requirement to include the additional area west of the Woodville Rural Community.
2. Do not approve the modification provided to the City of Tallahassee to amend their 2030 Sewer Masterplan to delete the requirement to include the additional area west of the Woodville Rural Community.
3. Board direction.

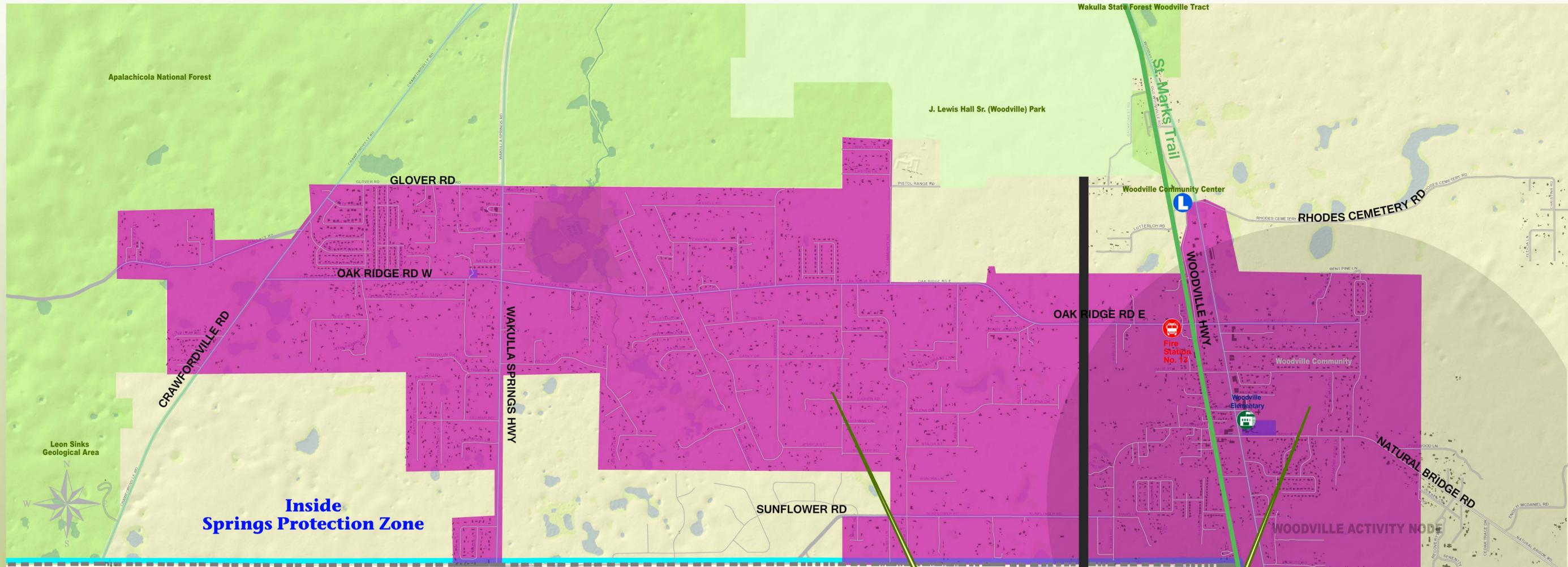
Recommendation:

Option #1.

Attachments:

1. Interlocal Agreement
2. Sewer Master Plan Historical Background
3. Woodville Rural Community and Woodville Urban Fringe Map

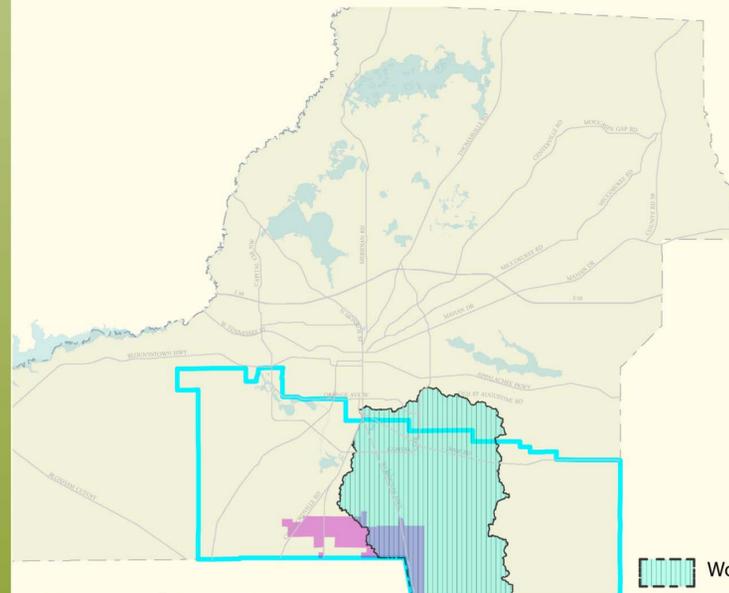
VSL/TP/KB/djw



Woodville Water Quality

Urban Fringe
Future Land Use

Woodville Rural
Community
Future Land Use



General Location

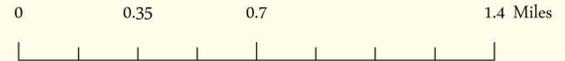
Legend

- Woodville Sewer
- St. Marks Trail
- Springs Protection
- Existing Sidewalks, Bike Routes
- Park Trails
- Parks
- Waterbodies

Woodville Water Quality Project Criteria:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Comprehensive Plan | <input checked="" type="checkbox"/> Water Quality Enhancements and Green Infrastructure |
| <input checked="" type="checkbox"/> Regional Mobility | <input checked="" type="checkbox"/> Stormwater/Sewer Capacity Improvements |
| <input type="checkbox"/> Greenway Master Plan | <input type="checkbox"/> Transportation Capacity Improvements |
| <input type="checkbox"/> Connectivity | <input checked="" type="checkbox"/> Core Infrastructure |
| <input type="checkbox"/> Complements BP2000 Project | |

Woodville Recharge Basin



This product has been compiled from the most accurate source data from Leon County and the City of Tallahassee. However, this product is for reference purposes only and is not to be construed as a legal document or survey instrument. Any reliance on the information contained herein is at the user's own risk. Leon County and the City of Tallahassee assume no responsibility for any use of the information contained herein or any loss resulting therefrom.