

Updated Stormwater Master Plan

Board of County Commissioners (BCC) Meeting

June 23, 2026

Purpose of Presentation

- To update the Board of County Commissioners (BCC) on the finalization of the Updated Stormwater Master Plan and to request the BCC accept the updated Stormwater Master Plan into service

Agenda

- Background
- Current Status
- Requested Action

Background

- Purpose of this project was to update the Stormwater Master Plan (2018)
- Updated Stormwater Master Plan contains all the new projects concepts from the new Basin Studies approved early 2026
- Also includes project concepts from various Nutrient Studies
- Provides projects prioritization using the same evaluation criteria as the basin studies, but on a County-wide basis.
- Creates a technical framework for future policy-making decisions regarding flooding protection and water quality.

Current Status

- County staff and consultants have concluded the countywide project concept rankings
- Draft updated Stormwater Master Plan is prepared and ready to enter service

Seminole County Stormwater Master Plan Update

June 23, 2026



Agenda

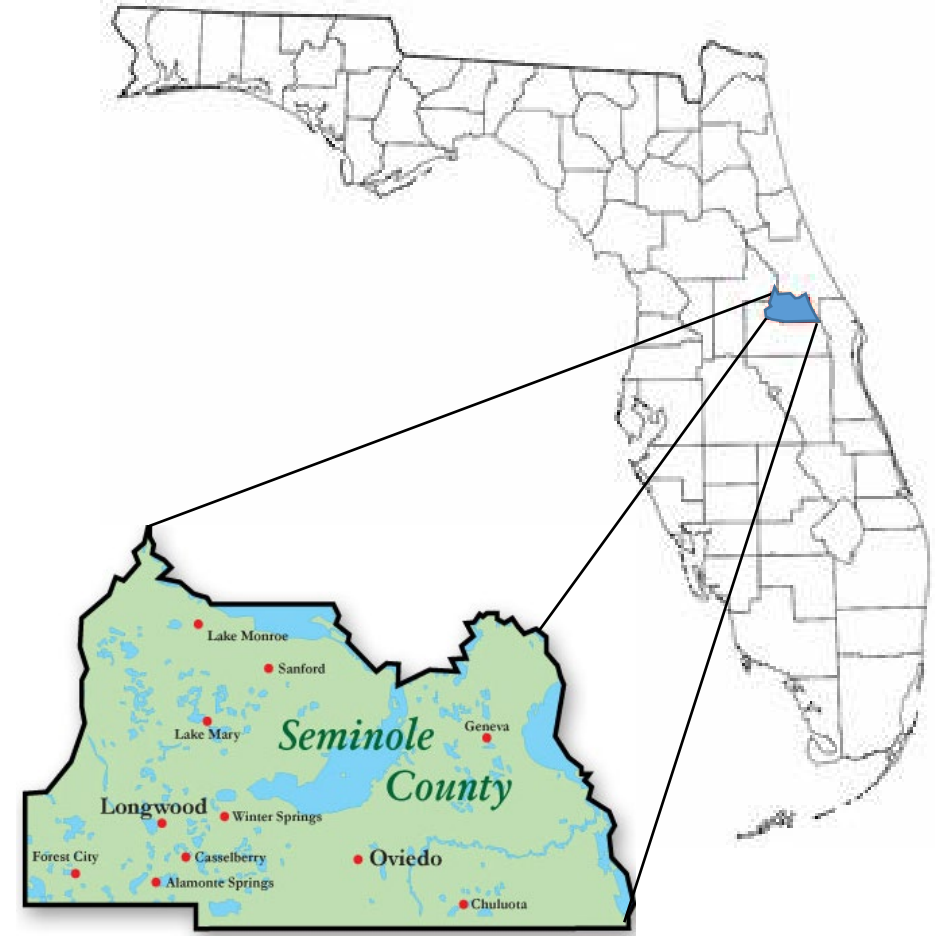
- Stormwater Master Plan (SWMP) Update Overview
- SWMP Update Approach
 - Data Collection
 - Project Screening
 - Evaluation Criteria
 - Site Assessments
 - Benefit Scoring
 - Cost Estimates
 - Project Prioritization





SWMP Update Project Overview

- Stormwater Master Plan Update Goal
- Update of the previous Stormwater Master Plan
- Prioritization of Projects from 8 Basin Studies
- Unincorporated Seminole County



1. Midway
2. Lake Harney
3. Little Wekiva – Big Wekiva – Yankee Lake
4. Lake Monroe
5. Big & Little Econlockhatchee
6. East County Basins – Lake Jesup
7. East County Basins – Howell Creek
8. East County Basins – Soldiers Creek, Gee Creek, & Little Lake Howell



Lake Burkett, Lake Martha, Lake Pickett, Lower Sweetwater Cove, Tuskawilla Lake, Lake Tony and Clear Lake



SWMP UPDATE APPROACH

SWMP Update Approach

The SWMP Update has 7 steps:

1. Data Collection
2. Project Screening
3. Evaluation Criteria
4. Site Assessments
5. Benefit Scoring
6. Cost Estimates
7. Project Prioritization



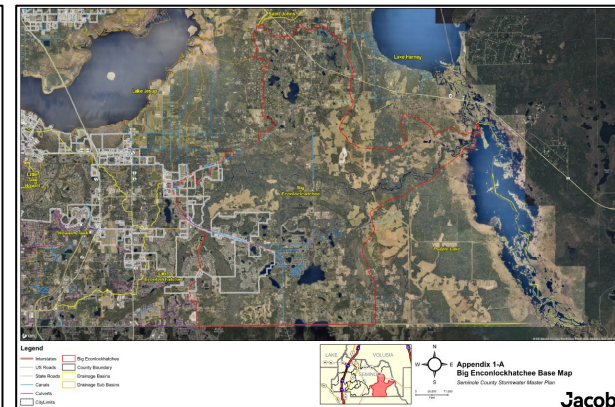
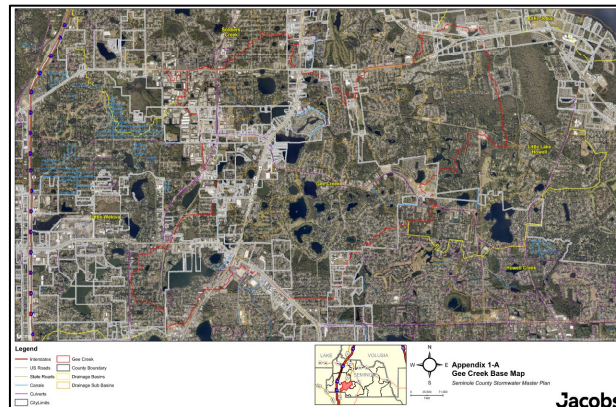
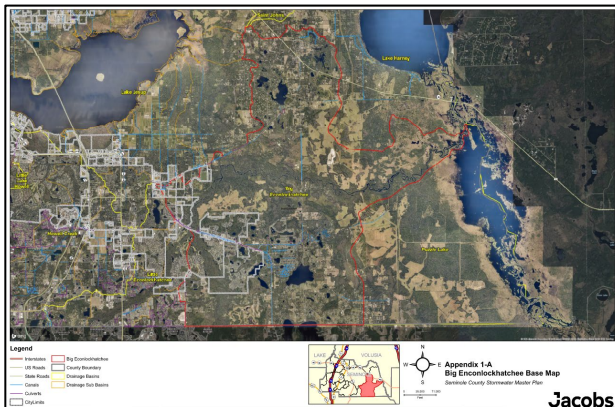


SWMP UPDATE APPROACH



Data Collection

- Data Collection and Review
 - Basin Studies
 - Drainage/Stormwater Maintenance Requests (for benefit/cost analysis)
 - Stakeholder Interviews with County, Jurisdictions, SJRWMD, FDOT, FDEP
- GIS Setup
 - GIS Data Collection from the County



Project Screening



- Review projects from draft and completed basin studies



SWMP UPDATE APPROACH

Data Collection

Project Screening

Evaluation Criteria

Site Assessments

Benefit Scoring

Cost Estimates

Project Prioritization

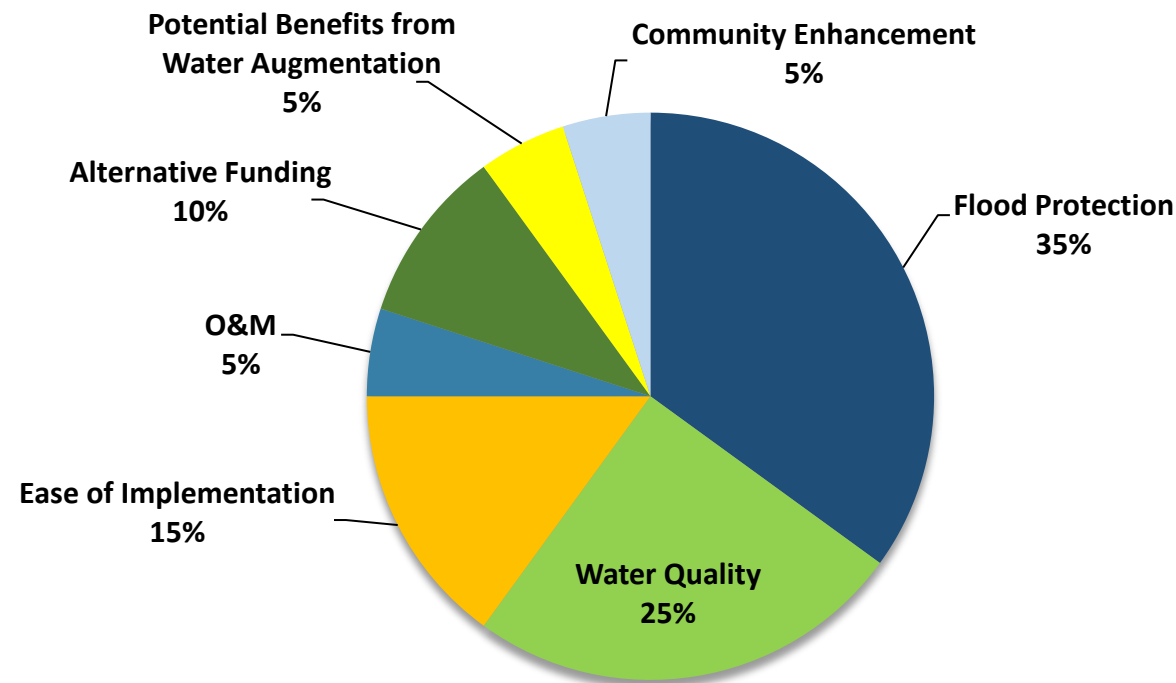
Evaluation Criteria



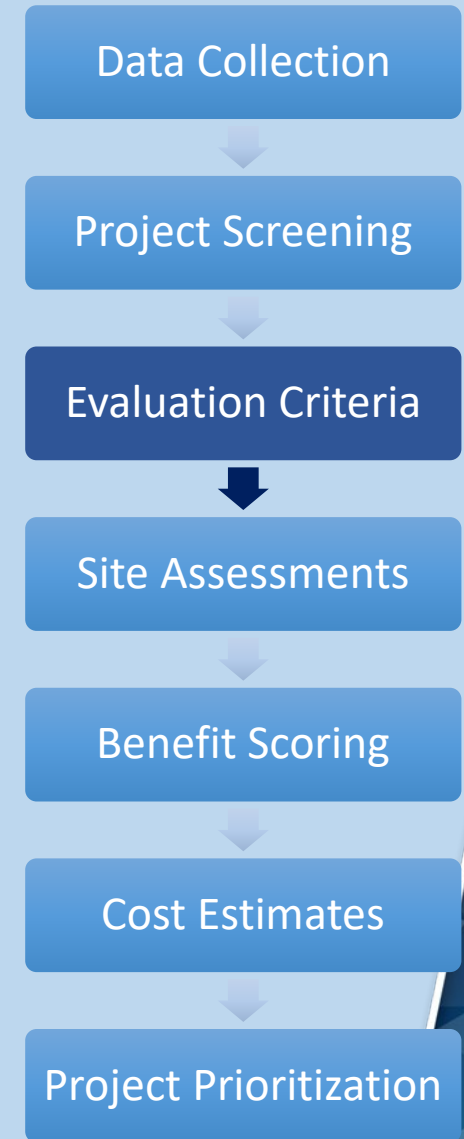
7 Scoring Categories:

- Flood Protection
- Water Quality
- Ease of Implementation
- Operations & Maintenance (O&M)
- Alternative Funding
- Potential Benefits from Water Augmentation
- Community Enhancement
- **Same criteria as basin studies**

Weighting Factors



SWMP UPDATE APPROACH

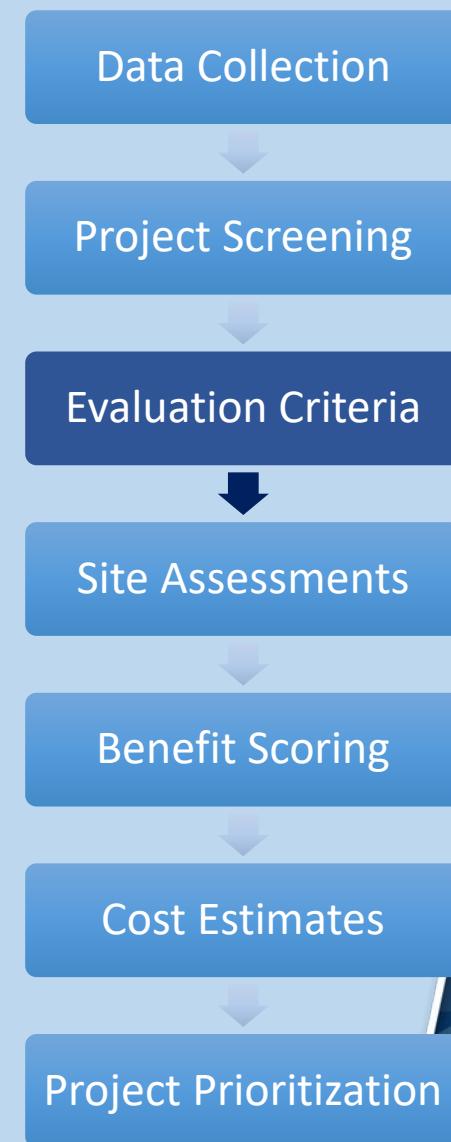


Evaluation Criteria



Benefit Scoring Group	Weighting Factor	Low Score Characteristics	High Score Characteristics
Flood Protection	35%	- No flood protection - Upstream within basin - No identified flooding problems	- Proximity to known problem areas (MaintStar, Historic Flooding, Roads-Stormwater Division) - Proximity to major conveyances, downstream within basin - Poor, existing level of service - Flood protection benefit
Water Quality	25%	- Low BMAP Priority/Not-Impaired - No water quality benefit	- High BMAP priority - High BMP efficiency - Upstream basins (projects impact downstream impaired basins, benefit to multiple basins)
O&M	5%	- High frequency - High complexity	- Low frequency - Low complexity
Ease of Implementation	15%	- Proximity to wetlands - Private property	- MSBU - County-owned or right-of-way - No wetlands - High density of MaintStar records
Alternative Funding Opportunity	10%	- Low water quality benefit/flood protection - Nominal area of impact	- Grant or cost-share eligible - High water quality benefit/flood protection - Significant area of impact
Potential Benefits from Water Augmentation	5%	- No storage of stormwater - Discharge Area proximity	- New storage of stormwater - High Recharge Area proximity
Community Enhancement	5%	- Outside of target areas - Distant from trails and parks - Project type without aesthetic potential	- Target Area - Close proximity to trails and parks - Project type has potential aesthetic features

SWMP UPDATE APPROACH



Evaluation Criteria – Flood Protection

SWMP UPDATE APPROACH

Data Collection

Project Screening

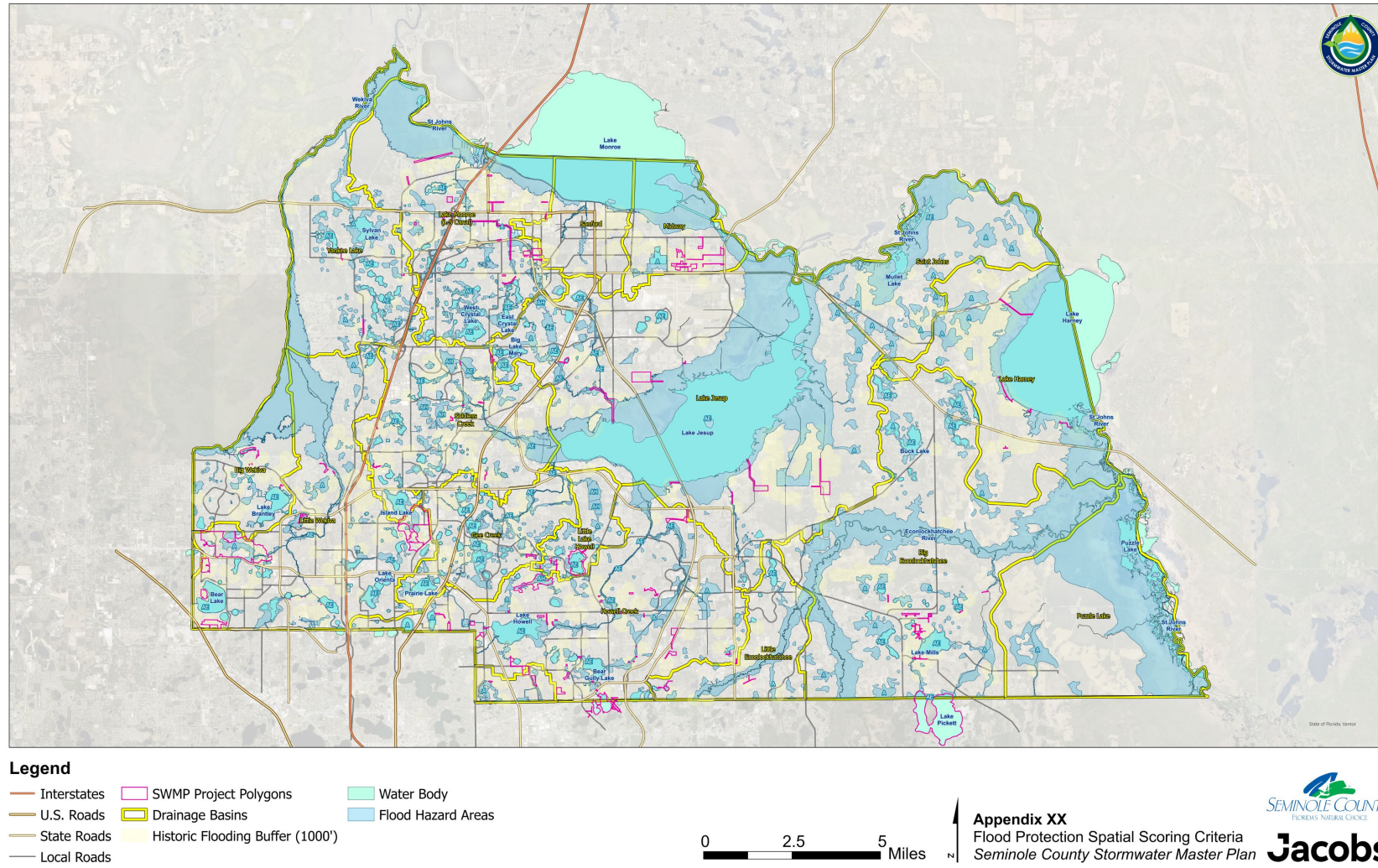
Evaluation Criteria

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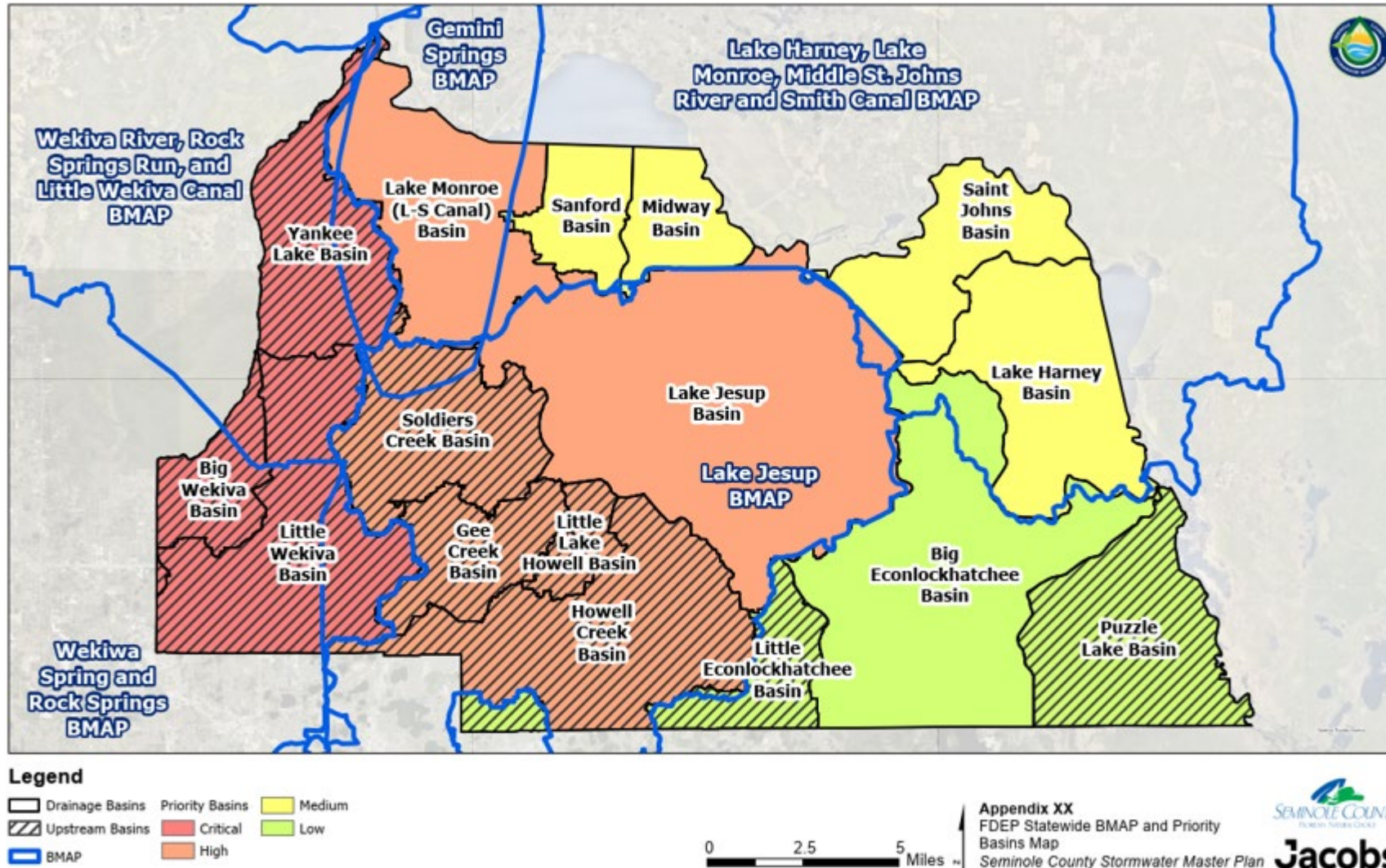
Project Prioritization



Flood Protection:

The flood protection criteria represent the benefit the project provides to reducing flooding of infrastructure or property.

Evaluation Criteria – Water Quality



SWMP UPDATE APPROACH

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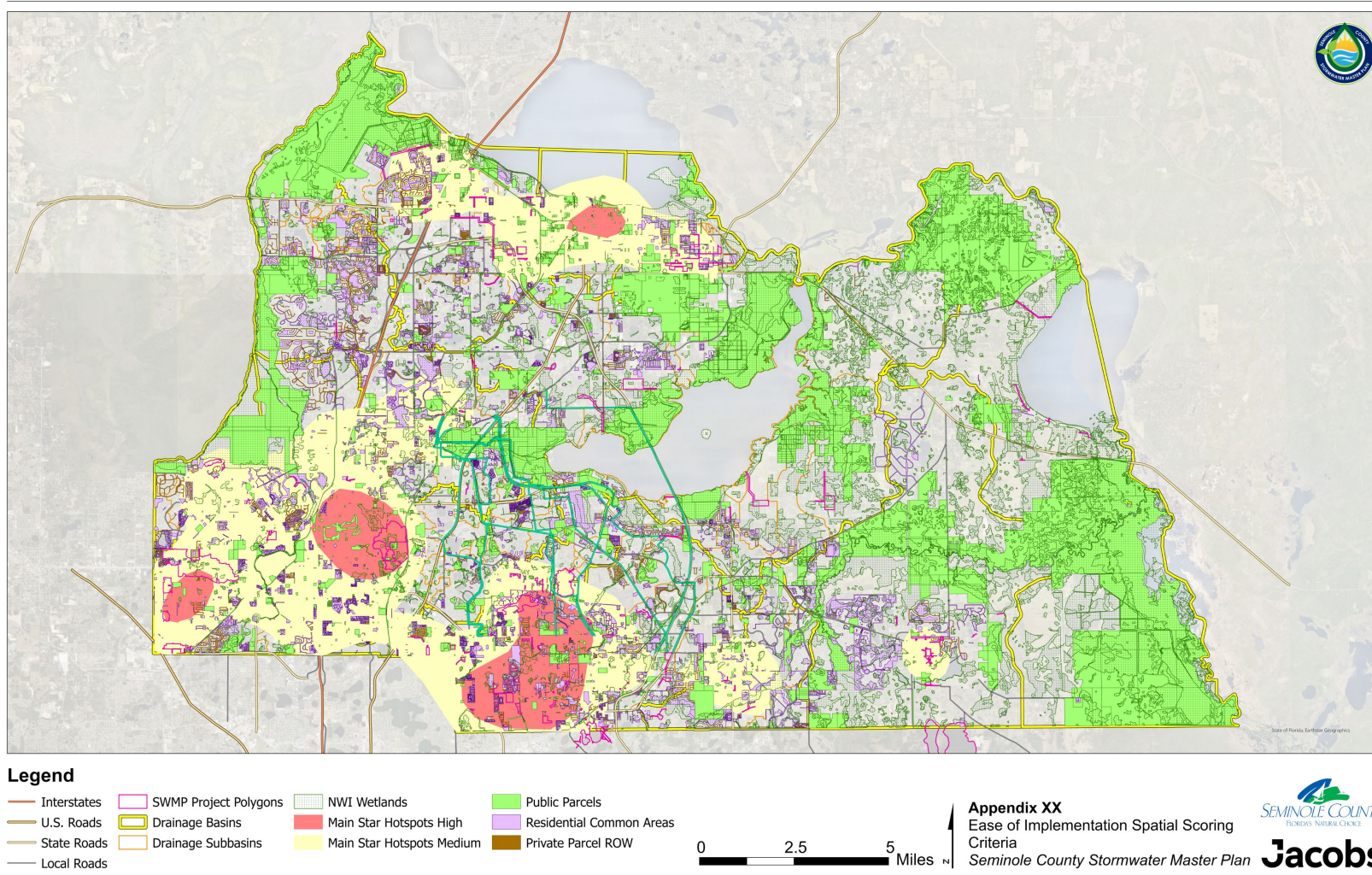
Cost Estimates

Project Prioritization

Water Quality:

These criteria are for the potential improvement to water quality of receiving water bodies

Evaluation Criteria – Ease of Implementation & OM



Ease of Implementation and O&M: These criteria represent the ability of a project to move forward without delays due to outside influences, such as land acquisition or wetland impacts. O&M criteria represent those projects that can easily be incorporated into the County's current ongoing operations.

SWMP UPDATE APPROACH

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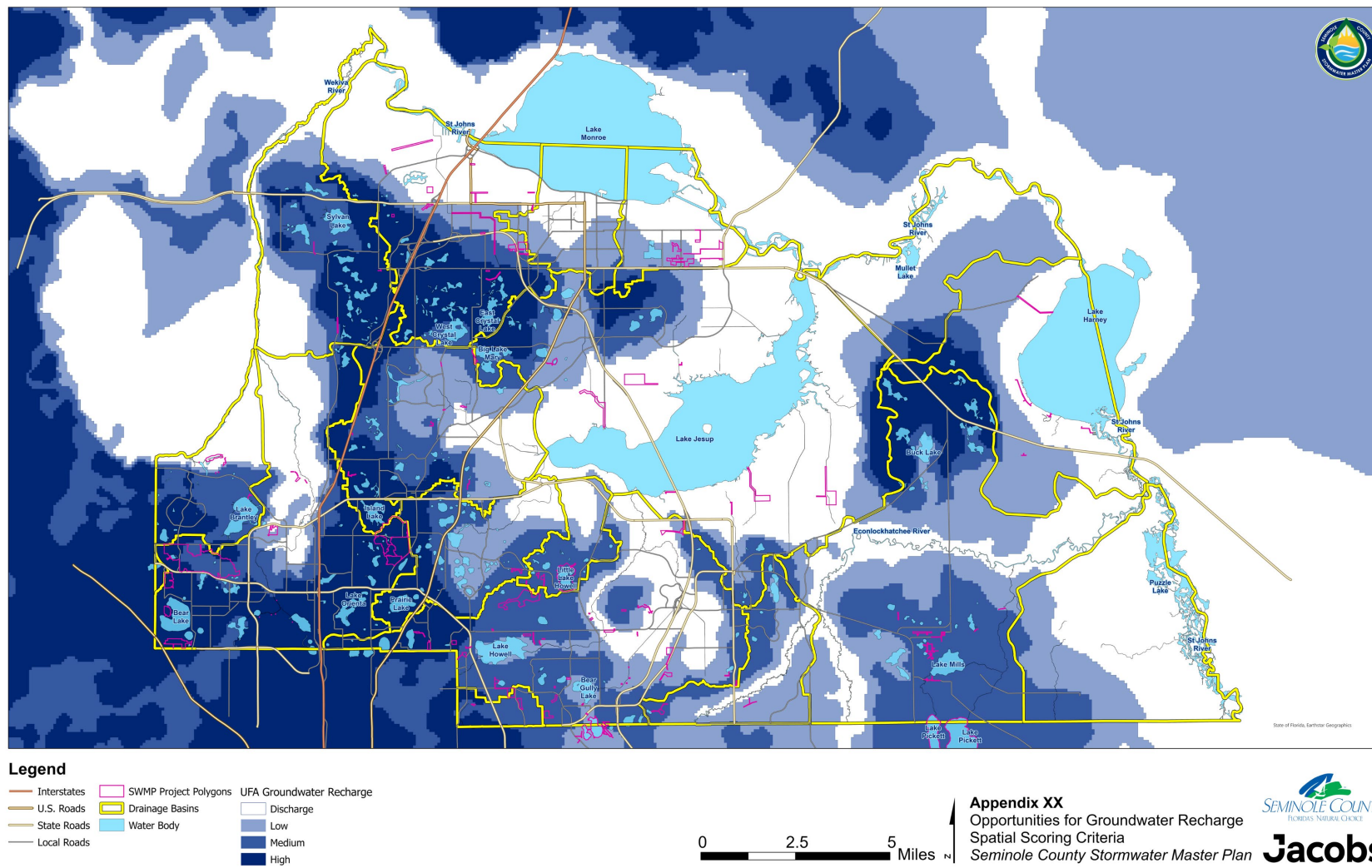
Site Assessments

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Cost Estimates

Project Prioritization

Evaluation Criteria – Water Augmentation



Potential Water Augmentation Benefits:

Potential Benefits from Water Augmentation: Stormwater can provide benefits to the County's water supply by integrating it into their water management approach. This integration is done in three ways; providing a source for groundwater recharge, water for landscape irrigation, and direct augmentation of stressed wetlands and lakes.

SWMP UPDATE APPROACH

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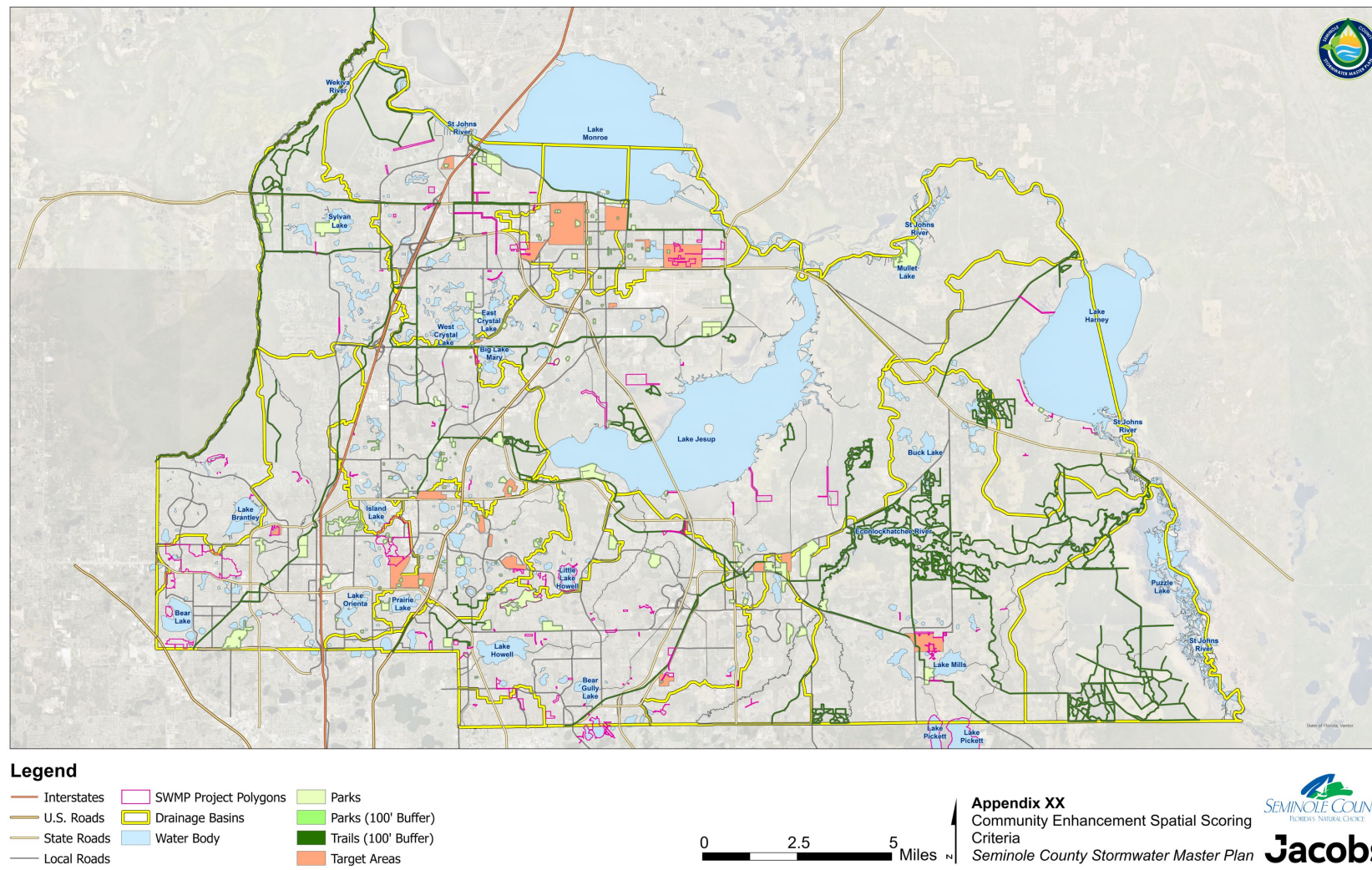
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Evaluation Criteria – Community Enhancement



Community Enhancement:

These criteria include opportunities to enhance living conditions in target areas, and potential aesthetic enhancements along parks and trails.

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Benefit Scoring

- The criteria and scoring methodology is applied to each project
- Followed by weighting factor
- Results in Total Benefit Score



SWMP UPDATE APPROACH



Benefit Cost Ratio



- Review and update conceptual costs for each project
- Used to help develop a Benefit Cost Ratio

$$\text{Benefit Cost Ratio} = \frac{\text{Project Benefit Score}}{\text{Cost Score}}$$

DRAFT PRIORITIZATION LIST - SEMINOLE COUNTY STORMWATER MASTER PLAN - NOVEMBER 2025

Ranking	Total Cost Benefit Ratio Score	Cost Estimate	GISID	PROJECT NAME	REPORT	DESCRIPTION	GOALS
1	9181	\$163,270.45	41	41 - Lockhart Smith Canal - Upstream of Rinehart Road	Lake Monroe (L-S Canal) Basin Study Improvement Projects Concept Analysis	Improvements include: - Raise the Canal access road (north bank), Smith Canal Road, for approximately 190 ft to a minimum elevation of 30.50 ft NAVD88 (inside berm). - The regrading of the access road will prevent the 25-year, 24-hour stage at the Canal from overtopping the bank, with no adverse impacts to the 100-year FEMA floodplain.	Reduce Flooding
2	9004	\$140,878.71	92	92 - Tuska Bay Court	Little Lake Howell Watershed - Alternatives Analysis Task Memorandum	Proposed improvement include: - Reduce road inundation by raising the PGL of Tuska Bay Court by approximately 148 feet.	Reduce Flooding
3	6601	\$213,981.25	47	47 - Brown Avenue	Lake Monroe (L-S Canal) Basin Study Improvement Projects Concept Analysis	Drainage improvements for Brown Avenue include maintenance and regrading of the outlet ditch on the east side of the railroad tracks behind the Sanford Amtrak Auto Train Station.	Reduce Flooding
4	6031	\$325,048.23	48	48 - West Airport Blvd.	Lake Monroe (L-S Canal) Basin Study Improvement Projects Concept Analysis	The key improvements for this concept include: 1. Regrade portion of the West 22nd Street roadside ditch along the south side of the road to accommodate the additional flow and proposed outfall pipe invert. 2. Upsize the storm pipes under West Airport Boulevard that discharge flows from east to west of the intersection. 3. Replacement of existing storm drain at the southeast corner of the intersection will require a small easement at parcel 35193051716000010.	Reduce Flooding
5	5920	\$306,786.77	46	46 - School Street	Lake Monroe (L-S Canal) Basin Study Improvement Projects Concept Analysis	The key improvements for this concept include: 1. Replacement and upsizing of School Street cross-drain at the Elder Creek crossing to two 4' by 8' box culverts. 2. Provide bank stability measures upstream and downstream of the crossing to transition with existing channel grading. 3. Continue maintenance along Elder Creek.	Reduce Flooding
6	5583	\$371,776.53	101	101 - Rutledge Road	Soldiers Creek Watershed - Alternatives Analysis Task Memorandum	Proposed improvements include: - increase control structure pipe to 36-inch diameter	Conveyance
7	5355	\$274,541.50	50	50 - Palm Ter Ditch	Lake Monroe (L-S Canal) Basin Study Improvement Projects Concept Analysis	The key improvements for this concept include: 1. Construction of concrete flumes along the north and south sides of the cul-de-sac to allow positive drainage from the yard and road to the outfall. 2. Keep and increase maintenance along the ditch east of the road to remove debris and vegetation. 3. Provide fifteen (15) foot wide proposed easements along the north/south outfall ditch to provide adequate maintenance along the ditch. 4. Acquisition of additional right-of-way along the outfall ditch will be necessary to perform adequate maintenance along the ditch and construction of the concrete flumes. The construction and maintenance activities will require easements at seven parcels: 281930504000000050, 281930504000000020, 281930503000000080, 1619305AC00000087A, 1619305AC00000087C, 1619305AC00000096A, and 1619305AC00000096D.	Reduce Flooding
8	4293	\$436,490.64	58	58 - Brumley Road	Big and Little Econlockhatchee Basin Study Report	Proposed improvements include: - Install a piped stormwater system that collects runoff on the south side of Brumley Road and routes it to Lake Gore. The stormwater system includes three (3) 18" RCP stormsewer pipes, three (3) mitered end sections, and one (1) ditch bottom inlet. - Provide additional storage by regrading the south drainage ditch. A 3-foot soft shoulder is proposed along the swale with 1:4 (V:H) front and 1:3 (V:H) back slopes.	Reduce Flooding

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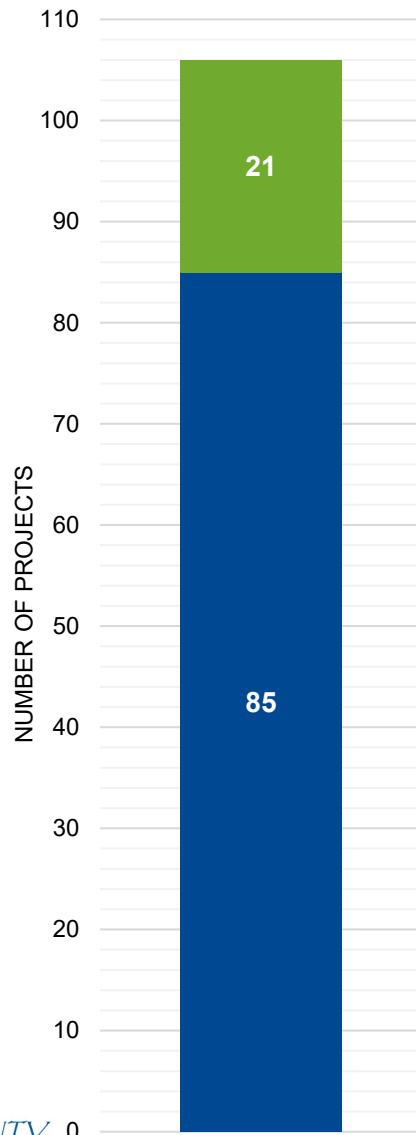
- Prioritize projects using Total Benefit Score and Benefit Cost Ratios

Overall Ranking	Category Rank	Project name	Project Identifier (GSID)	Cost Estimate	Flooding Criteria Score	Water Quality Score	O&M Score	Ease of Implementation Score	Alternative Funding Score	Community Enhancement Score	Potential Benefits (water Augmentation) Score	Total Benefit Score	Overall Benefit Cost Ratio Score
1	FL-1	92 - Tuska Bay Court	92	\$131,000.00	1	1	5	5	5	1	1	44	6152
2	FL-2	41 - Lockhart Smith Canal - Upstream of Rinehart Road	41	\$169,000.00	5	1	5	1	1	1	1	52	5636
3	FL-3	90- Little Lake Howell Outfall Ditch	90	\$130,000.00	2	1	4	1	5	1	1	38	5354
4	FL-4	101 - Rutledge Road	101	\$286,000.00	5	1	5	5	5	1	1	72	4611
5	FL-5	47 - Brown Avenue	47	\$226,000.00	3	1	4	5	1	1	1	49	3971
6	FL-6	48 - West Airport Blvd.	48	\$349,000.00	5	1	5	5	1	5	1	68	3569
7	FL-7	50 - Palm Ter Ditch	50	\$273,000.00	5	1	4	1	1	1	1	51	3422
8	FL-8	91 - Sunset Road at Center Drive	91	\$346,000.00	3	1	5	5	5	1	1	58	3070
9	FL-9	58 - Brumley Road	58	\$353,000.00	5	1	4	1	5	1	1	59	3061
10	FL-10	Timberbrook and Bridge	22	\$279,000.00	3	1	4	1	5	1	1	45	2954
11	FL-11	95 - Country Club Heights / Crystal Creek Subdivisions	95	\$443,000.00	5	1	5	1	5	1	1	60	2481
12	WQ-1	29 - Northwestern BMP 1	29	\$460,000.00	1	5	2	5	5	1	1	61	2429
12	WQ-1	30 - Northwestern BMP 2	30	\$460,000.00	1	5	2	5	5	1	1	61	2429
12	WQ-1	31 - Northwestern BMP 3	31	\$460,000.00	1	5	2	5	5	1	1	61	2429

SWMP UPDATE APPROACH



Prioritized Projects by the Numbers



85

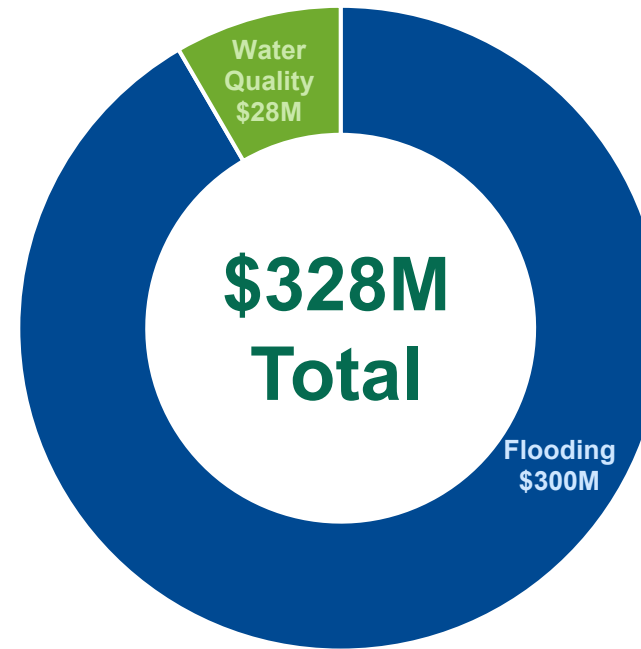


Flooding
Projects

21



Water Quality
Projects



■ Flooding

■ Water Quality

Project Sheets



SWMP UPDATE APPROACH

Data Collection

Project Screening

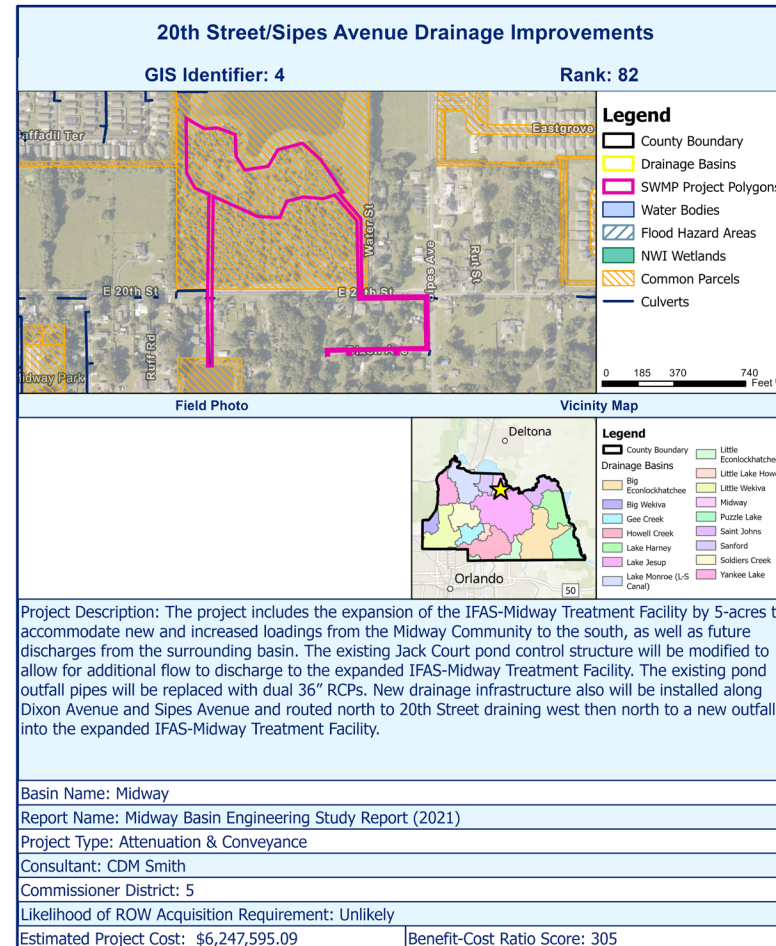
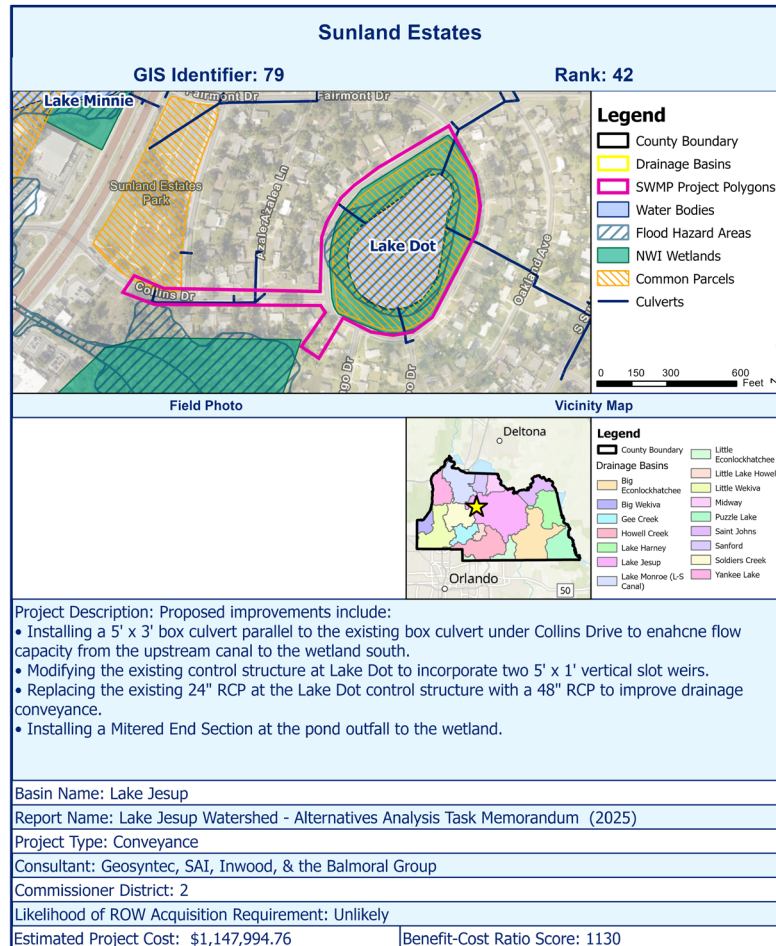
Evaluation Criteria

Site Assessments

Benefit Scoring

Cost Estimates

Project Prioritization



Activities to Date



Data
Collection



Project
Screening



Evaluation
Criteria



Site
Assessments



Benefit
Scoring



Cost
Estimates



Project
Prioritization



Recommended Action

- Board approval for acceptance into service of the Updated Stormwater Master Plan as recommended by staff.