FLORIDA-ALABAMA REGIONAL

STORMWATER RESILIENCE

PILOT PROJECT

Final Report

DRAFT

11.04.26

EMERALD COAST REGIONAL COUNCIL

Florida-Alabama TPO Transportation Planning Organization

HDR

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Acronyms

ADA	Americans with Disabilities Act
AOI	Area of Influence
BMAP	Basin Management Action Plan
BMP	Best Management Practice
CAR	Community Access Road
CCMP	Comprehensive Conservation and Management Plan
CFP	Cost Feasible Plan
CIP	Capital Improvement Plan / Program
DST	District Stormwater Team
ECOS	Environmental Conservation Online System (USFWS)
ECRC	Emerald Coast Regional Council
ECUA	Emerald Coast Utilities Authority
ELA	Environmental Look Around (predecessor to WATERSS)
ERP	Environmental Resource Permit / Program
ESA	Endangered Species Act
EST	Environmental Screening Tool
ETDM	Efficient Transportation Decision Making
F.A.C.	Florida Administrative Code
FAST Act	Fixing America's Surface Transportation Act
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FL-AL TPO	Florida-Alabama Transportation Planning Organization
FLU	Future Land Use
FL-SOLARIS	Florida State Owned Lands and Records Information System
FNAI	Florida Natural Areas Inventory
FPID	Financial Project Identification
FPL	Florida Power & Light Company
FWC	Florida Fish and Wildlife Conservation Commission
GIS	Geographic Information System
GPS	Global Positioning System
HBTS	Holley-by-the-Sea
HOA	Homeowner’s Association
IPaC	Information for Planning and Consultation
LRTP	Long-Range Transportation Plan
MANLAA	May Affect, Not Likely to Adversely Affect
MPO	Metropolitan Planning Organization
NAS	Naval Air Station
NEPA	National Environmental Policy Act of 1969
NRCS	Natural Resources Conservation Service
NWFWMD	Northwest Florida Water Management District

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OFW	Outstanding Florida Water
OLF	Outlying Landing Field
PD&E	Project Development and Environment
PEL	Planning and Environmental Linkages
Phase I ESA	Phase I Environmental Site Assessment
ROW	Right-of-Way
SIT	Stormwater Implementation Team
SMARt	Stormwater Management Alternatives Report
SOW	Scope of Work
SR	State Road
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TP	Total Phosphorus
TPO	Transportation Planning Organization
TRIP	Transportation Regional Incentive Program
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WATERSS	Watershed Approach to Evaluate Regional Stormwater Solutions
WPI	Work Program Item

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Acknowledgements

Many partners across the region made this pilot project possible. The **Stormwater Implementation Team** was the multi-agency advisory committee that shaped the pilot's methodology, corridor screening, and site selection. The Team included representatives from the **Northwest Florida Water Management District**, the **Florida Department of Transportation**, the **Florida Department of Environmental Protection**, the **Pensacola and Perdido Bays Estuary Program, Escambia County, Santa Rosa County**, the **City of Pensacola**, the **City of Milton**, the **City of Gulf Breeze**, and the **City of Orange Beach, Alabama**. Their combined local knowledge and technical judgment shaped every aspect of this project. **Santa Rosa County** staff from multiple departments engaged constructively throughout. The demonstration site would not have been possible without the County's willingness to be a partner. The **Holley-by-the-Sea Homeowner's Association**'s board and staff met with the project team several times and helped promote the community preference survey. That partnership was essential to the survey's response rate and quality of the input received. One hundred thirty-two **community members** took the time to complete the preference survey during April and May 2026. The **Florida Department of Transportation District 3** provided additional context and support throughout, particularly on the WATERSS process.

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Executive Summary

Stormwater management is a significant driver of the high costs of road construction in Florida. FDOT and most local governments conventionally use fenced ponds to treat stormwater for individual projects. These ponds consume prime land while returning little else to the surrounding community. The Florida-Alabama Transportation Planning Organization funded this pilot to test whether a different pattern is possible: identifying opportunities for regional, multifunctional stormwater facilities early enough to serve both FDOT treatment requirements and other community needs.

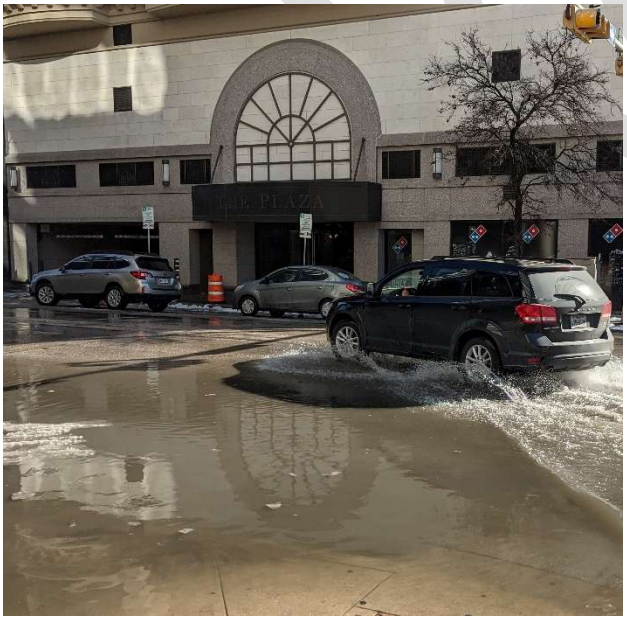


Figure 1 Traffic on a Street with Standing Water

The pilot produced two deliverables:

1) A repeatable process for identifying and advancing opportunities for multifunctional stormwater facilities, using projects from the long-range transportation plan. Chapter 2 describes the full process undertaken during this pilot. Chapter 6 includes a recommended six-step process for future use. The six steps are to identify eligible FDOT projects, consider key factors, conduct corridor-level screening, filter for site viability, commission a technical feasibility study, and develop a conceptual design. The Stormwater Opportunity Screening Checklist in Appendix I is a quick, first-level tool to start the process. The process is designed to complement FDOT's Watershed Approach to Evaluate Regional Stormwater Solutions (WATERSS) by flagging opportunities and local partners early, so they are already on the table when FDOT evaluates a project's stormwater needs.

2) A demonstration concept plan was created for a county-owned parcel in the Holley-by-the-Sea neighborhood of Navarre. At this site, the project team moved through the full process, including a feasibility study, community engagement, and conceptual design. The concept, presented in Chapter 5, is designed to provide water-quality treatment and attenuation for approximately 3,600 linear feet of a potential future roadway while also

serving as a neighborhood park with walking trails, elevated boardwalks, a playground, picnic shelters, and other amenities. The concept plan preserves the site's existing wetlands and habitat features while making them more accessible to the surrounding community. The concept and its supporting documentation position Santa Rosa County to pursue grants, state allocations, or other partnerships to develop this park site as the transportation corridor advances. The concept is planning-level only and does not commit Santa Rosa County, FDOT, or any other agency to funding or construction. HDR's planning-level estimate for the full park is about $8.0 million.

The pilot shows that the process is not always straightforward. Most candidate sites, even those that appear promising at first, will not advance. Some fail at the corridor-screening stage because right-of-way is constrained or the available parcels are too small. Others fail because of acquisition costs, environmental regulations, or the absence of a willing local partner. That is the nature of developing a complex partnership. Finding sites where all the pieces align requires the screening of many potential locations and maintaining flexibility as circumstances change. Local multi-governmental organizations are uniquely positioned to help. The FL-AL TPO has the local and regional perspective to evaluate FDOT projects, local drainage needs, and community priorities together. TPO meetings regularly bring together counties, municipalities, state agencies, and other organizations required for a successful project. The Navarre site advanced because many pieces fell into place: an FDOT-funded PD&E in the area, a willing parcel owner, a compatible future land use designation, other nearby drainage needs, a willing local government partner, and an active and enthusiastic homeowner's association.

This process also identified two additional corridors as strong candidates for future screening: SR 297 (Pine Forest Road) and SR 173 (Blue Angel Parkway).

How to Read This Report

TPO board members and general readers may want to focus on the introduction and context in Chapter 1, the conceptual plan in Chapter 5, and the recommendations in Chapter 6.

Practitioners applying the framework to future corridors, such as TPO/MPO staff, FDOT district staff, and consultants should read Chapters 2 and 6 together, review the screening checklist in Appendix I, and consult Chapter 3 for a sense of what the feasibility evaluation step requires.

Santa Rosa County and community members interested in the pilot site's design should focus especially on Chapters 3 through 5.

Chapter 1: Introduction and Purpose

Project Background

Stormwater runoff is one of the most impactful environmental issues facing northwest Florida. Development pressure, poorly draining soils, and increasingly heavy rainfall events make stormwater management a major concern for long-term infrastructure maintenance and quality of life. Stormwater management is a major part of road-building costs. With changes to Florida's statewide stormwater rule now in effect, tightening pollutant-reduction standards and mandating measurable water-quality improvement, agencies need more creative stormwater management approaches.

Capacity projects undertaken by the Florida Department of Transportation (FDOT) typically generate stormwater runoff that must be treated and attenuated. The conventional solution is to develop stormwater treatment sites sized specifically to treat the runoff from a segment of a particular project. Most designs require creating many treatment ponds that remain fenced off from the community and serve a single purpose. The result is a landscape dotted with detention ponds that remain cut off from the surrounding communities.

The goal of this pilot project is to develop a process to identify specific situations where alternative stormwater treatment methods are possible and to help facilitate the partnerships to execute them. A regional approach to stormwater management, rather than addressing each project's stormwater needs in



Figure 2 Large Stormwater Pond Located in Escambia County

isolation, considers multiple community needs at once, including water-quality treatment and attenuation, recreation, and habitat creation, while also addressing stormwater treatment needs at other sites in the area.

Several examples from around Florida demonstrate the potential benefits of multifunctional stormwater projects. Cascades Park in Tallahassee and Depot Park in Gainesville (see Figure 4) have become important public spaces that also manage significant amounts of stormwater.

Within the FL-AL TPO region, several projects show that the multifunctional model can work locally. The Government Street Regional Stormwater Pond at Corinne Jones Park in downtown Pensacola (shown in Figure 3) treats runoff from roughly 40 acres of the downtown basin while providing a walking path, playground, and restored wetland habitat. Likewise, Carpenter Creek Headwaters Park, off Olive Road, pairs flood protection and water-quality improvements with walking paths, picnic areas, and pollinator gardens.

These examples differ from the projects explored in this report in one significant way. In each case, a single local government controlled the land, held the legal responsibility to treat the stormwater, provided the funding, and directed the design. Aligning a regional stormwater facility with an FDOT corridor project is more complicated, because the land, the need, the funding, and the design decisions are split across two or more agencies. That coordination is harder, but it has been done, both in Florida with FDOT as a partner as well as across the country in a variety of creative ways with other state departments of transportation.



Figure 3 Corinne Jones Park in Pensacola, FL – Concept Plan



Figure 4 Map of Depot Park in Gainesville, FL

The City of Rockledge in Brevard County offers one of the clearest Florida examples. After a severe flood, the city adopted a stormwater master plan and began expanding Barton Park Manor Lake. The lake first grew from 7 to 10 acres, and later phases added 55 acres of park and lake and enhanced another 40 acres of adjacent wetlands. Because the expanded lake had capacity to spare, the city reached an agreement with FDOT when the department widened US 1 next to the park. Instead of building treatment ponds along the corridor, FDOT routed the highway's runoff to the city's regional facility, which removes trash and sediment before the water reaches the lake. The arrangement brought the city $1.2 million in revenue and saved FDOT several million dollars. Rockledge gained a larger park and better flood protection. FDOT avoided buying land for ponds it would have had to build and maintain on its own.

Other FDOT partnerships show that the shared benefits do not have to be recreational. In Altamonte Springs, the city proposed sending runoff from Interstate 4 to Cranes Roost, an existing lake the city uses to store reclaimed water for irrigation. The partnership, known as A-FIRST, eliminated FDOT's need to buy right-of-way for a new pond and tunnel a large pipe to reach it. The highway runoff now supplements the city's irrigation supply, which reduces demand on the aquifer and overflows into the Wekiva River. FDOT contributed $4.5 million of the $12.5 million cost, and the St. Johns River Water Management District, the Florida Department of Environmental Protection (FDEP), and the city covered the rest. The city owns and maintains the system.

In Orlando, a Joint Project Agreement during the I-4 Ultimate reconstruction allowed part of the interstate's runoff to be treated in a series of interconnected ponds at the city-owned Dubsdread Golf Course. The project treats runoff from nearly 397 acres of highway and neighborhood, rehydrates wetlands on the course, and captures trash.

State DOTs in other parts of the country have formed similar partnerships for creative stormwater management. One of the most memorable is at the North Carolina Zoo in Asheboro (see Figure 5). The North Carolina Department of Transportation (NCDOT) prepared a feasibility study and construction drawings for a stormwater wetland on zoo grounds. The wetland treats runoff from a state highway and an 11-acre visitor parking lot. The zoo used NCDOT's study to win a $400,000 construction grant, and the zoo now owns and maintains the wetland. NCDOT monitors water quality and receives credit toward its stormwater permit. With more than one million visitors in 2022, the zoo also gives the wetland a large audience for environmental education. The approach is similar to what this pilot offers Santa



Figure 5 Stormwater Pond at the North Carolina Zoo

Rosa County: a planning-level study that a local partner can use to compete for construction funding.

The largest example comes from Denver. There, the City and County of Denver partnered with the Colorado Department of Transportation (CDOT) and the regional transit agency on the Platte to Park Hill program. The roughly $300 million program gave a large, flood-prone basin in north Denver a new outlet to the South Platte River. Along the way, it rebuilt Globeville Landing Park, created a greenway along 39th Avenue, and added regional detention at two golf courses. CDOT's reconstruction of Interstate 70 relies on parts of the same drainage system.

Across these examples, successful projects share a few traits. Each paired a DOT need with a local partner that already had a goal of its own, such as a park, a water supply, a teaching site, or neighborhood flood protection. In most cases, the opportunity emerged while the road project was still in planning or design. These opportunities must be identified early to work. This pilot asks whether a review team supported by TPO staff can help find them early, using projects already identified in the long-range plan, and what early conceptual design for a promising site could look like.

Project Purpose

FDOT has recognized the need to find these opportunities earlier. For many years, the department relied on a practice called the Environmental Look Around. Under it, district drainage engineers looked for regional stormwater partners while a project was being designed. In a 2025 national study of DOT stormwater partnerships, FDOT reported that this approach depended too much on luck and on individual staff, and that partnerships were often found late in design. FDOT replaced it with the Watershed Approach to Evaluate Regional Stormwater Solutions (WATERSS) (see Figure 6). WATERSS evaluates stormwater on a watershed basis, brings partner agencies into project review, and aims to identify partnerships at the planning stage.

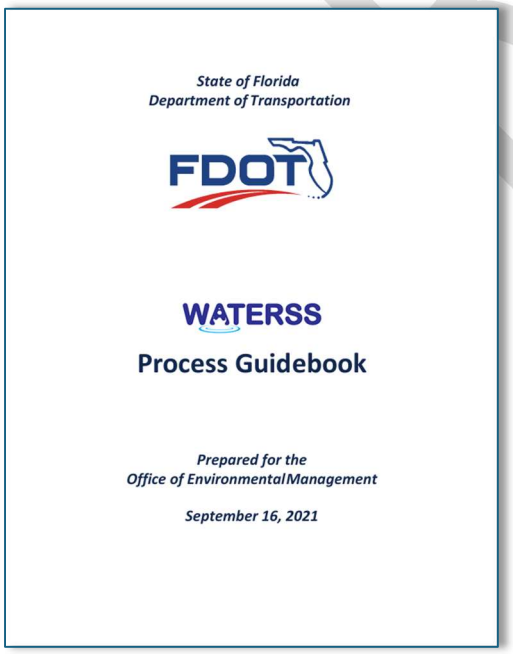


Figure 6 FDOT WATERSS Guidebook

This pilot complements WATERSS and FDOT's Efficient Transportation Decision Making (ETDM) process. It also supports early environmental planning under the National Environmental Policy Act (NEPA) and the Federal Highway Administration's Planning and Environmental Linkages (PEL) approach. PEL considers environmental, community, and economic goals early in transportation planning and carries the information developed there into environmental review.

The pilot is not intended to change how the LRTP is developed. Instead, a separate stormwater review team, convened with TPO staff support, reviews LRTP projects that have a PD&E funded or underway and looks for sites where a regional facility could also meet local needs. Because the team includes local governments, it can bring local drainage concerns and potential partners into the conversation early, and its findings can be shared with FDOT through ETDM and WATERSS. The goal is to have a willing partner and a candidate site already identified when FDOT evaluates a project's stormwater needs. Chapter 6 lays out the recommended process.

The Florida-Alabama TPO funded this pilot with Transportation Management Area (TMA) funds to pursue two related goals:

1. **Develop a replicable process** that uses projects identified in the long-

range transportation plan to find opportunities for regional stormwater facilities that meet both FDOT's stormwater needs and broader community needs.

2. **Demonstrate the community benefits** that can result from pursuing and developing a conceptual plan, documenting lessons learned, and formulating recommendations for future projects.

The intent is to give FDOT, local planners, and decisionmakers a practical resource for identifying shared stormwater opportunities. This report documents the methodology the project team used, including corridor screening, site evaluation, technical feasibility review, stakeholder engagement, and conceptual design. Although the process is intended to apply broadly, much of this report focuses on the details of the Navarre pilot site, because working through a real site is the best test of the process.

Scope Overview

The project included five work areas, each addressed in this report:

1. **Stakeholder coordination.** Emerald Coast Regional Council (ECRC) staff serving the FL-AL TPO convened a multi-agency Stormwater Implementation Team (SIT) to guide the pilot. Chapter 2 documents the team's membership, meeting process, and outcomes.

2. **Priorities and needs.** The FL-AL 2045 Long-Range Transportation Plan and Cost Feasible Plan provided the information needed to identify FDOT corridors where stormwater needs could align with community recreation, greenspace, and drainage needs. (The Stormwater Pilot project was initiated prior to the start of the 2050 LRTP Update.) A staged review and corridor screening narrowed the field to a demonstration site. Chapter 2 describes this process, and Chapter 6 adapts it into a framework for future use.



Figure 7 Successful Projects Balance Multiple Criteria

3. **Civic engagement.** In addition to ongoing coordination with the SIT, the project team held dozens of meetings with potential project partners, the homeowner's association, and individual property

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owners. After the demonstration site was selected, a community preference survey gathered input from residents. Chapter 4 presents the survey and its results.

4. **Concept site planning.** For the selected pilot site, the project team prepared a feasibility study covering engineering, environmental, and planning considerations, which is summarized in Chapter 3. The team combined this information with public feedback to develop a conceptual stormwater park layout and a planning-level cost estimate, presented in Chapter 5.

5. **Reporting and recommendations.** This report documents the lessons learned throughout the pilot. Chapter 6 provides recommendations for future projects in the region and beyond, and Chapter 7 offers a brief conclusion.

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Chapter 2: Process and Methodology

This chapter describes how the pilot moved from the full list of FDOT projects to a single demonstration site. It covers the advisory team that guided the work, the process used to identify, narrow, and screen candidate corridors, the results of that screening, and the factors that led to the selection of the Navarre site. The chapter closes with a summary of the six-step framework that came out of this experience, which Chapter 6 develops into the recommended process for future use.

Stormwater Implementation Team

To guide the pilot, ECRC, serving as staff to the TPO, convened an advisory group of local governments, state agencies, and community representatives called the Stormwater Implementation Team (SIT). The SIT met periodically throughout the project.

Membership reflected the regional, multi-jurisdictional character of stormwater management and included a wide variety of local stakeholders from the northwest Florida and south Alabama region.

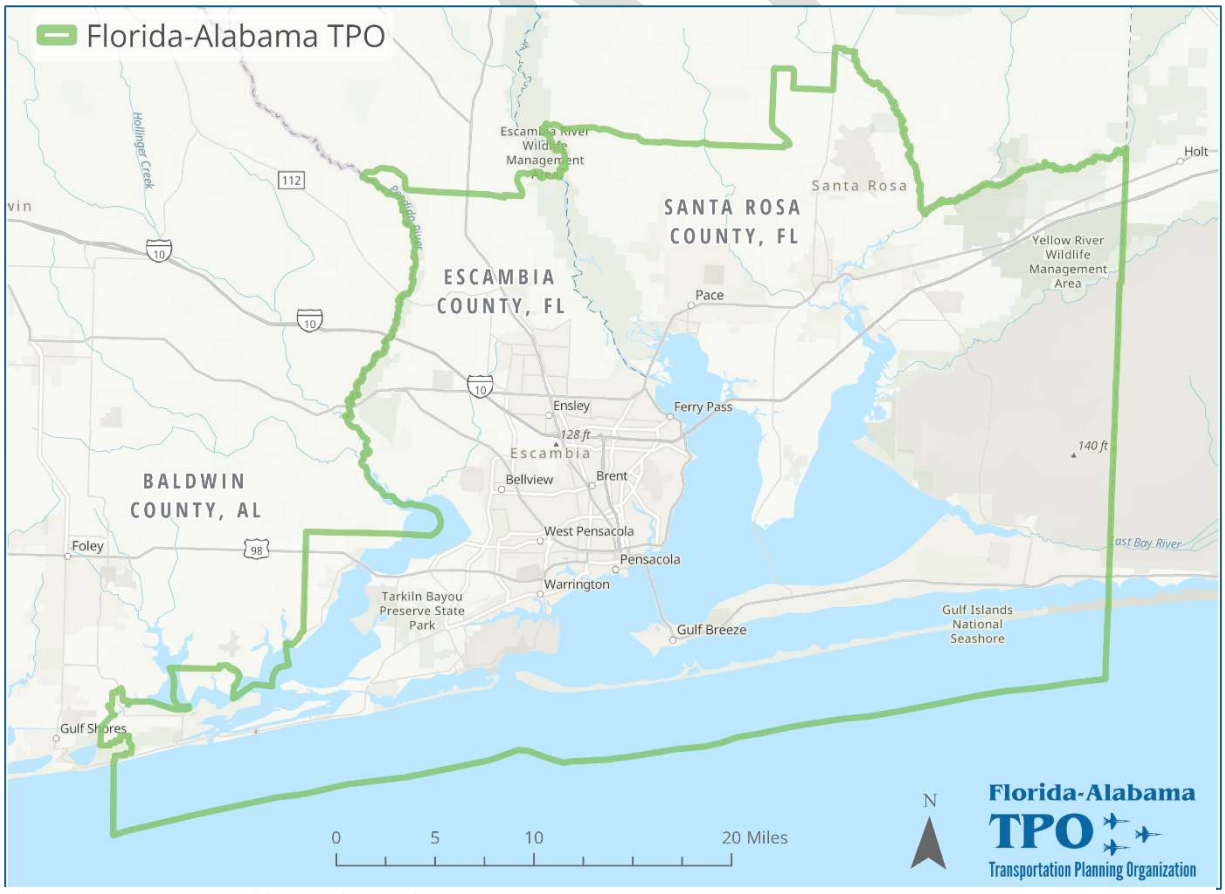


Figure 8 Stormwater Resilience Pilot Project – Study Area

Members included:

1. **State and regional agencies:** Florida Department of Transportation; Northwest Florida Water Management District; Florida Department of Environmental Protection; Pensacola and Perdido Bays Estuary Program.
2. **County governments:** Escambia County; Santa Rosa County.
3. **Municipalities:** City of Pensacola; City of Milton; City of Gulf Breeze; City of Orange Beach, Alabama.
4. **Community stakeholders**: Local nonprofit organizations, advocates, and the Holley-by-the-Sea Homeowner's Association (HOA).

ECRC staff led SIT logistics and facilitation. HDR participated to support technical review and concept development.

The SIT served three functions:

1. Reviewing and refining the corridor screening, identifying potential projects, raising additional considerations, and defining what was practical at each candidate site.
2. Surfacing local knowledge that would not appear in a desktop analysis. These included known drainage problems, ownership histories, prior planning efforts, right-of-way acquisition issues, and political or community sensitivities.
3. Acting as a regional sounding board for the framework itself. Having spent many years working on similar projects, SIT members helped ensure that the process developed would be appropriate for typical FDOT capacity projects.

SIT Meetings

The SIT met five times over the course of the pilot. The project began with a kickoff meeting in November 2022 among ECRC staff and HDR. ECRC began recruiting SIT members the following month. Meetings were grouped into two active phases: site identification and selection in 2023, and concept development in 2026.

Meeting 1 (February 15, 2023) ECRC staff introduced the pilot, its goals, and the project partners. Staff presented the initial list of eligible projects and the factors the team planned to consider, and the SIT began discussing how candidate sites should be selected.

Meeting 2 (May 3, 2023) Staff shared an updated list of candidate sites developed in coordination with FDOT and HDR. Members discussed the candidates and helped refine which corridors deserved closer study.

Meeting 3 (August 22, 2023) For this meeting, the SIT was expanded to include community advocates and the Holley-by-the-Sea HOA, bringing more perspectives on site conditions and community needs. HDR presented its feasibility study

describing site conditions and opportunities, and members discussed design concepts and considerations to guide the landscape architects. At this meeting, the SIT decided to focus on the Navarre site as the pilot location.

After the third meeting, the project was paused at Santa Rosa County's request. The concept required technical outputs from the Navarre Community Access Road PD&E, including the pond siting analysis, which was not yet complete. Work on the pilot resumed in 2026.

Meeting 4 (July 15, 2026) The SIT reconvened nearly three years after its previous meeting. Staff gave a project status update, presented the results of the community preference survey, and reviewed draft conceptual designs for the Navarre site. Members discussed the remaining steps toward a final plan.

Meeting 5 (October 29, 2026) The final SIT meeting reviewed the completed concept plan for the Navarre site and provided an overview of the full pilot process. Staff presented the recommended framework and the recommendations in Chapter 6, and members discussed how the process could be applied to future projects. FDOT District 3 explained the legal role of the pond siting report and reported that it had shared the draft report with Central Office staff who are updating WATERSS. HDR and Santa Rosa County staff noted that the concept is high-level planning and commits no agency to funding or construction. Members also discussed flagging candidates before pond sites are selected, Water Quality Enhancement Areas, hydraulic access to regional facilities, and how land use affects nutrient treatment. Chapter 6 reflects these points.

In addition to SIT meetings, ECRC met separately with FDOT District 3 staff, particularly those responsible for stormwater, and with local governments and property owners connected to candidate sites. ECRC also held a meeting with staff from a range of Santa Rosa County departments in August 2026 to gather input on the Navarre site concept design.

Site Identification and Screening Process

Site identification moved through three broad stages: identifying eligible projects, narrowing them to a short list of corridors, and screening those corridors in detail. In practice, the process was more iterative than this summary suggests. Throughout the course of the project, the team gained valuable insights. Several of the criteria outlined below were identified and refined as the team engaged with actual corridors and participated in extensive discussions with prospective partners. This chapter documents the parts of the process that proved useful and should be carried forward. Chapter 6 refines them into a recommended framework.

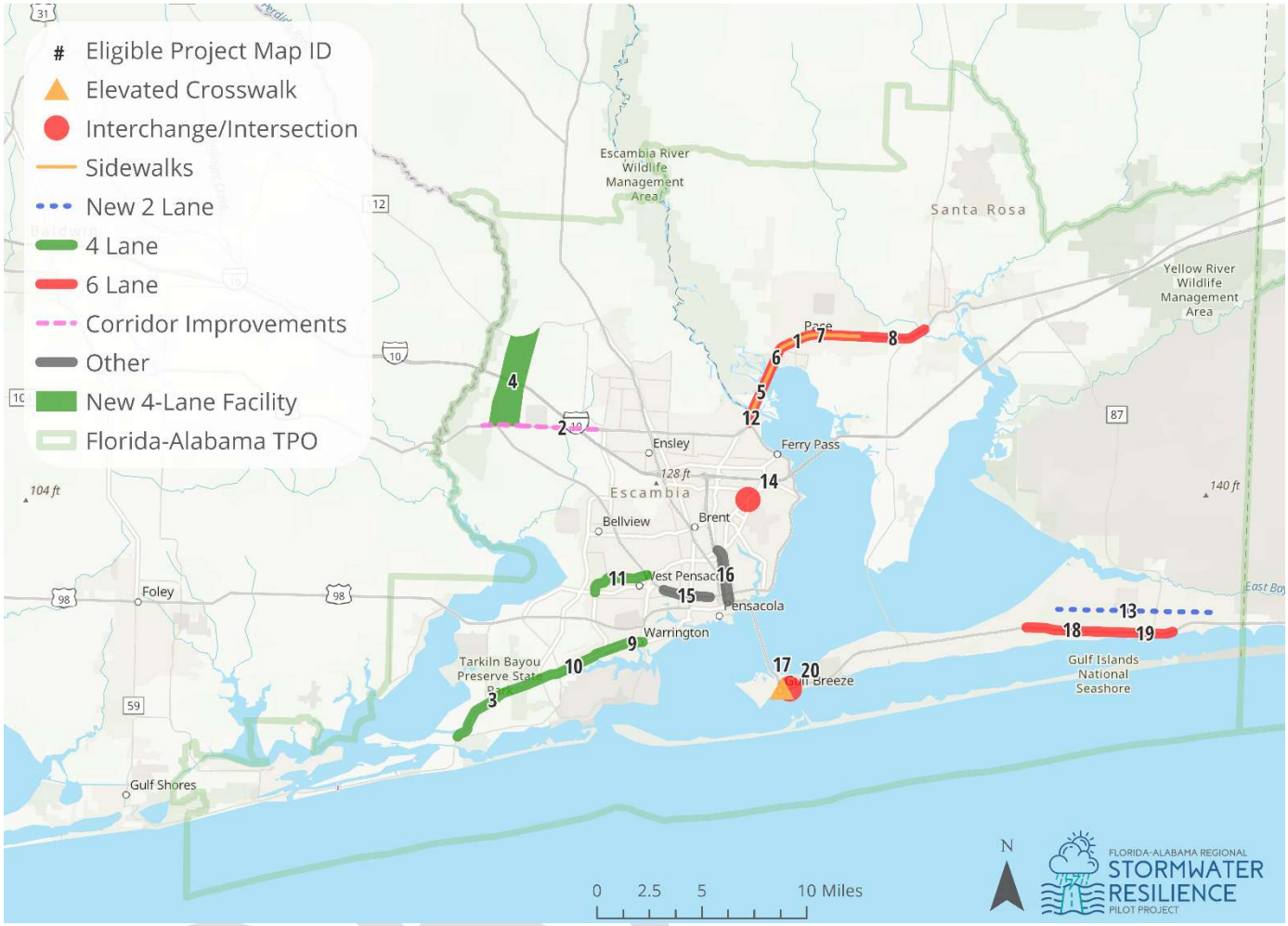


Figure 9 Eligible Projects

The project team began with the FL-AL 2045 Long-Range Transportation Plan, Cost Feasible Plan, and FDOT Five-Year Work Program. This pilot project began before the 2050 LRTP Update. Projects were generally eligible only if they had not yet been fully designed. This produced an initial list of twenty projects (Figure 9 and Table 1). Figure 10 illustrates the TPO and FDOT project planning stages. The team also reviewed TPO projects in the Alabama portion of the planning area, but none were a good fit for this pilot. As screening progressed, the team found that the most workable window for a regional alternative is after the PD&E pond siting report is available but before design is complete. Once design is complete changes would require a costly redesign. The pond siting report compares possible pond locations and justifies the one FDOT selects. That is the legal basis for acquiring the property, through eminent domain if necessary. As a result, FDOT generally cannot enlarge a pond to fix a drainage problem the road did not create or worsen. Capacity for local needs must come from a partner.

Table 1 Eligible Projects

ID	TPO	FDOT WPI#	Project Name/Limits	Project
1	**Non-SIS 7**	2186055, 2185192	Nine Mile Rd (Mobile Highway to Pine Forest Rd)	Capacity and Pedestrian
2	**Non-SIS 4**	NA	US 90 (Escambia County Line to Bell Ln)	Sidewalks
3	**Non-SIS 8**	4210112	Sorrento Road (Innerarity Point Road to Blue Angel Parkway)	Widen to 4 Lanes
4	**Non-SIS 9**	4331132, 4331133	US 29 Connector (Nine Mile Rd to Muscogee Rd)	Widen/New 4 Lane Facility
5	**Non-SIS 13**	2204363	US 90 (Escambia Co. Line to Simpson River Bridge)	Widen to 6 Lanes
6	**Non-SIS 14**	2204363	US 90 (Simpson River Bridge to Third Avenue)	Widen to 6 Lanes
7	**Non-SIS 15**	2204363	US 90 (Third Avenue to CR 197 (Bell Ln))	Widen to 6 Lanes
8	**Non-SIS 16**	2204363	US 90 (CR 197 (Bell Ln) to Glover Ln)	Widen to 6 Lanes
9	**Non-SIS 17**	2184932	Gulf Beach Highway (Fairfield Dr to Navy Blvd)	Widen to 4 Lanes
10	**Non-SIS 18**	2184933	Sorrento Road/Gulf Beach Highway (Blue Angel Pkwy to Fairfield Dr)	Widen to 4 Lanes
11	**Non-SIS 20**	NA	Fairfield Drive (Mobile Highway to Lillian Highway)	Widen to 4 Lanes
12	**Non-SIS 21**	2204362	US 90 (Scenic Highway to Santa Rosa Co Line)	Widen to 6 Lanes
13	**Non-SIS 22**	4369021	Navarre Community Access Road (Edgewood Drive to Whispering Pines Road)	Construction 2 Lane Connectivity
14	**Non-SIS 23**	2186202	Langley Ave./Tippin Ave./9th Ave.	Major Intersection
15	**Non-SIS 24**	NA	US 90 (Dominguez Street to A Street)	Road Diet
16	**Non-SIS 25**	NA	Davis Highway and Dr. Martin Luther King, Jr. Drive/Alcaniz Street (Wright Street to Fairfield Drive)	Two-Way Conversion
17	**Non-SIS 28**	NA	US 98 Multimodal Overpass (Gulf Breeze)	Overpass
18	**SIS 6**	2204266	US 98 (Bergren Road to East of Ramble Bay Lane)	Widen to 6 Lanes
19	**SIS 8**	2204264	US 98 (E. of Ramble Bay Lane to E. of Ortega Street)	Widen to 6 Lanes
20	**SIS 11**	NA	SR 399 at US 98 Interchange	Interchange

Note: TPO ranking refers to the 2024-2028 priorities. Priorities have subsequently been updated.

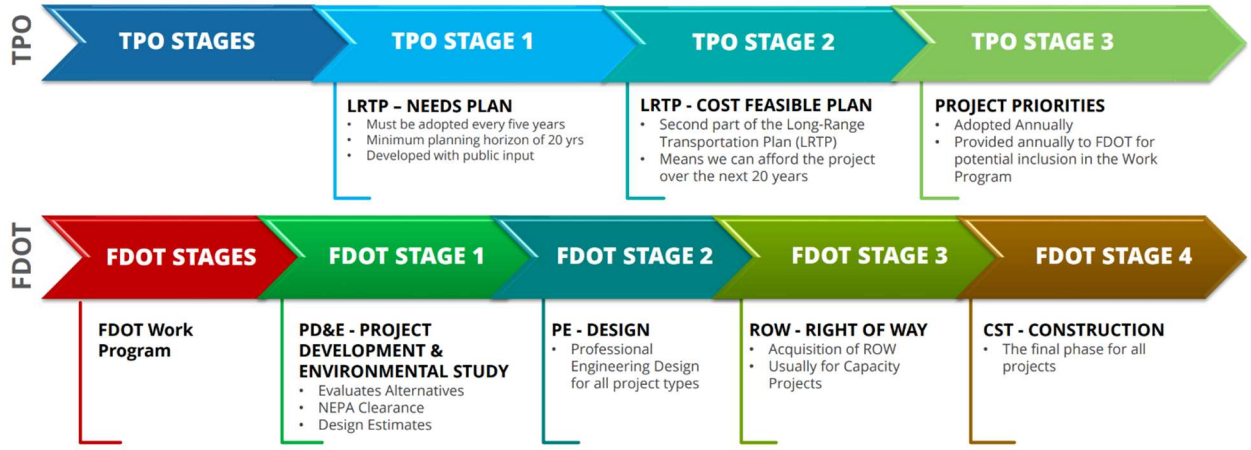


Figure 10 TPO and FDOT Planning Stages

For this pilot, the project team did not use a quantitative ranking system to narrow the list. The factors that make a parcel fit the process are complex and interact in ways a simple score does not capture well. Instead, the team narrowed the list through a series of progressively more detailed reviews.

First, staff reviewed each project on its own, considering stormwater treatment needs, connectivity, proximity to community assets, expected growth, right-of-way acquisition costs, and flooding risk. Staff compared the projects as a group to identify those with the most promise.

For further expertise, the team worked with HDR and met separately with the agencies responsible for the projects and candidate parcels, including FDOT stormwater staff and local governments. These conversations tested early ideas and filled in information not available from plans and maps.

The six most promising corridors were brought to the SIT with more detailed information for discussion. Table 2 summarizes how the six corridors compared.

Other Projects Considered

The project team also reviewed several projects suggested from outside the screening process. Some came from elected officials who wanted to know whether a regional stormwater park could work in a particular location. In one case, a nonprofit organization asked whether one of its own projects could be linked to a regional stormwater facility as a source of grant match. These proposals did not fit, either because the road was not on the state highway system or because the project was not at a suitable stage. These requests show real interest in the idea across the region. They also show the value of clear eligibility criteria, which lets staff answer these questions quickly.

Table 2 Corridor Screening Outcomes

Corridor	Stage at Screening	Pond Siting Information	Opportunities	Limiting Factor	Outcome
I-10 at Beulah Rd (SR 99)	Design complete; ROW acquisition underway	Pond siting report (2020); four basins, four alternatives each	Several alternatives large enough for multifunctional use; growing Nine Mile/Beulah area	Too far along; redesign too complex	Not advanced
SR 297 (Pine Forest Rd)	PD&E underway	Draft pond siting report (2022); preferred alternative in each of four basins	Existing urban population; planned OLF-8 growth	Preferred site on a recently purchased private parcel; owner declined to participate	Recommended for future screening
SR 292 (Sorrento Rd)	PD&E complete	Conceptual drainage report; no pond sites identified	None identified	Most basins drain directly to the bayou; few large parcels	Not advanced
US 98 / SR 30 (Navarre)	Various stages	Preliminary pond siting report (2018); 22 basins	Proposed pond sites in most basins	Sites too small or hemmed in by development	Not advanced
Navarre Community Access Rd	PD&E (FDOT-funded) underway	Pond siting not complete during initial screening	22-acre county-owned parcel; Conservation/Recreation land use	Controversy over the road project caused project pause	Advanced as pilot site
SR 173 (Blue Angel Pkwy)	PD&E just awarded at screening	None available during screening	Links to the Estuary Program's CCMP and the Bayou Marcus wetland and recreation site	Too early for technical review. The project has since advanced.	Recommended for future screening

Corridors Evaluated

Six corridors received detailed screening.

I-10 at Beulah Road (SR 99) Interchange — Escambia County. The pond siting report identified four basins (Basins 3, 8, 9, and 10), each with several pond alternatives requiring additional right-of-way. Several were large enough for a multifunctional stormwater pond. FDOT had already completed design and moved into right-of-way acquisition, which placed the project outside the eligibility window. The team reviewed it as an edge case because part of the drainage design might be revisited. On large projects with several years between design and construction, some redesign is common, and that can briefly reopen the door to alternatives. On closer review, the changes proved too complicated to pursue, and the corridor was not advanced.

SR 297 (Pine Forest Road) — Escambia County. The PD&E was ongoing, but the draft pond siting report was already available (FPID 441056-2 and 441056-3). The project team evaluated four basins, each with a preferred pond alternative already identified. The corridor combines an existing urban population with intensive planned growth associated with the future development of the OLF-8 site, suggesting a regional stormwater park could serve genuine recreational demand. A promising site on this corridor was carried forward to site selection but did not advance (see below). The corridor is recommended for future screening.

SR 292 (Sorrento Road, Innerarity Point to Blue Angel Parkway) — Escambia County. Pond siting and drainage analysis showed that most basins along this corridor drain directly to the bayou. With limited surface storage opportunities and few large parcels available, the project team identified no viable regional stormwater park sites. The corridor was not advanced.

US 98 / SR 30 (Navarre Corridor) — Santa Rosa County. The FDOT Preliminary Pond Siting Report (November 2018) delineated 22 basins in the Santa Rosa County portion of the corridor. Most preferred pond sites were too small or too constrained by adjacent development to host community uses alongside a stormwater facility of the size FDOT would require. The corridor was not advanced.

Navarre Community Access Road — Santa Rosa County. This is a planned two-lane connector from Edgewood Drive to Whispering Pines Road. The road would be a county facility, but FDOT funding for the PD&E made it eligible for this review. Site-by-site review identified habitat constraints, wetland areas, contamination sites, military-owned parcels, and one county-owned parcel within the Holley-by-the-Sea neighborhood with a Conservation/Recreation future land use designation. This parcel was ultimately

advanced for full conceptual development.

SR 173 (Blue Angel Parkway, US 98 to Pine Forest Road) — Escambia County. This project was at the PD&E stage, but the PD&E contract had just been awarded at the time of screening and no technical material had yet been developed. The SIT identified potential opportunities to connect stormwater design with the Pensacola and Perdido Bays Estuary Program's Comprehensive Conservation and Management Plan and existing publicly owned wetland mitigation projects. This corridor should be considered in a future round of screening.

Selection of Pilot Site

The screening surfaced multiple physically suitable sites across the six corridors. The project team met several times with local officials and property owners to discuss the viability of these sites. What ultimately determined the pilot site was the willingness of the property owner to engage in the process.

The most promising early candidate was a privately owned parcel in a high-growth area. The location was close to ideal: it sat near identified FDOT drainage needs, and a stormwater park there could have served both an existing community use on the parcel and residents of planned development nearby.

Having recently acquired the parcel, the new owners were not aware of the planned capacity project or that part of their parcel had been identified as a preferred pond site. Asking a private owner to consider an additional public use of their land, on top of potential right-of-way acquisition, proved to be a difficult first conversation. After several discussions and outreach attempts, the project team decided to move on from this site.

While the project originally planned for up to three concept plans, the SIT decided to focus on a single site, allowing a deeper analysis of one strong candidate rather than lighter work on several less viable ones.

The Navarre parcel succeeded along exactly the dimensions where the earlier candidate did not:

1. **County ownership.** Santa Rosa County already owns the 22-acre parcel.
2. **Compatible designation.** The site's Conservation/Recreation future land use designation and R-1 zoning are aligned with park development.
3. **A willing institutional partner.** County staff understood the difference between conceptual planning and project commitment and engaged constructively. Staff from Santa Rosa County had served on the SIT from the beginning.
4. **Appropriate scale.** Twenty-two acres is large enough to

accommodate meaningful stormwater function alongside community recreation and natural preservation, and the site sits near existing neighborhood drainage concerns it could help address.

5. **Established neighborhood with outreach capacity.** The Holley-by-the-Sea HOA was willing to assist with community engagement through its newsletter and neighborhood network.

Property owner willingness emerged as one of the most important factors in site viability. Right-of-way acquisition is a normal and costly part of FDOT capacity projects, which often leads to ponds being built on the smallest footprint possible. The lesson for this kind of work is that publicly owned parcels, or parcels with confirmed willing owners, should be the first screen in any application of this process. The screening checklist, described in Chapter 6 and provided in Appendix I, places this filter at the top.

Framework Process

The pilot produced a six-step process that the TPO and partner agencies can apply to future LRTP and Work Program cycles.

1. **Identify eligible FDOT projects.** From the LRTP, Cost Feasible Plan, and FDOT Five-Year Work Program, identify projects with a PD&E funded or underway that are not yet through design. Candidates can be flagged as soon as a PD&E begins; detailed screening works best once the pond siting report is available.

2. **Consider key factors.** Review eligible projects for connectivity, proximity to community assets, expected growth, presence of public land, right-of-way acquisition costs, stormwater treatment needs, and flooding risk to focus on higher-potential corridors.

3. **Conduct corridor-level screening.** For higher-priority corridors, overlay FDOT drainage basins and pond siting reports with parcel ownership, land use, environmental data, and known community needs. Working through potential sites with the relevant local government at this point can bring in useful context and background knowledge.

4. **Filter for site viability.** Apply the screening checklist, starting with its three threshold questions: public or willing ownership, project timing, and a willing local maintenance partner. Sites that fail any of these should be deprioritized regardless of their other strengths.

5. **Commission a technical feasibility study**. For each site that passes the checklist, if funds are available, the next step is a deeper engineering and environmental review of the site. This review should include analysis of soils, wetlands, potential protected

species, hydrology, cultural resources, contamination, and existing easements. The HDR feasibility study described in Chapter 3 is an example of what this step produces.

6. **Develop a conceptual design.** If the site remains feasible for multifunctional stormwater treatment, structured engagement with the local partner and community informs a conceptual design. The form this takes will vary with community goals.

Steps 1 through 4 are screening steps that TPO staff can complete with existing resources. Steps 5 and 6 require additional funding and should follow only once a site has been screened and determined to be a strong candidate. Chapter 6 further develops this two-level structure.

What this pilot adds to the typical TPO and FDOT process is a deliberate, local look at stormwater for LRTP projects early in project development, before design, so that regional alternatives and willing partners are already identified when WATERSS is applied. Chapter 6 explains this relationship in more detail and describes the screening checklist, which is provided in Appendix I.

With the Navarre parcel selected, the project team moved to a detailed technical review of the site. Chapter 3 summarizes the findings of that feasibility study.

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Chapter 3: Feasibility Evaluation of the Pilot Site

Once a site has passed preliminary screening and been identified as a strong candidate, the next step is a more in-depth technical and environmental assessment. Initial screening can be done by planning staff with desktop tools. However, there are many important details that cannot be determined using only desktop analysis. A feasibility evaluation requires engineering and environmental analysis by qualified professionals on site.

This chapter describes the feasibility work the project team commissioned for the Navarre site. It is intended as an example of what this step involves rather than a full catalog of findings. HDR Engineering's complete feasibility study, prepared as a technical study, is included as Appendix F for readers who want the site-specific detail.

The Pilot Site

The pilot site is a 22.08-acre parcel owned by Santa Rosa County on the eastern edge of the Holley-by-the-Sea neighborhood in unincorporated south Santa Rosa County (Figure 11). The parcel is designated Conservation/Recreation on the County's future land use map and zoned R-1 (Single Family). It is undeveloped and wooded and is

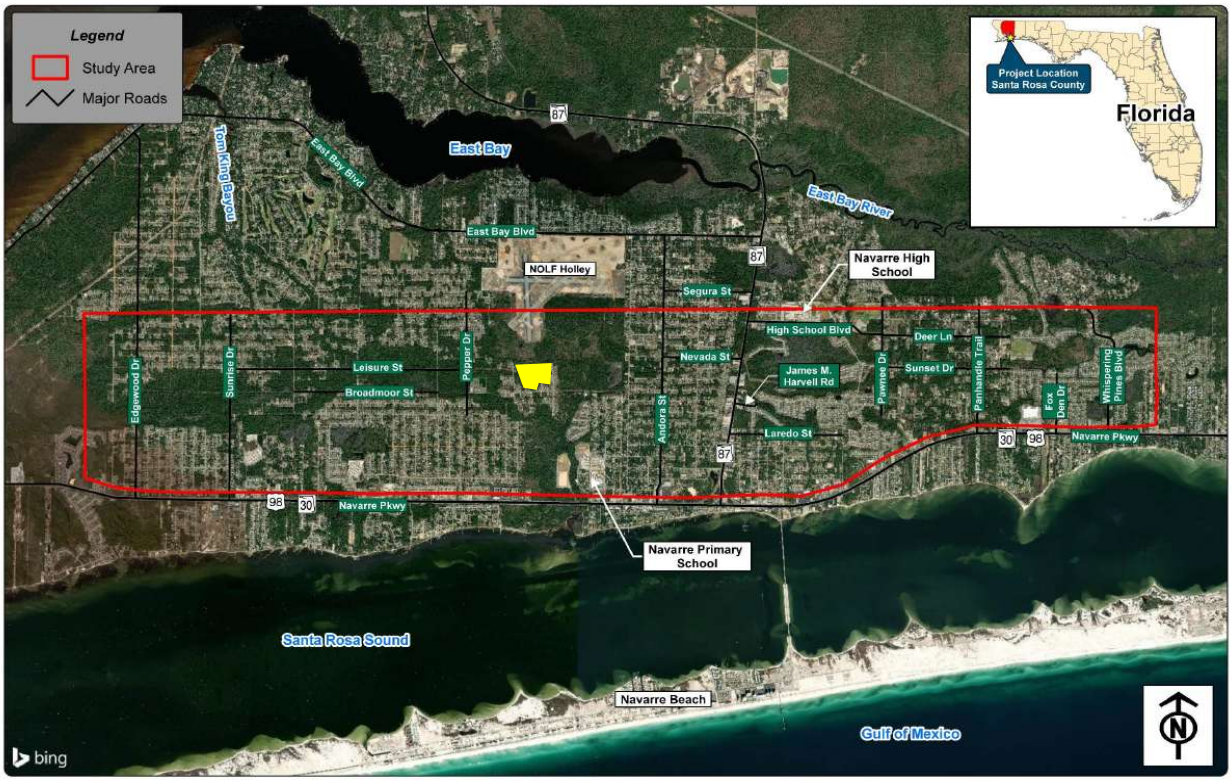


Figure 11 Regional Context of Pilot Site

surrounded by single-family homes on the east, south, and west. To the north lies NAS Whiting Field's Outlying Landing Field (OLF) Holley. OLF Holley is not currently used for flight operations and now hosts a large solar field.

Several natural and built features shape the constraints and opportunities for development on the site:

- **Williams Creek** runs through the parcel, entering on the west side and leaving to the south on its way to Santa Rosa Sound. The creek channel is heavily incised into the landscape.
- **Wetlands** cover about nine acres of the parcel, in two separate areas. One is associated with Williams Creek. The other is a low-lying area to the northeast with a small ephemeral pond.
- **A Florida Power & Light transmission line** within a utility easement bisects the parcel from north to south.
- **The two proposed alignments** for the Navarre Community Access Road run along the parcel's northern and southern edges.

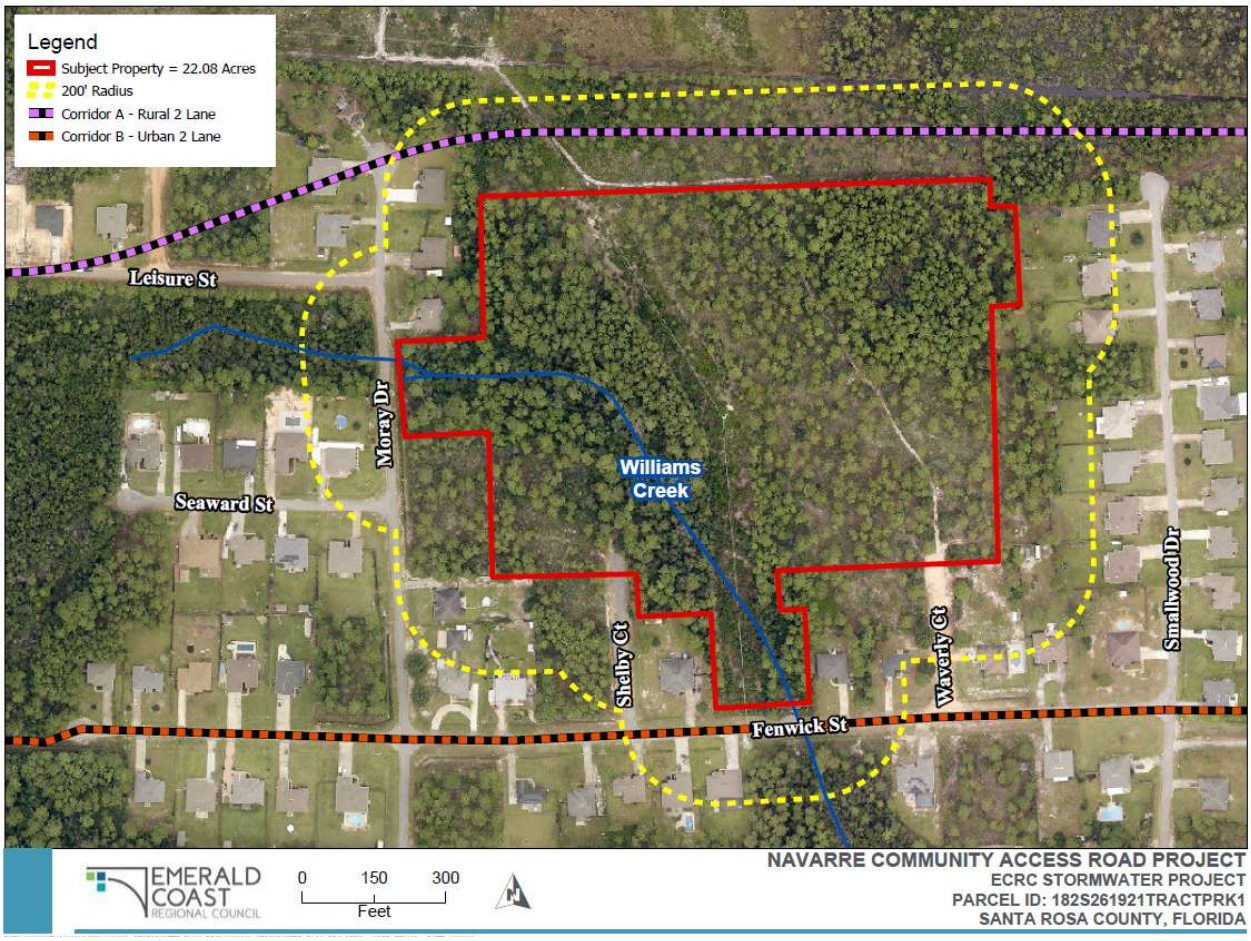


Figure 12 Navarre CAR Feasibility Study Alignments



Figure 13 Typical View of the Pilot Site

The parcel's eligibility for this pilot comes from its location between those two alignments (Figure 12). The alignments shown come from the earlier corridor study for the Community Access Road, which the project team used to identify this parcel. The PD&E later developed more detailed alignments, but it has not been finalized. The road would be a county facility, but its PD&E was funded through FDOT's Transportation Regional Incentive Program (TRIP). The parcel also lies within a Santa Rosa County–designated Stormwater Problem Area, an area where the County has documented existing drainage concerns.

Together, these factors made the site a promising candidate: county ownership, compatible land use designation, a nearby planned road project, and a documented local drainage problem.

Feasibility Review

For the Navarre site, HDR conducted a screening-level review modeled on the due diligence FDOT typically performs during a PD&E, scaled to a conceptual planning exercise. The work included:

Environmental data collection and review. The project team used standard federal and state sources: the USDA

Natural Resources Conservation Service Soil Resource Report, the Florida Natural Areas Inventory, the U.S. Fish and Wildlife Service ECOS-IPaC project screening, FDOT's Environmental Screening Tool Area of Influence reports, and Santa Rosa County Property Appraiser records.

Field reconnaissance. HDR and ECRC staff visited the site to take photographs, verify site conditions, observe species present, and map wetland boundaries with GPS.

Hydrologic and topographic analysis. With the wetlands mapped, HDR engineers determined how water moves across the site and where a stormwater facility could be placed without disrupting existing flow patterns.

Protected species and habitat assessment. HDR developed preliminary effect determinations for federally and state-listed species that could occur in the study area.

Cultural resources desktop review. A high-level review against the Florida Master Site File identified no potential concerns.

Regulatory pathway analysis. HDR identified which permits would be needed, from which agencies, and under what conditions, including federal review



Figure 14 Williams Creek During the Site Visit

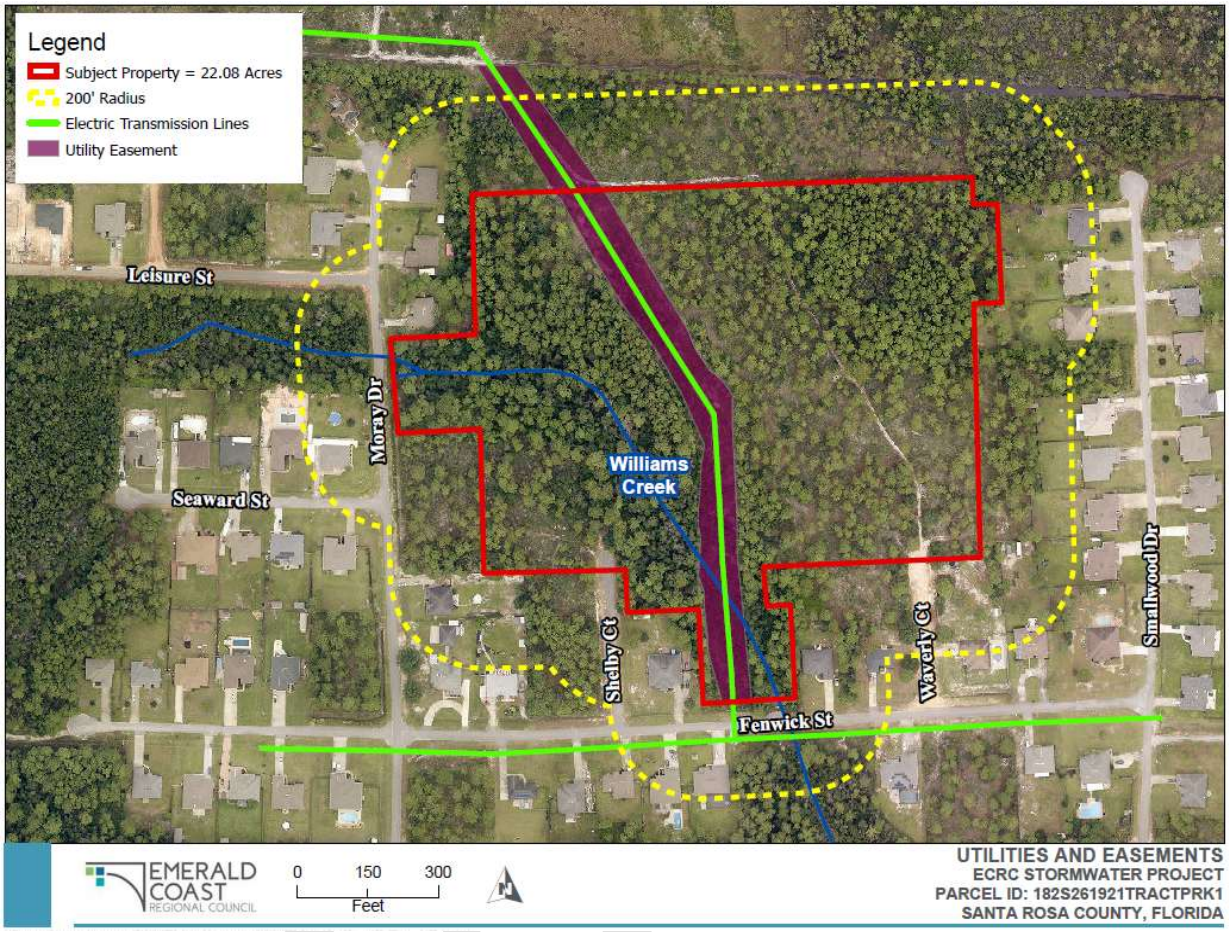


Figure 15 Utilities and Easements

triggers that might apply during construction.

Utilities and infrastructure review. HDR documented easements and transmission lines that could reduce the developable area of the potential stormwater park.

Conveyance and pond siting analysis. HDR evaluated the parcel's topography and soils to determine where a pond could be located and what treatment capacity is realistic.

Takeaways for Concept Design

Williams Creek and the wetlands. Because the creek is heavily incised and the two wetland areas cover about nine acres, both are treated as preserved features in the conceptual design (Figure 14). The usable area for a pond and park amenities lies in the uplands outside these areas.

Utility easement. The FPL transmission easement runs north to south through the middle of the parcel (Figure 15). The

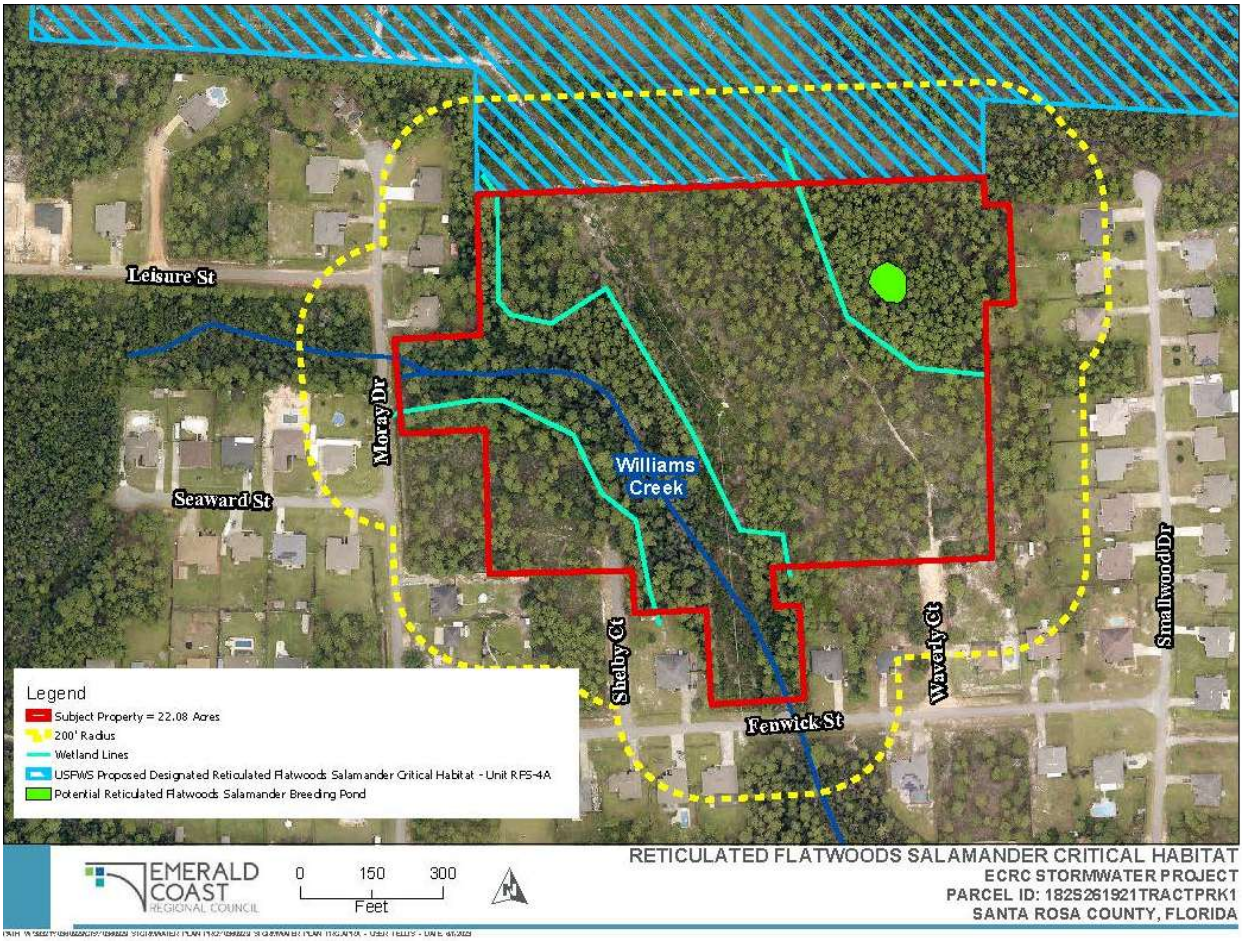


Figure 16 Reticulated Flatwoods Salamander Critical Habitat

conceptual design keeps the pond and any structures out of the easement and places only paths and boardwalks within it. The project team did not coordinate with FPL during this phase. The utility's review and approval would be needed before design moves forward.

Salamander habitat. Proposed critical habitat for the federally endangered reticulated flatwoods salamander lies along the northern boundary of the study area but not within the parcel itself (Figure 16). The small ephemeral pond in the northeast wetland may serve as a salamander breeding pond. That possibility should be considered in any design, and coordination with USFWS is recommended as the project advances.

Informal dumping. The field visit found evidence of informal dumping on the parcel. This is a common finding on undeveloped parcels near neighborhoods and does not affect feasibility. A Phase I Environmental Site Assessment is recommended before design or construction begins.

Soils and groundwater. The site's sandy Type A soils and roughly six feet of depth to groundwater favor a dry retention pond,

though a wet detention design is also possible.

Road conveyance. Because one proposed alignment runs along the northern edge of the parcel and the other along the southern edge, each would convey stormwater to a pond on the site in a different way.

No cultural or conservation easement concerns. The desktop review found no archaeological or historic resources on the parcel. A state database check returned no conservation easements, though a title search is recommended for full legal certainty.

Figure 17 shows how these findings shaped the site zones carried forward into the conceptual design in Chapter 5. Each finding is documented in more detail in Appendix F.

Lessons Learned

For a conceptual design to be realistic, a feasibility study of at least this depth must come first. TPO-level screening can identify many high-level issues, but it cannot replace this kind of technical review. The screening checklist, described in Chapter 6 and provided in Appendix I, is designed to help identify which sites deserve this level of investment. The review found several constraints and coordination needs, but none ruled the site out. Each finding was carried into the conceptual design.

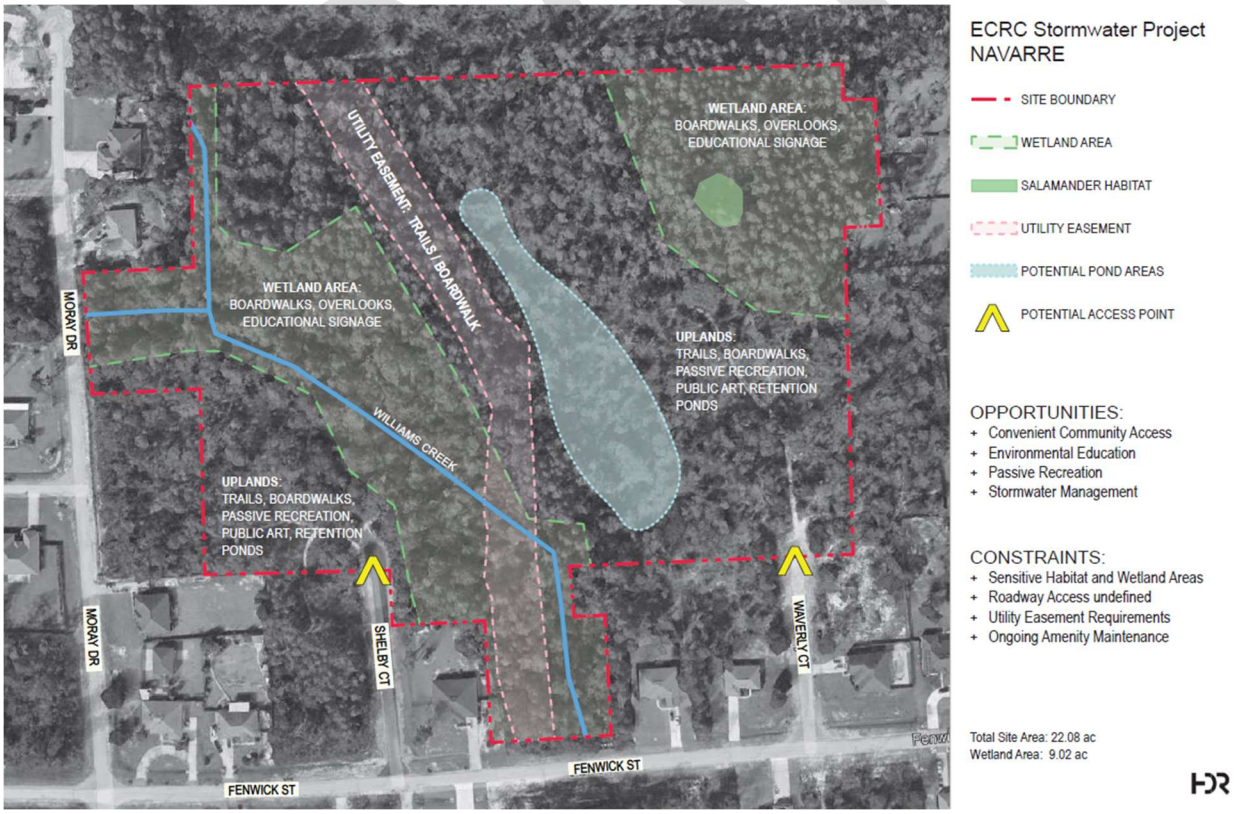


Figure 17 Predesign Site Notes and Potential Uses

Chapter 4: Community Engagement

Once a site has been identified and the initial feasibility assessed, it is necessary to involve nearby residents, potential project partners, and the local government from the start. For the Navarre site, this involved coordinating with Santa Rosa County staff, residents of the Navarre area, and the Holley-by-the-Sea (HBTS) homeowner's association (HOA). The team also developed a structured community preference survey for conceptual design.

Stakeholder coordination started in 2023. The project team initially met with the board and staff of the HBTS HOA to discuss the pilot, its purpose, and the conceptual planning that would take place if the site moved forward. The project team coordinated with Santa Rosa County throughout the process, with Santa Rosa County staff participating in the Stormwater Implementation Team from the beginning and later advocating for focusing on this site. Staff from several departments provided input.

For broader community input, the project team developed and distributed a structured online preference survey. The HOA helped promote the survey through its newsletter and neighborhood channels, which helped drive the strong response rate. As a follow-on, the project team held a virtual design forum for the survey respondents who opted in to continued participation.

The project team ultimately decided against holding an in-person public open house. That decision was driven in part by the ongoing Navarre Community Access Road PD&E, which was generating substantial public discussion in the same neighborhood. Convening in-person meetings in HBTS during that period could have created confusion and made it difficult for residents to engage with the park concept separately. The survey format allowed the project team to gather structured, usable input without entangling the park in the larger roadway conversation. The community feedback was substantial and provided a strong base for developing the concept plan.

Community Preference Survey

The project team conducted the survey online in Esri's Survey123.

The survey focused on prioritization rather than open-ended questions about preferences. Simplifying the responses made it easier to focus attention on elements that the landscape designers could integrate into the final concept design. The two central questions were focused on desired park attractions and park services. Each question capped respondents at five selections to force them to make decisions about what they most preferred.

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Another key design decision was to focus only on community preferences for a park and leave out questions about givens. Wetland preservation, for example, is required regardless of community preference, and asking about it would falsely frame it as a choice. The survey focused on what the community could genuinely influence.

To keep the burden on respondents to a minimum, the final instrument contained 14 questions across five areas:

1. personal connection to the site,
2. desired attractions and services,
3. preferred park character,
4. concerns about development,
5. basic demographics.

Respondents could also provide additional comments in an open-ended comment field. The full instrument is in Appendix D.

The survey was distributed through the HOA newsletter, QR-code flyers posted in the neighborhood, and targeted social media in the Navarre and south Santa Rosa area. It was open from April 1 to May 7, 2026.

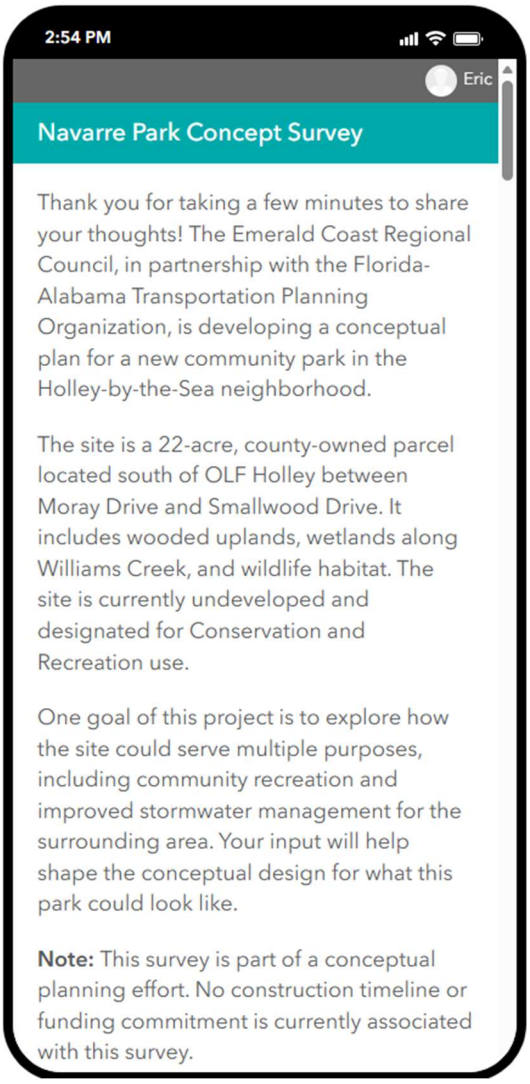


Figure 18 Survey as Shown on a Mobile Phone



HELP SHAPE A POTENTIAL **NEIGHBORHOOD PARK**



The Florida-Alabama Transportation Planning Organization is developing a conceptual plan for a **22-acre site** owned by Santa Rosa County, and designated as a future park, **located in the Holley by the Sea neighborhood.**

Although no construction timeline or funding is currently associated with this project, your input will help shape the concept for what this park could look like. Please take a short survey to tell us what features you'd like to see.

For more information contact:
eric.christianson@ecrc.org

Scan the QR code to take a five-minute survey or visit
www.arcg.is/W59D42

Please respond by
May 8, 2026

Florida-Alabama TPO Transportation Planning Organization

EMERALD COAST REGIONAL COUNCIL

Figure 19 Survey Promotion Flyer

Respondent Demographics

The survey received 132 responses. Participation was voluntary and self-selected, so these results reflect engaged community opinion rather than a statistically representative sample.

Most respondents (72%) identified as HBTS residents. Another 21% live in the Navarre area. The majority live within a short walk or drive of the site. About a third were not familiar with the parcel before the survey.

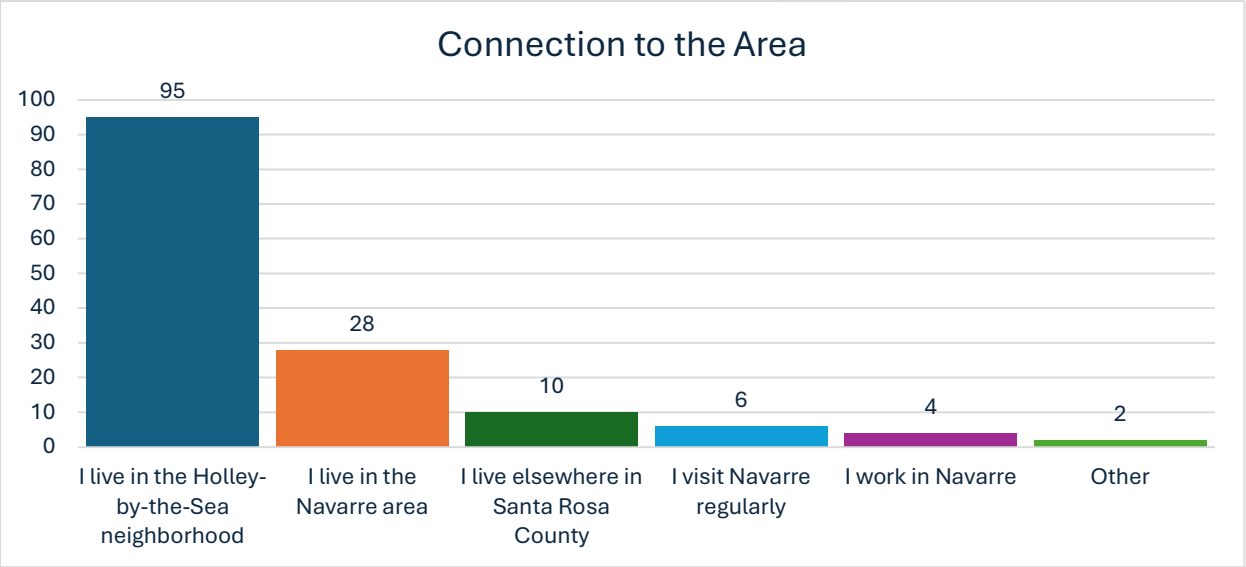


Figure 20 Connection to the Area

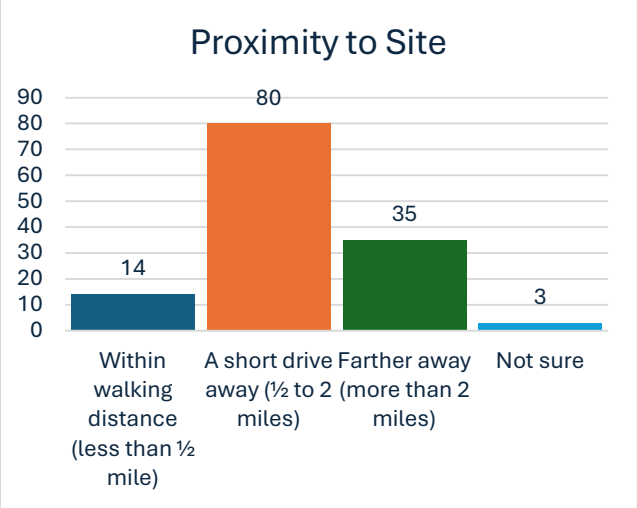


Figure 21 Proximity to Site

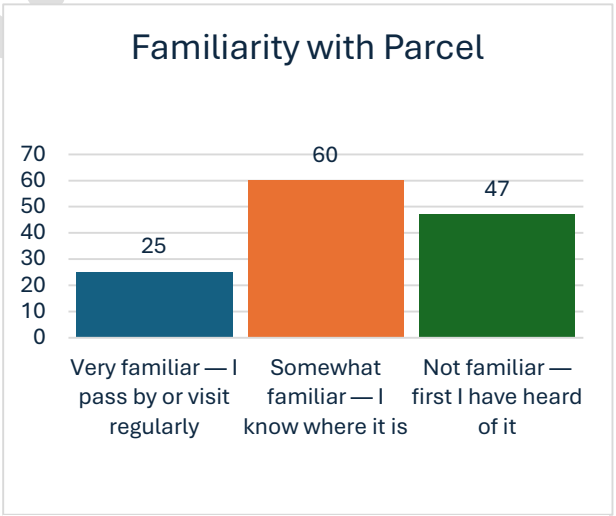


Figure 22 Familiarity with Parcel

The respondent pool skewed somewhat older than the area's population, and 46% reported children under 18 at home, a little higher than the area overall. Forty-four percent of respondents shared an email address to stay involved and comment on draft plans.

Survey Outcomes

Overall, the respondents preferred a primarily balanced or nature-focused development on this site. Only a small minority (8%) wanted a primarily active park.

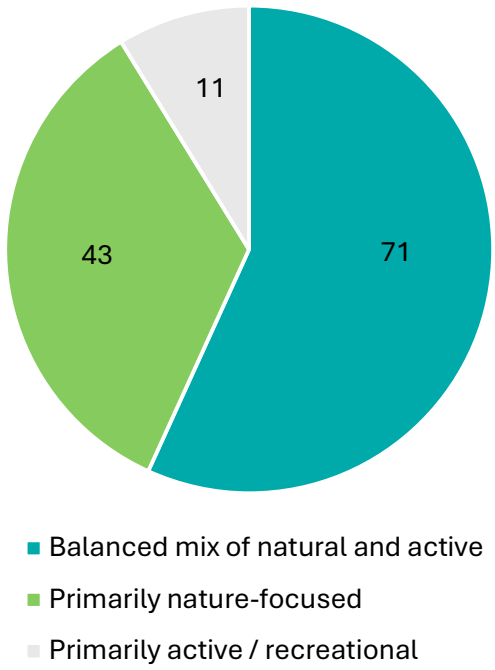


Figure 23 Natural or Active Park Preferences

These preferences carried through to specific amenities. Walking trails and boardwalks were the most-selected feature by a wide margin, and this held across every demographic group. Picnic areas and shade shelters, playgrounds, sports courts, and educational signage about local ecology were also popular. The most popular active amenities, a playground, sports courts, and possibly a small splash pad, could be integrated into a mostly natural site with a modest footprint.

Table 3 Park Attraction Results

Desired Park Attractions	Count
Walking trails and boardwalks	95
Picnic areas and shade shelters	64
Playground or play structures for children	63
Sports courts (basketball, pickleball, tennis)	41
Educational signage about local ecology and wildlife	36
Dog park (off-leash area)	32
Multi-use open lawn area	27
Splash pad	26
Farmer's market or event space	24
Community garden plots	22
Fitness stations	21
Disc golf course	19
Amphitheater or outdoor performance space	18
Other	13
Outdoor classroom space	12
Public art installations	6

Desired park services and amenities included shade trees and covered areas, restrooms, trash receptacles, and lighting for safety, followed by parking, pet waste stations, and drinking water fountains.

ADA-accessible paths ranked lower, but they were mentioned several times in the open-ended comments at the end of the survey.

Table 4 Park Services Results

Desired Park Services	Count
Shade trees and covered areas	92
Restrooms	85
Trash receptacles	70
Lighting for safety	66
Adequate parking – with considerations for golf carts	52
Pet waste stations	46
Drinking water fountains	27
Pedestrian connections to surrounding streets	27
Security features (e.g., call boxes)	22
ADA-accessible paths and facilities	21
Bicycle parking	13

Public concerns about development of a park on this site focused on wildlife impacts and maintenance. Other common concerns included losing the area's natural character, additional traffic or parking, and flooding or drainage. Lesser concerns included safety and security and noise. The wildlife concern correlates closely with preferences for nature-oriented design. Many respondents who flagged it also picked trails, educational signage, and shade as desired amenities. This pattern suggests a park could be designed to mitigate these concerns. Overall, few concerns rose to outright opposition to developing a park on this site. The flooding concern is reinforced by open-ended comments that specifically cite Williams Creek as a source of street and property flooding during storms; a design focused on improving hydrologic function in the area would respond directly to those concerns.

Table 5 Development Concern Results

Concerns about Development	Count
Impact on wildlife or natural areas	65
Maintenance and upkeep over time	64
Loss of natural, undeveloped character of the site	50
Increased traffic or parking in the neighborhood	49
Flooding or drainage issues	46
Safety or security concerns	35
Noise from park activities	23
I have no concerns	19
Other	4

At the end of the survey, respondents were given the opportunity to share any other comments about this project. Forty-eight (36%) took the time to do so. Wildlife, habitat, and natural character were the dominant themes, raised by 13 respondents. Comments mentioned local wildlife such as bears, coyotes, bobcats, and foxes, along with tree loss and broader development pressure across Santa Rosa County. Five respondents argued specifically that

active programming would be incompatible with the site's ecological function. Four wanted to see the development of other potential future park sites within the HBTS neighborhood. Four raised maintenance and funding capacity as a real concern. Smaller clusters mentioned accessibility, Ferry Park in Fort Walton Beach as a positive model in the area, a preference for a skate park or pump track, and interest in an outdoor performance space. A few single-respondent comments are worth noting for their specificity: an after-hours safety concern from a near-neighbor, a detailed drainage observation about Williams Creek, a case for a disc golf course citing a regional gap, and a reference to a prior HOA parks committee that had done some planning work a decade ago.

The project team categorized each response into one of three groups: supportive (83%), supportive with reservations (11%), and opposed (5%). The vast majority (94%) were fully supportive of or at least open to the concept. The concerns raised most consistently (maintenance, wildlife impact, flooding, and traffic) are legitimate design considerations that the conceptual plan can address.

Community Design Forum

Following the close of the survey and after the initial concept plan had been developed and shared with the SIT for comments, the project team held a virtual community design forum on September 17, 2026, for the respondents who had opted in to continued participation. Santa Rosa County staff and the project team also attended. ECRC presented the overall goals and history of the project and HDR presented conceptual design direction and options developed from the survey findings. This was followed by open discussion with the attendees.

Feedback from the forum reflected many of the same themes as the survey. Participants were enthusiastic about the design, especially the emphasis on preserving the site's natural character, and the trail network as the organizing element. Attendees noted that there is a lack of safe places to walk in the neighborhood and that some residents already use the site informally. Some topics were raised that will be more appropriate to consider at a later design phase, including whether bicycles and leashed dogs will be permitted on the trails, and how ongoing maintenance of the completed park will be funded and staffed. Santa Rosa County staff present at the meeting confirmed that funding for this project both for initial construction as well as ongoing maintenance has yet to be identified. Overall, the design was received with broad support among the participants who attended.

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Community Input Outcomes

The survey, public forum, and meetings with stakeholders gave clear direction to the design team.

Natural preservation and access is the primary interest. The nature-first preferences, wildlife-impact concerns, and open-ended comments point consistently toward a design that treats access to a preserved Northwest Florida landscape as the primary community goal.

Walking trails and elevated boardwalks are the most desired amenities. Selected by 72% of respondents, this was the community's clearest priority. A need for trails was also mentioned during the community design forum and meetings with HOA staff and board members.

A modest active-amenity package is warranted. A small playground, shaded picnic shelters, and potentially sports courts were all desired by community members. If possible, they should be incorporated into the overall low-impact design.

Basic services are needed to make this park effective. Shade, restrooms, trash receptacles and lighting were prioritized by half or more of respondents and parking by nearly 40%.

Maintenance needs to be part of the concept. With maintenance the second-most-cited concern and a recurring open-ended theme, the concept needs to be designed in a way to minimize long-term maintenance costs. A primarily natural design carries a lower long-term maintenance load than a heavily developed active park.

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Chapter 5: Conceptual Plan

With the site's physical characteristics (Chapter 3) and the community's preferences (Chapter 4) documented, the project team developed a conceptual plan for the pilot site. The plan is not a construction-level design and does not represent a funding or construction commitment. It is, however, a defensible starting point. Santa Rosa County or its partners can use it to pursue funding, coordinate with the Navarre Community Access Road if that project moves forward, and refine it into permit-ready design documents when the time comes.

Because the Navarre Community Access Road PD&E and a preferred alignment were never adopted in a final environmental document, the design team needed a working assumption to size the stormwater facility. The concept assumes treatment for approximately 3,600 linear feet of the future roadway. That figure allowed conceptual design to move forward. If a road project advances, the pond would need to be resized using actual design numbers. This treatment capacity could also be adjusted to meet other identified stormwater needs.

The plan includes two options that differ in the type of pond and treatment capacity. Option 1 uses a dry retention pond, and Option 2 uses a wet detention pond. Only Option 2 provides treatment for runoff from outside the park, including the future roadway. Option 1 is included as a potential alternative intermediate step in the development of this site as a stormwater park. The site organization, trails, program areas, and access are broadly the same in both. The full conceptual drawings and cost detail are included in Appendices G and H.

The park is designed to be worthwhile whether or not the road is built. If the road does not advance, the County could explore permitting the pond as a Water Quality Enhancement Area (see Chapter 6). The trails and amenities would serve the neighborhood on their own.

Existing Conditions

The concept design began with the existing site features as identified in HDR's feasibility study. Some of the most significant are shown in Figure 24.

1. Williams Creek, which runs through the parcel on its way to Santa Rosa Sound.
2. Existing wetlands, associated with the creek and the low-lying area to the northeast.
3. Salamander habitat, including the possible breeding pond in the northeast wetland.
4. The FPL utility easement, which crosses the parcel from north to south.
5. Primary site access from Waverly Court.

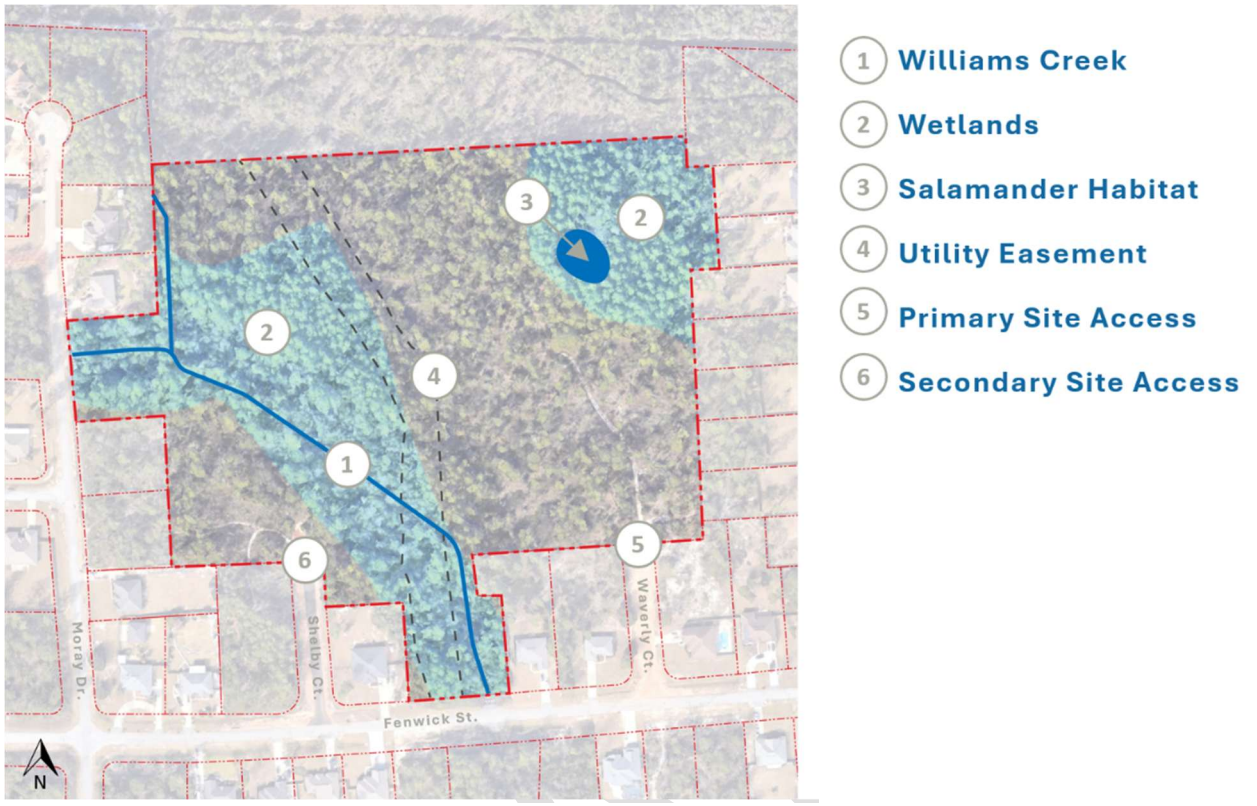


Figure 24 Existing Conditions Site Map

6. Secondary site access from Shelby Court.

The parcel is bordered by homes along Moray Drive to the west, Smallwood Drive to the east, and Fenwick Street to the south.

Design Approach

The conceptual design balances three goals: preserving the site's natural, undeveloped character; meeting the community's preferences for recreation; and providing the stormwater function that a new capacity project would require.

Two working principles shaped the plan:

1. The stormwater pond should be integrated naturally into the park rather than fenced off from it.
2. Preservation comes first. Active recreation is a secondary goal.

Williams Creek, the wetlands, the salamander habitat, and the mature upland tree canopy are treated as fixed features. The park works with them. Elevated boardwalks cross the wetlands, and permeable paths follow the wetland edges. Parking and active amenities are concentrated in the southeast corner near the main entrance, which leaves most of the site in its natural state.

Two stormwater control options are presented, dry retention or wet detention. Both maintain a very similar overall site design. Only small adjustments are made based on the size and shape of the stormwater control as shown in Figure 25.



Figure 25 Dry Retention and Wet Detention Concepts

Option 1: Dry retention. A dry retention pond of about 1.5 acres holds water after storms and drains between them. The site's sandy soils suit this design well (Chapter 3). However, this option would manage only runoff from the park itself and would provide no treatment for an off-site roadway. It could be a lower-cost choice if the County builds the park without a road connection.

Option 2: Wet detention. A pond of about 2 acres with a naturalized edge holds a permanent pool of water. Its size and shape reflect the depth to groundwater on the site. This option



Figure 26 Dry Retention



Figure 27 Wet Detention



Figure 28 Overall Site Layout

provides treatment for the assumed 3,600 feet of roadway. Its ultimate size and shape will be determined based on required treatment volumes.

Design Elements

The pond and the preserved salamander habitat set the basic framework for the site. The trail network ties everything together, and the program areas and parking fit into the space that remains. Most of the developed footprint is concentrated in the southeast corner near the main entrance on Waverly Court: the parking, the active amenities, and the pond's edge. The rest of the site, including Williams Creek and the northeast wetland, stays largely natural and is reached by trails and boardwalks. Each element is described below.

1. **Wet detention pond:** a naturalized pond that treats runoff from the park and the future roadway.
2. **Salamander habitat:** the wetlands and possible breeding pond, maintained as habitat.
3. **Trail network:** upland walking paths and elevated boardwalks that connect the program areas, the pond, and the natural areas.
4. **Primary program areas:** active-use amenities such as a playground, picnic shelters, and courts.

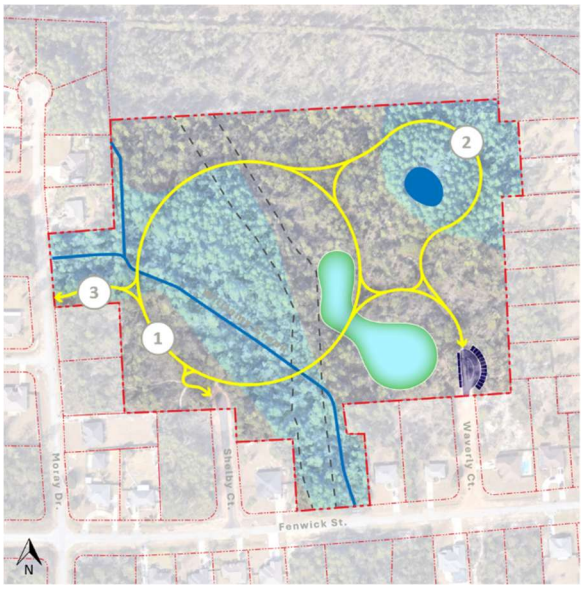


Figure 29 Trail Network Layout



Figure 30 Trail and Boardwalk Concept Illustration

5. **Secondary program areas:** quieter spaces along the trail network for rest, nature exploration, and interpretation.
6. **Parking:** an unpaved lot at the main entrance off Waverly Court.

A trail network ties the site together (Figure 29). Walking trails and boardwalks were the community's clearest priority in the survey, selected by 72% of respondents. The network connects the main entrance and the primary program areas to the pond, the secondary program areas, and the preserved natural areas.

The network includes two named routes and a neighborhood connection:

(1) The **Williams Creek Oculus** is a circular loop that crosses the creek and passes through the wetlands, with at least two bridges over the creek. It gives visitors access to the most natural part of the site while keeping foot traffic on defined paths and boardwalks.

(2) The **Salamander Meander** is a shorter loop through the eastern portion of the parcel. It offers a chance to draw attention to the preserved habitat through interpretive signage.

(3) A neighborhood spur to **Moray Drive** connects the park to the street on the west side. Residents on that side of the neighborhood can reach the park without walking around to the main entrance.

Route names are placeholders. In upland areas, the trails are permeable paths. Where they cross wetlands, they become elevated boardwalks that let water and wildlife move underneath. Where trails cross the FPL easement, they are limited to paths and boardwalks, consistent with the approach described in Chapter 3. Trail alignments near the possible salamander

breeding pond would be reviewed as part of future coordination with USFWS. Several details raised during engagement are better settled in the design phase. These include accessibility for people with disabilities and whether bicycles and leashed dogs will be allowed. Figure 30 illustrates what paths and boardwalks look like on this site.

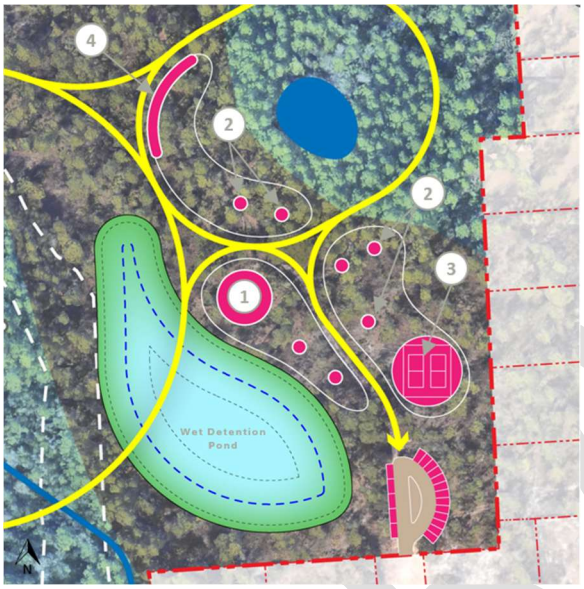


Figure 31 Primary Program Areas Concept Layout



Figure 32 (1) A playground, medium-sized at up to about 4,500 square feet, serving 15-25 children.



Figure 33 (2) Picnic areas and shade shelters



Figure 34 (3) Two regulation pickleball courts.



Figure 35 (4) An outdoor fitness circuit

The primary program areas sit in the eastern half of the parcel, near the main entrance and the pond. They are deliberately flexible. The concept shows one way to arrange them, but final uses would be chosen during design.



Figure 36 Secondary Program Areas



Figure 37 Naturalized Parking Illustration

Away from the active corner, the secondary program areas offer quieter spaces along the trail network. They could include rest areas, nature exploration zones, and additional educational signage. These areas align most directly with the nature-focused preferences that dominated the survey's open-ended responses.

For parking, vehicles enter from Waverly Court, where a naturalized, unpaved parking area is sized for typical neighborhood use (Figure 38). The parking area should include space for golf carts, as the survey's parking option specifically noted. Unpaved parking fits the site's undeveloped character while also avoiding the creation of more impervious surface which would add to the stormwater treatment burden. The lot could also demonstrate low-impact ways to reduce runoff.

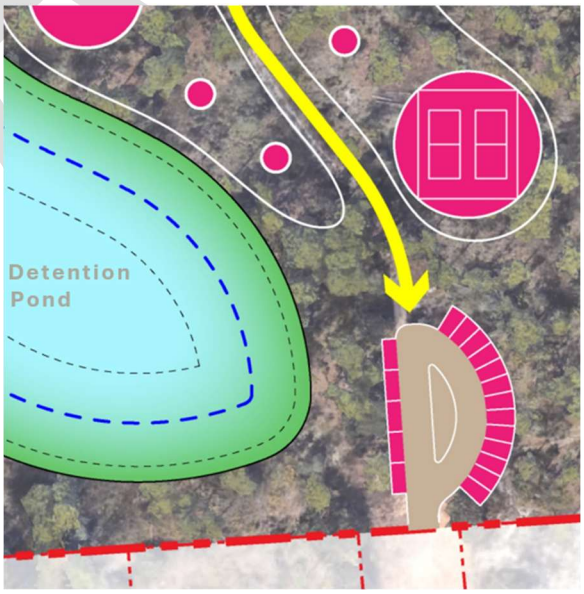


Figure 38 Concept Parking Location

Several of the services respondents ranked highest are not shown in detail at the concept level: restrooms, trash receptacles, lighting, drinking fountains,

pet waste stations, and bicycle parking. Their exact location would be set during design. Shade comes largely from the preserved tree canopy and the picnic shelters.

For restrooms, the concept suggests a compact prefabricated unit such as the Portland Loo (Figure 39). Its 6-by-10.5-foot footprint limits clearing. Its angled louvers and exterior handwashing sinks discourage loitering and overnight use, which responds to an after-hours safety concern raised in the survey comments. The unit is a single ADA-compliant stall, and it can be solar-powered, which avoids running new electrical lines through the site.



Figure 39 The Portland Loo

Maintenance was the second most-cited concern in the community survey, and Santa Rosa County staff confirmed at the design forum that maintenance funding has not yet been identified. The concept keeps long-term maintenance needs low. Most of the site remains in its natural state. The parking area is unpaved, the pond edges are naturalized rather than formally landscaped, and the restroom is a low-maintenance prefabricated unit. Responsibility for operating and maintaining the park has not been assigned, and settling that question is one of the key next steps listed below.

A few amenities from the survey were considered but were ultimately not included in this concept:

Dog park (24%). Off-leash dogs would be difficult to reconcile with the site's wildlife habitat. A small dog park could be reconsidered for inclusion in one of the program areas if it becomes a higher priority during design.

Uses requiring significant clearing. A multi-use open lawn (20%), a farmer's market or event space (18%), and an amphitheater or outdoor performance space (14%) would all require clearing a large part of the tree canopy. That conflicts with the community's strong preference for keeping the site's natural character.

Other uses. A disc golf course (14%), an outdoor classroom (9%), and public art installations (5%) could work on the site, but the design team prioritized other uses for the available space. Because the program areas are flexible, these could be revisited during design.

Stormwater Design

The pond options are based on assumptions from the Navarre Community Access Road Preliminary Pond Siting Report. The contributing area was reduced to a part of the roadway that could reasonably drain to a pond in the park.

Either option would need to remove at least 55 percent of total nitrogen and 80 percent of total phosphorus. If keeping post-development loading below pre-development loading requires more removal than that, the higher standard applies. FDEP would be the permitting agency, with Santa Rosa County as the applicant. The design would also need to meet the County's Land Development Code.

Dry retention is the more effective option for removing nutrients. The site has sandy Type A soils and groundwater about six feet down, so a dry pond can meet both targets without other treatment. It also costs less to build and maintain.

Wet detention is required to treat the roadway segment, but it is harder to build here. It depends on a permanent pool of water, at least 4.10 acre-feet in this concept, and it cannot meet the nutrient targets on its own. It would also need a planted littoral shelf, and a Type II baffle box. Because the groundwater is deep, the pond would need about 12 feet of total grading above and below the water line. Wet detention will cost more than dry retention.

Cost Estimate

HDR prepared a planning-level opinion of probable cost for the concept plan (Appendix H). The total project cost is estimated at about $8.0 million. This includes a construction subtotal of $5.3 million, a 30 percent construction contingency, 5 percent escalation, and 10 percent for design services. Table 6 breaks down the construction subtotal.

Table 6 Conceptual Cost Estimate

Category	Cost
Trails and boardwalks	$2,475,000
Amenities and furnishings	$897,000
Mobilization and general conditions	$886,000
Planting and irrigation	$433,000
Stormwater pond and infrastructure	$375,000
Site preparation and grading	$110,000
Utilities	$99,000
Parking	$42,000
Construction subtotal	**$5,316,000**
30% contingency	$1,595,000
5% escalation	$346,000
Design services (10%)	$726,000
Total project cost	**$7,983,000**

Trails and boardwalks account for nearly half of construction costs. Most of that is the boardwalk itself: about 14,600 square feet of 8-foot boardwalk and 3,600 feet of railing, together about $2.25 million. The boardwalks are what let visitors cross Williams Creek and the wetlands without

disturbing them, so they are central to the concept. Their length and alignment are also where design decisions will most affect the final cost.

The estimate reflects the dry retention pond (Option 1). Wet detention (Option 2) would cost more because of the deeper grading, littoral shelf plantings, and baffle box described above.

The estimate does not include long-term operations and maintenance, County staff time, or the road itself. Costs are approximate and will change with market conditions and as the design is refined. Because the trail network is made up of separate loops, the park could be built in phases, starting with the parking area, upland trails, and primary program areas and adding boardwalk loops as funding allows.

Next Steps for the Pilot Site

Before the concept can move into design, Santa Rosa County and its partners would need to:

1. Determine whether and how the Community Access Road moves forward. That decision, along with a completed and approved pond siting and sizing report, will settle the choice between the two pond options and, if the road advances, the pond's actual size.
2. Identify funding for construction and long-term maintenance and decide who will operate the park.
3. Coordinate with FPL on trails and boardwalks and stormwater pond within or adjacent to the transmission easement.
4. Coordinate with USFWS on the salamander habitat and possible breeding pond.
5. Complete a Cultural Resources Assessment Report for coordination with the State Historic Preservation Officer.
6. Coordinate with the Florida Department of Environmental Protection (FDEP) on permitting requirements and wetlands mitigation requirements.
7. Complete a Phase I Environmental Site Assessment or NEPA review if federal funding is identified for this project.

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Chapter 6: Framework for Replication

This chapter focuses on making the pilot's process reproducible. The Navarre concept developed in the previous chapters demonstrates a framework that TPO, MPO, or state agency partners could adopt and apply to their own corridors. Each component of the process described in this chapter builds on standard planning practice and adds a specific focus on identifying and developing opportunities for multifunctional stormwater infrastructure.

The Navarre concept plan was developed as a stormwater park. It provides required stormwater treatment for a proposed transportation capacity project while also delivering a neighborhood park. That outcome fits the site and the surrounding community's needs. Other applications of this framework will produce different outcomes, and not all will be open to the public. A regional facility that consolidates stormwater treatment across multiple planned developments could substantially reduce per-project costs. Developing extra stormwater capacity is one way to make adjacent land more usable and cost-effective to develop. Another possible outcome is a facility designed primarily to relieve a specific community-wide drainage or flooding problem. The framework can support any of these by asking the same question: what does the community around a corridor actually need, and can a regional stormwater facility be shaped to meet that need? The broader "community" includes not only nearby residents but also local governments, industry, and the broader public dealing with flooding. The framework aims to surface which needs exist and where a regional facility could align with them

The Framework: A Six-Step Process

Because there are a very large number of potential corridors, each with dozens of potential stormwater treatment sites, the recommended process operates as a funnel. Staff begins with the full list of programmed FDOT capacity projects and narrows it first to a smaller set of corridors that warrant closer analysis, then to a smaller set of specific sites for conceptual planning and community engagement.

1. **Identify eligible FDOT projects.** From the LRTP, Cost Feasible Plan, and FDOT Five-Year Work Program, the review team identifies projects with a PD&E funded or underway that are not yet through design. The most workable window is after the PD&E's pond siting report is available but before design is complete. Candidates can be flagged and shared with FDOT as soon as a PD&E begins, so local drainage problems and possible

partners are known before pond sites are chosen. Once design starts, fixed let dates leave little time for the agreements and local resolutions a partnership requires.

2. **Consider Key Factors.** Staff, potentially working with a standing Stormwater Implementation Team, narrows the eligible projects based on stormwater treatment needs, connectivity, proximity to community assets, expected growth, right-of-way acquisition costs, flooding risk, and the presence of public land. This step surfaces the higher-potential candidates.

3. **Conduct corridor-level screening.** For the higher-potential corridors, staff overlays the pond siting reports and basin analyses with parcel ownership, land use, environmental data, and known community concerns. This identifies the most promising drainage basins and the best candidate sites for the checklist.

4. **Filter site viability.** Staff applies the screening checklist described later in this chapter and provided in Appendix I. Sites that fail any of its three threshold questions should be deprioritized before more analysis time is committed.

5. **Commission a technical feasibility study.** For each site that clears screening and has willing partners, the next step is an engineering and environmental due diligence study. It should cover soils, existing wetlands, protected species, hydrology, cultural resources, contamination, and easements. The Navarre feasibility study described in Chapter 3 and provided in Appendix F is an example of what this step could produce.

6. **Develop a conceptual design.** With the site's constraints and opportunities identified in the feasibility study, conceptual design can begin. What design and outreach look like will vary with the site's goals. For sites intended for public use, the process should include a public outreach component similar to the one described in Chapter 4 for the Navarre site.

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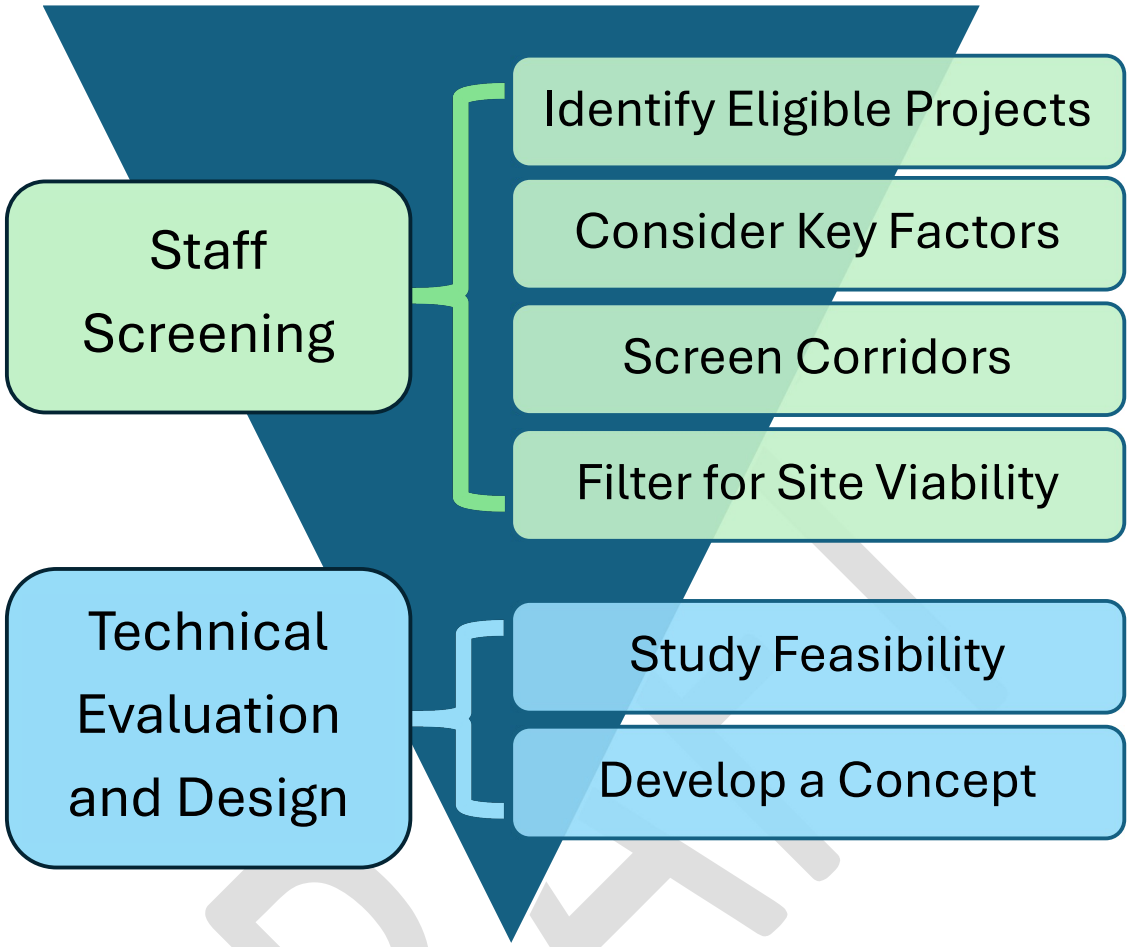


Figure 40 The Screening Funnel

Two Levels of Effort

A practical insight from the pilot is that this framework involves two very different levels of effort. Steps 1 through 4 are screening work that a standing stormwater review team, supported by TPO staff, can carry out alongside the LRTP process. Steps 5 and 6 are a substantially different scope of work that follows only once a candidate has cleared screening.

Screening. Steps 1 through 4 are typical planning work that is best kept local. They rely on publicly available information, including desktop GIS, county parcel records, and FDOT pond siting reports, and this information feeds into the screening checklist. TPO planners already have access to these tools. Local planners are best suited to this work, ideally supported by a standing committee like the Stormwater Implementation Team, because they bring contextual knowledge of community priorities, political considerations, and each project's particular challenges. This level produces a defensible "yes, no, or maybe" for each candidate and shows

whether a project merits the investment to move to the next level.

Technical Evaluation and Conceptual Design. Once a site clears the screening checklist and local staff or a standing stormwater committee recommends it, a substantially different scope is required before conceptual design can proceed. Chapter 3 describes what that scope involves: field-verified wetland mapping, NRCS soils and groundwater analysis, USFWS ECOS-IPaC species screening, FNAI screening, cultural resources review, contamination screening, regulatory pathway identification, utility and easement review, and a preliminary conveyance and pond siting analysis. For the Navarre site, this work produced a detailed study drawing on multiple technical disciplines. Conceptual design then added others, including landscape architecture and community engagement. A TPO applying this framework should budget for the feasibility study and conceptual design separately from screening.

The Screening Checklist

The screening checklist is a fast, first-level tool that uses data TPO staff already have. A standalone one-page version, intended for direct use by TPO or MPO staff, is provided in Appendix I. This section explains its intent.

In Florida, FDOT already has a process for identifying innovative and regional stormwater solutions during project development: the Watershed Approach to Evaluate Regional Stormwater Solutions (WATERSS), which replaced the older Environmental Look Around. WATERSS begins once a specific project is identified in the Planning phase and is expected for new-alignment and capacity projects. It links stormwater decisions through Planning, PD&E, and Design, and it is led by an FDOT Project Manager working with a District Champion and a District Stormwater Team. Its outputs are documented in a Stormwater Management Alternatives Report. FDOT is currently updating WATERSS. District 3 shared a draft of this report with the Central Office staff leading that update, so some details described here may change.

This checklist is designed to be applied locally to LRTP projects with a PD&E funded or underway, before WATERSS decisions are made. Results can be shared with FDOT through ETDM review and handed off to the WATERSS team. Several checklist items map directly to WATERSS's own triggers for pursuing an innovative solution: right-of-way needs for ponds, ERP treatment requirements, proximity to an impaired waterbody or BMAP, and opportunities to earn water quality or mitigation benefits.

The checklist is ordered roughly by what is fastest and cheapest to establish, and it begins with three threshold questions: ownership, project timing, and a local maintenance partner. A site that fails any

of these is unlikely to advance, however promising it looks otherwise. Ownership and timing can usually be checked from a parcel record and the Work Program in minutes. The partner question takes a conversation, but it is just as decisive. The remaining items do not rule a site out. Each "yes" strengthens the case for a regional facility and helps staff compare candidates.

1. **Is the site publicly owned, or is there a confirmed willing institutional owner?** Publicly owned parcels, or those held by willing partners, are the easiest to move forward. An unwilling owner will stop the project no matter how promising the site is. That said, ownership can change, and sites rejected for ownership reasons could later become viable.

2. **Is the FDOT project early enough in development (before Design) to incorporate regional alternatives?** Once design is underway, incorporating a regional alternative usually becomes prohibitively expensive or impossible.

3. **Is there a willing local government partner with maintenance capacity?** FDOT generally looks for a permanent local government partner to own and maintain a shared facility. A regional facility is a long-term operating commitment. Nonprofit and institutional partners are valuable, but a local government partner is typically required.

4. **Is there publicly owned land adjacent to or within the project corridor?** Adjacent public ownership often expands the practical site footprint and reduces acquisition risk.

5. **Are there documented community stormwater or drainage concerns in the area?** Residents, local engineers, and county or municipal staff are usually the best sources for this.

6. **Are there other community needs the facility could serve?** Beyond the drainage concerns in Item 3, look for recreation or greenspace deficiencies identified in comprehensive plans or parks master plans, or for opportunities to consolidate stormwater treatment across multiple planned or potential developments in the corridor. Any of these adds a co-benefit that strengthens the case for a regional facility.

7. **Is the site designated for conservation, recreation, or compatible use?** A compatible future land use designation signals

alignment with existing policy. Designations can be changed, but doing so adds a political process to the project timeline.

8. **Could a regional facility reduce the number or size of the project's own ponds?** This is the FDOT cost-side question and should be developed in coordination with the FDOT project team and design consultant.

9. **Are there cost-sharing opportunities, local partners, grants, mitigation credits?** Funding from multiple sources will be critical to advancing these projects beyond the conceptual plan stage. It also depends on whether runoff can physically reach the site.

10. **Does the corridor intersect a BMAP, TMDL, or impaired waterbody where additional treatment carries environmental and possibly funding value?** Sites within these designations often attract dedicated environmental funding and strengthen the case for an FDOT–local partnership. Land use in the contributing area also matters. Florida's updated stormwater rule measures treatment largely by nutrient reduction, and treating runoff from land uses with higher nutrient loads, such as agriculture, can achieve more reduction than treating roadway runoff alone.

Lessons Learned

The pilot confirmed that viable sites for multifunctional stormwater treatment are rare. A candidate site has to work physically: it needs the right topography, soils, size, and hydrology to connect with the corridor's drainage needs. It has to work from a regulatory standpoint: it needs a compatible future land use designation, no fatal environmental constraints, and a permitting pathway that won't be derailed by a protected species or a Section 4(f) question. Finally, it has to work institutionally. Partners need to be in place, including a willing landowner, a local partner with maintenance capacity, and an FDOT project at the right stage of development. Any one of these can derail a potential project. Over the course of the pilot, promising sites were ruled out because of hydrological mismatch, unwilling ownership, project timing, and pond sites that were too small or too constrained by adjacent development.

Most candidates screened will not advance. That is not a failure particular to this pilot; it is the reality of this kind of work. It does mean the screening process needs to eliminate unlikely candidates efficiently, without spending significant resources on them. By screening across the full corridor list and passing viable

candidates into FDOT's pipeline, the TPO can signal to FDOT project managers which sites deserve additional consideration. Because of this difficulty, the pilot ultimately concentrated its resources on a single site, rather than the up to three originally planned, after the other candidates fell through or proved unsuitable.

The local partner's timing sets the pace. After the SIT selected the Navarre site, the pilot paused for nearly three years at Santa Rosa County's request while the related road project went through a contentious public process. Future applications should expect that the local partner's priorities and circumstances, not the TPO's schedule, will decide when work can move forward. Keeping discussion of the park separate from the road debate, as the County requested, helped residents engage with the park concept on its own terms.

Conceptual design may need to start before the road's numbers exist. The Navarre site advanced before a pond siting report was available, and the road's PD&E was never finalized. The design team used a working assumption of 3,600 linear feet of roadway to size the pond. Future applications will often face the same situation. Setting a clear treatment target at the start of conceptual design, even an assumed one, keeps the stormwater function from getting lost as the design focuses on park amenities.

A park designed to stand on its own is more durable. Because the road's future was uncertain, the concept was designed to be worthwhile with or without it. Framing future concepts the same way protects the local partner's investment if the transportation project changes or stalls.

A focused survey produced usable design direction. Asking residents to prioritize a limited set of choices, and leaving out questions about features that were already required, gave the designers clear guidance they could apply directly. Partnering with the HOA to distribute the survey drew a strong response from the people most affected.

Applying the Framework Beyond the Pilot

The pilot's corridor screening surfaced two additional candidates within the FL-AL TPO area that the TPO should consider as ready next steps.

SR 297 (Pine Forest Road), Escambia County. This corridor combines an existing urban population with substantial planned growth, which suggests more than one possible outcome for a regional facility. It could serve the growing residential population with recreational space, consolidate stormwater treatment across incoming developments, or even provide combined treatment for FDOT and county road projects. The preferred site identified during this pilot did not advance because of ownership, so a

second round would start by looking at other parcels along the corridor. This is the most direct opportunity for a near-term second application of the framework.

SR 173 (Blue Angel Parkway, US 98 to Pine Forest Road), Escambia County. This PD&E was in its early phases at the time of screening. There are documented opportunities to connect stormwater design here with the Pensacola and Perdido Bays Estuary Program's Comprehensive Conservation and Management Plan and with the existing ECUA, county, and state-owned wetland mitigation and water reclamation site at Bayou Marcus. Bayou Marcus serves as a regional precedent for the kind of multipurpose facility a fully realized SR 173 site could become.

Both corridors should be re-examined as priority corridors if this process continues.

Permitting Options

Two permitting tools may give local governments more options for facilities like this one. The first is a Water Quality Enhancement Area (WQEA), authorized by Section 373.4134, Florida Statutes. A WQEA works much like a wetland mitigation bank: a facility that improves water quality earns credits that others can use to meet regulatory requirements. DEP's implementing rule, Chapter 62-332, F.A.C., was still in rulemaking as of October 2026. The second is offsite compensating treatment under the ERP Applicant's Handbook, a separate permitting path with different benefits. Either could let a local government build a facility before a road project is designed and recover part of the cost from projects that use it later. Agencies interested in either path should confirm its current status with DEP and the water management district.

Recommendations

Based on the pilot, the project team recommends that the FL-AL TPO:

1. **Run screening at regular intervals.** After each LRTP update and annual Work Program review, have a stormwater review team apply Steps 1 through 4 and the screening checklist to projects with a PD&E funded or underway, and share the results with FDOT through ETDM.
2. **Keep a standing stormwater committee**. Continue the SIT, a TCC subcommittee, or a similar group, to review screening results and bring local knowledge to candidate sites.
3. **Budget for site-level work separately**. Set aside funding for a feasibility study and conceptual design when a strong candidate emerges. This work requires professional expertise beyond what staff resources alone can provide.

4. **Hand off flagged candidates to FDOT early**. Share screening results with FDOT District 3 stormwater staff as early as PD&E scoping, so promising sites and local drainage problems are known before pond sites are selected.
5. **Pursue the next candidates.** Rescreen SR 297 and SR 173 as priority corridors.
6. **Support Santa Rosa County on the Navarre site**. Help the County use the concept plan and its supporting documentation to pursue funding and partners (see Chapter 5).
7. **Share the framework regionally.** Offer the process to other TPOs in the region, including the Okaloosa-Walton and Bay County TPOs.

Summary

This chapter's framework (the six-step process, the two levels of effort, and the screening checklist) is the pilot's most portable output. Applied consistently, it turns the search for multifunctional stormwater opportunities from an ad hoc exercise into a routine part of transportation planning. The Navarre concept shows what a viable candidate looks like at the far end of that process, and the checklist in Appendix I is where the next application would start.

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Chapter 7: Conclusion

Stormwater treatment is one of the largest costs of building roads in Florida, and the conventional answer, a fenced pond sized for a single project, returns little to the community around it. This pilot set out to test whether a TPO could find better opportunities earlier, starting from projects in the long-range plan, while there is still time to shape a project's stormwater solution around broader community needs.

The pilot produced two results. The first is a repeatable process: a six-step framework and a screening checklist that TPO staff can apply to the LRTP, the Cost Feasible Plan, and the FDOT Work Program with resources they already have. The second is a demonstration. At the Navarre site, the project team carried one candidate through the full process, from feasibility study to community engagement to a conceptual plan. The result is a stormwater park that preserves Williams Creek and its wetlands, gives the neighborhood the trails and recreation it asked for, and provides stormwater capacity for a future road if one is built.

The pilot also showed how hard this work is. Most candidate sites will not advance. A site has to work physically, from a regulatory standpoint, and institutionally, and the institutional pieces are often the hardest to line up: a willing landowner, a local partner able to maintain the facility, and a transportation project at the right stage. The Navarre site advanced because those pieces came together. It also took patience. The project paused for nearly three years while the related road project worked through a difficult public process.

That difficulty is the reason the framework matters. A TPO can screen many corridors at once, sort out the few that deserve further investment, and bring local governments, FDOT, and residents into the conversation before design decisions are locked in. Handled this way, multifunctional stormwater facilities become a routine consideration in transportation planning, not a lucky exception.

The work does not end with this report. Santa Rosa County now has a concept plan it can use to pursue funding and partners for the Navarre site. SR 297 and SR 173 are ready for the next round of screening. The recommendations in Chapter 6 lay out how the FL-AL TPO can build this process into its regular planning cycles and share it with other TPOs in the region. Over time, the goal is a region where the land set aside to handle stormwater from new roads also serves the people who live near it.

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Image Credits

Illustrative images in Chapter 5 were generated with AI by HDR and do not depict actual conditions.

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Figure 1: *A flooded street in Austin during the thaw following 2021 snowstorm* by Jno.skinner, via Wikimedia Commons. Licensed under CC BY-SA 4.0 https://commons.wikimedia.org/wiki/File:A_flooded_street_in_Austin_during_the_thaw_following_2021_snowstorm.jpg

Figure 3: City of Pensacola – Facilities - Corinne Jones Park https://www.cityofpensacola.com/facilities/facility/details/Corinne-Jones-Park-31

Figure 4: City of Gainesville, Florida. Depot Park – Map https://www.depotpark.org/park-map

Figure 5: Kimley-Horn. North Carolina Zoological Park Stormwater Design. https://www.kimley-horn.com/project/north-carolina-zoological-park/

Figure 6: Florida Department of Transportation, *WATERSS Process Guidebook* (2021).

Figure 39: *Portland Loo* by Graywalls, via Wikimedia Commons. Licensed under CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=76783113

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Appendices:

[Appendices apart from Appendix I have been removed from this draft for size]

A. Scope of Work;
B. Site Screening and Corridor Evaluation Materials;
C. SIT Meeting Agendas;
D. Community Survey Instrument;
E. Full Survey Results;
F. Technical Report;
G. Conceptual Plan Drawings;
H. Cost Estimate;
I. Stormwater Opportunity Screening Checklist;

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Appendix I: Stormwater Opportunity Screening Checklist

Purpose. This checklist is a fast, first-level screen for identifying FDOT corridors and candidate sites where a regional, multifunctional stormwater facility may be viable. It is meant to be applied to LRTP and Work Program projects that have a PD&E funded or underway, before design begins. Promising opportunities can then be flagged early and carried into FDOT's WATERSS process when a project advances. See Chapter 6 for a full discussion.

How to use it. Apply the checklist to FDOT capacity projects (new alignment or widening) with a PD&E funded or underway that are not yet through design. Start with the three threshold questions. A "No" on any of them means the site is unlikely to advance, however strong it looks otherwise. The strengthening questions do not rule a site out. Each "Yes" strengthens the case and helps compare candidates. Mark "Unknown" where information is not yet available and note what is needed. A site that passes screening still requires a technical feasibility study before conceptual design.

Corridor / project being screened

FDOT project / corridor: _____

LRTP / CFP reference: _____ **Phase (Planning / PD&E):** _____

Candidate parcel(s): _____

Screened by / date: _____

Screening items

Threshold questions (Yes / No / Unknown)

1. Is the site publicly owned, or is there a confirmed willing owner? (Property Appraiser; owner contact) ☐ ☐ ☐
2. Is the FDOT project early enough (before design) to incorporate a regional alternative? (Work Program; PD&E status) ☐ ☐ ☐
3. Is there a willing local government partner with capacity to maintain a long-term facility? (local government staff) ☐ ☐ ☐

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Strengthening questions (Yes / No / Unknown)

4. Is there publicly owned land adjacent to or within the project corridor? (Property Appraiser; FL-SOLARIS) ☐☐☐
5. Are there documented community stormwater or drainage concerns in the area? (local stormwater staff; stormwater master plans) ☐☐☐
6. Are there other community needs the facility could serve, such as recreation or greenspace deficiencies, or consolidating treatment across planned developments? (comprehensive plan; parks master plan; CIP) ☐☐☐
7. Is the site designated for conservation, recreation, or a compatible use? (future land use map; zoning) ☐☐☐
8. Could a regional facility reduce the number or size of the project's ponds, and can the project's runoff reach the site? (pond siting report; FDOT project team) ☐☐☐
9. Are there cost-sharing opportunities, such as local match, grants, or mitigation credits? (local partners; grant programs) ☐☐☐
10. Does the corridor intersect a BMAP, TMDL, or impaired waterbody, or drain land uses with high nutrient loads, where added treatment carries environmental or funding value? (FDEP impaired waters and BMAP maps) ☐☐☐

Staff Recommendation

1. ☐ **Advance** technical feasibility study, and share with FDOT District stormwater staff
2. ☐ **Hold**, revisit at the next LRTP/CFP cycle or when the project phase advances
3. ☐ **Do not advance**. Reason: _____

Notes / next steps:

_____

_____

_____

_____

This checklist is meant to work alongside FDOT's WATERSS process, before WATERSS decisions are made. Its results are intended to feed WATERSS, including the District Stormwater Team and the Stormwater Management Alternatives Report.