Implementation Grant Pre-Application Worksheet

Items with a red asterisk are required and italicized text denotes informational text seen by scrolling over an "i" icon in the application portal.

Applicant Information

Applicant Account: Pinellas County Government
Applicant Grant Manager: Yi Thierry Ku
Applicant Authorized Signee: Insert text here.
Applicant Fiscal Agent: Insert text here.

Project Information

Choose the Entity Category (Refer to 380.093(5), F.S., for more information):

County, municipality, or authorized special district addressing risks of flooding or sea level rise identified in a vulnerability assessment

Choose the project type you are submitting (*Resilient Florida Program Project Type*). Select all that apply by holding "ctrl" button down:

Stormwater infrastructure, Coastal Flood Control, Utilities infrastructure, Transportation and Evacuation

*Project Title (*This should be a brief synopsis of the project plan. Limited to 20 words.*):

98th Way/100th Way Drainage Improvements

List the City(ies)/Town(s)/Village(s) (*List all city(ies)/town(s)/village(s*) where work is to be performed):

City of Seminole, Unincorporated Pinellas County

Project Location

o Latitude:

82.774

o 27.820 Longitude:

Project Location narrative (Neighborhood, part of town, intersection, etc.):

The 98th Way/100th Way Drainage Improvements project ("Project") focuses on improvements to the stormwater conveyance systems draining to the Pinellas Trail and ultimately Long Bayou via the St. Petersburg/Madeira Beach Kampgrounds of America (KOA) Holiday campground. The Project proposes to upgrade the existing collection system with new stormwater culverts along 100th Way, Seminole Trail North and along the Pinellas Trail and 98th Way North. The project length is approximately 1.05 miles. In addition, the existing pond owned by Pinellas County adjacent to 100th Way will be enlarged to provide additional storage and the outfall from the pond will be redirected to the proposed storm system to the southeast.

Figure 1 Project Location



Will any of the work to be performed or fall on state lands?

Yes, some of the Project will be performed on state lands. The region has historically been a wetland and has increased in size over time. As part of this project, a submerged portion of the pond that the state claims as sovereign submerged lands and is proposed for expansion.

Area Served (If applicable, area served only required for projects that mitigate risks on a regional scale):

The Project serves and positively impacts surrounding regions such as the City of Seminole and critical regional assets such as a sanitary sewer lift station located within 500 ft of the project area, located close to Long Bayou. The sanitary sewer assets are identified as: Pinellas County Sanitary Sewer Pump Stations # 16FS-SP3161 & 16FS-SP3162. The City of Seminole's stormwater management asset # SSW10_8968, has a theoretical pre max stage of 2.5' above warning stage, and post max stage of 2.0' above warning stage.

Sponsor City/County (If applicable. If the applicant is the sponsor, leave blank.):

N/A

Background

Explain the demonstrated need(s) and how the project will address those needs. (Explain the demonstrated need which the project addresses.)

Pinellas County will address community flooding impacting local roads, stormwater discharge points and wastewater assets with the 98th Way/100th Way project area. These flooding impacts ultimately lead into Long Bayou in addition to the adjacent City of Seminole stormwater systems. The project area floods due to excessive flows from coastal floods and rainfall as well as an undersized drainage system, which has been identified and well-documented by Pinellas County based on reports of historic local flooding events. The County's Stormwater and Vegetation Division investigated several sub-basins within the Lake Seminole Watershed Basin, encompassing approximately 300 acres in the vicinity of 98th Way, 100th Way and the Pinellas Trail which have several outstanding complaints about flooding and is in dire need of enhancement of the collection, storage, and conveyance systems to bring it to the level of service established by the Pinellas County Stormwater Manual. Frequent flooding as a result of the inadequate capacity of the storm pipe system results in deterioration of sanitary and stormwater infrastructure, property damage, and roadway flooding and damage. It also creates residential access problems and public safety concerns.

Records indicate flooding at the northern ends of both 98th Way and 100th Way. 98th Way has an open ditch/pipe collection system that enters into a closed conveyance crossing 98th Way at the high point of the roadway. 100th Way has small ditch bottom inlets with 12-inch PVC pipes in the middle of the street. The streets and yards at the southern ends of 98th and 100th Ways flood and remain saturated during rainfall season. A stormwater conveyance ditch system between 100th Way and 98th Way was filled in by one of the homeowners, eliminating the only positive outfall

for this area. Impacts of flooding within County jurisdiction have exceeded capacity and increased flooding impacts within the adjacent Seminole City infrastructure. The northern end of 100th Way is within Seminole city limits and floods at levels greater than 2-feet for a 100-year, 24-hour storm event. Streets like 59th Avenue North, Cherokee Avenue, Seminole Trail, and 100th Way experience flooding regularly. -



Pinellas County has conducted comprehensive modeling to prioritize these specific mitigation components so that flood impacts will not be transferred to adjacent areas. The project will upgrade pipes and add curb inlets to optimize flows and alleviate the flooding. New stormwater culverts along 100th Way, Seminole Trail North, and Pinellas Trail are proposed to connect to a box culvert by 54th Avenue North. As proposed, the supplementary storm sewer system would redirect and convey excess flows from the Bay Pines Estates subdivision that are beyond the capacity of the existing storm sewer system. In addition, the existing pond that is owned by Pinellas County and adjacent to 100th Way will be enlarged to provide additional storage. The outfall from the pond will be redirected to the proposed storm system to the southeast end of the pond.

The project is designed to reduce structural flooding for a 100-year, 24-hour storm event and roadway flooding for a 10-year, 24-hour storm event. It would improve conveyance capacity from the Pinellas Trail through the KOA to Long Bayou, not only for the required flows associated with the project area, but for the surrounding region including Seminole municipality. The project is also intended to provide additional conveyance for future improvements within the contributing watershed. This project is included in Pinellas County's FY 2023-2028 Capital Improvement Plan.

Explain how the proposed project fits into the Project Types chosen.

The Project proposes a comprehensive approach that effectively targets the improvement of stormwater infrastructure, coastal flood control, utilities infrastructure, and transportation and evacuation. It focuses on stormwater infrastructure and utilities infrastructure improvements by upgrading existing pipes, adding curb inlets, and constructing supplementary storm sewer systems to reduce flooding and promote effective stormwater management. This would reduce roadway flooding and protect critical regional transportation infrastructure, utilities, and residential neighborhoods. The stormwater infrastructure and pond expansion would also help with coastal flood control and mitigating flood risks during intense rain events and rising sea levels. The area is impacted by increasing tidal effects, which combined with rainfall, aggravates localized flooding.

Project Scoring Criteria Tier 1 Criteria Information

Does the project reduce risk of flooding or sea level rise identified in a comprehensive vulnerability assessment or the comprehensive statewide flood vulnerability and sea level rise assessment? If yes, please explain. (Until July 1, 2024, applicants without a comprehensive vulnerability assessment shall receive points based on risks posed by flooding or sea level rise identified an assessment, report, evaluation, or other documentation of risk that addresses flooding or sea level rise.)

 \boxtimes Yes

🗆 No

Yes, the Project will reduce risk of flooding and sea level rise as identified through the Pinellas County's Sea Level Rise and Storm Surge Vulnerability Assessment

(https://pinellas.gov/projects/vulnerability-assessment/) and project vulnerability assessment in *Grants Strategy, Development, and Management Funding Plans*. Additionally, this project is identified in the Pinellas County's Public Works and *Local Mitigation Strategy* (LMS) (2020). It is listed as LMS 98th Way/100th Way Drainage Improvements (PID 003899A) on row 195 (see attached). The LMS identifies potential hazards and vulnerabilities, set goals and establish specific mitigation actions to reduce risk of natural or man-made or natural hazards to people, buildings, infrastructure and the environment.

The vulnerability assessment points out that tidal effects are impacting this area, limiting stormwater capacity and contributing to localized flooding. This condition is anticipated to worsen, with tidal effects becoming more prevalent over time, increasing localized flooding for each successive rainfall event.

Does the project reduce risk of compound flooding identified in a vulnerability assessment or the comprehensive statewide flood vulnerability and sea level rise assessment? If yes, please explain. (Until July 1, 2024, applicants without a comprehensive vulnerability assessment shall receive points based on risks posed by

flooding or sea level rise identified an assessment, report, evaluation, or other documentation of risk that addresses flooding or sea level rise.)

⊠ Yes

Yes, the Project reduces risk of compound flooding from coastal flooding (tidal effects), and pluvial flooding (rainfall induced flooding of drains/storm surge). Storm surge exposure was demonstrated in 100% of storm surge exposure scenarios (*Grants Strategy, Development, and Management Funding Plansse*) while the LMS assessed risk for 22 hazards including flooding. Pinellas County modeling assessed X rainfall scenarios for initial design which is the basis for this project design. Implementation of this project will reduce risk resulting from compound flooding.

Does the project reduce risk to or adapt a regionally significant asset? This can include relocation. If yes, please explain.

 \boxtimes Yes \Box No

Yes. The Project reduces the risk to two sanitary pump stations (asset numbers 16FS-SP3161 and 16FS-SP3162) providing regional benefits. This includes three existing 24-inch pipes and one 6-inch pipe for sanitary/stormwater conveyance that will have enhanced resilience to flood pressures as a result of this project. The project will reduce the elevation of water and limit the water coming out of the sanitary sewer, helping limit detrimental impact on the pump stations and several other utilities, including private storm utility access manholes and the adjacent City of Seminole utilities.

What percent of critical assets in the project impact area are considered to be vulnerable? Please describe the method used to determine the percent selected as well as provide a list of critical assets in the project impact area. (*Vulnerable critical assets are those at risk of flooding based on applicable scenarios and standards outlined in paragraph 380.093(3)(d), F.S. Until September 1, 2024, if evaluation of those scenarios and standards is unavailable for the project impact area, best available data can be used to determine the percent.*)

- \boxtimes At last one critical assess but less than 20%
- \Box 20% or more but less than 40%
- \Box 40% or more but less than 60%
- \Box 60% or more but less than 80%
- □ 80% or more

Based on the vulnerability assessment meeting FDEP requirements, 5.9% of critical assets were

deemed vulnerable.

The percentage of vulnerable critical assets was calculated using maximum available exposure scenarios and whole counts of all assets, including the linear assets with a 500-year storm surge. All assets were assumed to have a reduced risk as a result of project implementation.

Does the project contribute to existing flood mitigation projects that reduce upland flood damage cost by incorporating new or enhanced structure or natural system restoration and revegetation? If yes, please explain.

	No
	Yes, by incorporating new or enhanced structure
	Yes, by incorporating natural system restoration and revegetation
\boxtimes	Yes, by incorporating BOTH new or enhanced structure AND natural system restoration and revegetation

Yes, this Project incorporates both new and enhanced structures and revegetation. New stormwater pipes and curb inlets and a supplementary storm sewer system will be constructed. Natural system restoration and revegetation features are also key components of the project. A new bioswale will be constructed over the pipe along the Pinellas Trail and an existing stormwater treatment pond will be expanded and will include native vegetation. The natural pond was previously expanded to cover three acres of area and will be expanded further as part of this project. Pinellas County will also align the Project with their tree mitigation policies which preserve tree canopy for the entire project footprint ensuring a net tree impact of 0%.

(<u>http://www.pinellascounty.elaws.us/code/coor_ptiii_ch138_artx_div3_sec138-3654</u>#) In addition, the introduction of a sterically placed back flow preventor at the old inflow/outflow pipe (on the northeast side of the pond), will convert the pipe to inflow only. By doing this and removing the connection to the 62nd Avenue Drainage system that is proposed to be diverted south, will reduce flooding at the City of Seminole's stormwater asset # SSW10_8968 by approximately half a foot.

Tier 2 Criteria Information

What is the current frequency of flooding or erosion in the project impact area? (If area has been flooded 3 times in 5 years or is experiencing ongoing erosion, supporting documentation must be submitted with the application)

- □ No current flooding or erosion
- □ Has experienced flooding or erosion in the last 3 years
- Has been flooded at least 3 times in the last 5 years or is experiencing ongoing erosion. If area has been flooded 3 times in 5 years or is experiencing ongoing erosion, please explain and provide documentation.

The project impact area has been flooded numerous times (>3) in the past five years. Pinellas County has about 36 flooding, drainage and erosion related service requests within the Seminole

Area of Interest (AOI). These service requests demonstrate over 30 asset flooding-related and drainage-related work within the project area over the past five years (2019-2023). This includes several reports of flooded streets and ditches and clogged storm drains near properties. See attached spreadsheets and photos.



What is the current severity of flooding or erosion in the project impact area? (If area has been flooded greater than 1 foot in the current and each of the previous three calendar years, been flooded for 7 consecutive days or erosion is critical for the asset class, supporting documentation must be submitted with the application)

- □ No current flooding or erosion
- Flooding greater than 3 inches in last 3 years or has ever experienced unmitigated erosion
- Flooded greater than 1 foot in the current and each of the previous three calendar years, has been flooded for 7 consecutive days or erosion is critical for the critical asset class. If area has been flooded greater than 1 foot in the current and each of the previous three calendar years, been

flooded for 7 consecutive days or erosion is critical for the critical asset class, supporting documentation must be submitted with the application.

As noted above this area receives frequent requests for service due to flooding impacts. To accurately predict future risk scenarios and hindcast previous impacts, Pinellas County alternatives analyses ran through multiple flooding scenarios. The models show approximately 100 locations that have flooding greater than 0.1 foot and three locations with flooding greater than 2 feet for the 100year storm event (*PID No. 003899A Analysis of Design Alternatives on 98th & 100th Way, 2019*). This results in property damage, access problems, and residential safety issues. See attached reports and photos. A low spot in the yard of 10019 59th Ave. N. stays wet for the entire wet season.

Long Bayou is designated as a Flood Zone AE with a base flood elevation of 10 feet along the western shoreline, which is indicative of a tidal surge area exceeding the 1' criteria. (*Final Phase Submittal - Design Document Pinellas Trail and 54th Avenue North Drainage Improvements – PID No. 000183A*).

What is the status of project design? (*To receive points for a completed design, plans properly certified by a professional in the relevant field must be submitted with the application.*)

- □ Not designed
- Partially designed or site-specific environmental or geotechnical reports have been completed.
- Design is complete. To receive points for a completed design, plans properly certified by a professional in the relevant field must be submitted with the application.

Site inspections have been conducted. The project is at 30% design and all final designs and plans are expected to be completed by February 2024. Construction is planned for June 2024 to June 2025. Phase 1 was completed previously and includes a new outfall to Long Bayou via the existing KOA pond.

Permitting and easement acquisition status. If applicable, please provide a list of necessary permits/easements and application statuses.

Necessary permits and easements have been identified

- All permits have been applied for or at least one permit has been approved
- All necessary permit(s) and easement(s) have been authorized/obtained
- □ No permits or easements are required for the project

Pinellas County held a pre-meeting with Southwest Florida Water Management District. An Environmental Resources Permit is required. All easements have been acquired. No project activities will take place on private property.

Are local funding sources committed as cost share or is the project in a financially disadvantaged small community as defined in 380.093(5)(e), F.S.? If yes, please explain and provide documentation.

Yes			No
	Yes	Yes	Yes 🗆

Total project costs are projected at \$9,477,046. A 50% cost share of \$ 4,607,520 has been secured through the Penny for Pinellas tax (see attached STANDARD NAME lines XX, <u>https://www.pennyforpinellas.org/</u>). This is a voter-approved, one-cent sales tax used to pay for projects to improve Pinellas County infrastructure.

Does the project include environmental habitat enhancement or nature-based solutions? If yes, please explain.

⊠ Yes

🗆 No

Yes, the pond expansion will provide additional habitat. A new bioswale will be constructed over the pipe along the Pinellas Trail and an existing stormwater treatment pond will be expanded and will include native vegetation. The natural pond was previously expanded to cover three acres of area and will be expanded further as part of this project. Pinellas County will also align the Project with their tree mitigation policies which preserve tree canopy for the entire project footprint ensuring a net tree impact of 0%. (http://www.pinellascounty.elaws.us/code/coor_ptiii_ch138_artx_div3_sec138-3654#)

Does the project impact area include area that is identified as state or federal critical habitat for threatened and endangered species? If yes, please explain.

🗆 Yes

🛛 No

While the project area is not identified as a state or federal critical habitat for threatened and endangered species, mangroves are present at the outfall discharge point to Long Bayou.

Figure 2 Long Bayou outfall 9.2.2016



Is the project cost-effective? If yes, please explain.

 \boxtimes Yes \Box No

Project costs are approximately \$9,477,046. Pinellas County will issue a competitive solicitation and contract for professional services to include engineering, construction management, labor, tools, equipment, and supplies associated with this project to ensure cost effective, fair contracting (see Purchasing Policy & Procedure Manual). The County will apply all appropriate Uniform Guidance and cost principles toward the use of funds associated with the project (<u>https://pinellas.gov/purchasing-policy-procedure-manual/</u>)

Tier 3 Criteria Information

Is 50% local, state, or federal cost share secured for the project? If 50% cost share has been secured, please provide documentation with the application.

- □ No (unless the project is in a financially disadvantaged small community)
- Cost share has been identified but not appropriated or released
- Cost share has been secured
- The project is in a financially disadvantaged small community and cost share is not required

Has state funding previously been awarded for the project? If so, for what? Please explain and provide information sufficient for the Department to verify previous state funding. (Pre-construction activities are defined in s. 380.093(2)(c), F.S.

No

Will this project exceed Florida Building Code flood-resistant requirements and local floodplain management regulations? If yes, please outlines the specific requirements and details relating to how the design exceeds the criteria.

Yes

Yes, the Project is subject to Pinellas County's stormwater regulations that are more stringent and exceed the requirements of the Florida Building Code. This can be demonstrated by regulations such as The FDOT Drainage Manual Section 4.7.1 Rational method can be used on areas up to 600 acres. Pinellas County Drainage Manual Section 6.10.1 restricts the Rational Method to 10 acres or less. Or FDOT Drainage Manual Section 3.3, requires for general design frequency of a 3 year storm event, and Pinellas County Section 1.5.4.2 requires a design frequency of 10 year storm event.

Does this project include innovative technologies designed to reduce project costs and provide regional collaboration? If yes, please specify which technologies will be used and explain why they are innovative as well as how they will reduce cost and provide regional collaboration. (For this criterion, "innovative" means an emerging technology or a proven technology used in a unique way to adapt one or more critical assets to the effects of flooding or sea level rise.)

	Yes		No
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Yes, the project proposes the installation of an in-line back check valve to reduce flooding in the adjacent jurisdiction of the City of Seminole. Additionally, the bioswale that will be developed over the new pipe would reduce costs and improve water quality for the surrounding region.

Does the critical asset being adapted or the project impact area contain a financially disadvantaged community? If yes, please explain the metric used to determine financial disadvantage (ex. Local income compared to state average).

		⊠ No
N/A		
	Addition	al Information
Will this project be	nefit a spring? If yes, p	lease explain.
		⊠ No
N/A		
Will this project pro explain.	otect water sources usi	ng alternative water supplies? If yes, please
		⊠ No
N/A		
Will this project cor yes, please explair	nstruct, upgrade or exp า.	band facilities to provide waste treatment? If
	🛛 Yes	□ No

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coming out of the sanitary sewer systems, helping limit detrimental impact on two sanitary pump stations and several other utilities, including private storm and sanitary sewer utility manholes and the adjacent City of Seminole stormwater utilities.

Will this project convert septic to sewer? If yes, please explain.

□ Yes

	⊠ No	
N/A		

Has this project been submitted to other programs for funding? If yes, please explain.

🛛 No

N/A Confirm

What is the population of your community? (Enter integer values only.)

As of July, 2022, the population estimate for Pinellas County is 961,739 (https://www.census.gov/quickfacts/fact/table/pinellascountyflorida/PST045222)

May need to add numbers specific to local community/project benefit area.

Multiagency Information

The following information is for data collection purposes only and do not correlate with any of the project evaluation criteria.

Estimated Project Duration:

24 months

Permitting (Brief description of expected permit determinations necessary for project completion or relevant permit information once permitted.):

Pinellas County held a pre-meeting with Southwest Florida Water Management District and has identified that an Environmental Resources Permit is required.

Lands, Easements, Rights of Way (Brief description of acquisitions or permissions necessary for project completion or relevant information once required.):

All pertinent easements have already been acquired in an earlier phase of the project. No project activities will take place on private property.

Critical Infrastructure (Select yes if this project includes critical infrastructure that is confidential or should be redacted from public records searches):

	Yes	\boxtimes	No
Project located in a Coastal	Zone?		
\boxtimes	Yes		No
SLIP Study Required? No			

Source of Match:

Local funds

Funding Mechanism (Program utilized or local funding mechanism.):

Total project costs are projected at \$9,477,046. A 50% cost share of \$ 4,607,520 has been secured through the Penny for Pinellas tax (see attached STANDARD NAME lines XX, <u>https://www.pennyforpinellas.org/</u>). This is a voter-approved, one-cent sales tax used to pay for projects to improve Pinellas County infrastructure. This is a voter-approved, one-cent sales tax used to pay for projects to improve Pinellas County infrastructure.

Local Project Phase:

- □ Planning
- Pre-construction (design, permitting, etc.)
- □ Construction
- □ Post-construction Monitoring
- □ Closed

The project is at 30% design and final design is expected to be completed by February 2024. Construction is planned from June 2024 - June 2025.

Project Work Plan

Project Summary (Provide a brief synopsis of the project. Limited to 75 words.):

The 98th Way/100th Way Drainage Improvements project focuses on improvements to the stormwater conveyance systems draining to the Pinellas Trail and ultimately Long Bayou via the St. Petersburg/Madeira Beach Kampgrounds of America (KOA) Holiday campground that

currently experience persistent and significant flooding and constitute an undersized drainage system. The project will upgrade pipes, add curb inlets to optimize flows, add new stormwater culverts, and provide additional storage by expanding an existing pond owned by Pinellas County.

Project Description (This should be a concise summary of the work being done. It may explain the broader issue that the project will address or what the end goal of the work is. It should NOT restate the tasks or deliverables and should not give specifications or similar detailed descriptions. Limited to 300 words.):

The Project region experiences frequent flooding which results in property damage and creates access problems for private properties as well as public safety concerns. Flooding has persisted due to undersized primary drainage system components and the lack of a secondary drainage collection and conveyance system. There are several public and private assets and utility systems in the region as well that are impacted by the floods including stormwater drains, utility access holes, sewer lines and sanitary sewer pump stations.

Through the 98th Way/100th Way project, Pinellas County will address community flooding impacting roads, stormwater discharge points and critical regional wastewater assets such as sanitary pump stations. The project focuses on stormwater system improvements along the Seminole Trail between 100th Way and the Pinellas Trail. The collection system on Seminole Trail from 100th Way North to the Pinellas Trail is a 15-inch pipe system that outfalls in an existing ditch on the south side of the trail. The proposed new collection system upgrades the pipe to 24 inches and splits the system between the current ditch outfall on the south side of the Pinellas Trail and the new pipe system along its North side. 98th Way has open ditches and 18-inch pipes that flow north-south, entering a 24-inch pipe system that flows to the east into an existing pond at Carrage Bay Unit 1. The proposed system will redirect the flow from the south to the north via an 18-inch pipe to an existing natural area within the Shores of Long Bayou Homeowners Association. Along with stormwater improvements on 100th Way, the pond will be expanded to reduce flooding along these roadways and adjacent properties.

The improvements recommended over the entire project area are projected to address flood damage of seven properties during 100-year, 24-hour storm events and high-flow issues associated with the Pinellas Trail ditch system at Lake Kersky. The proposed improvements will reduce the stormwater management system's hydraulic grade line elevations at over 90 locations (ranging from 0.1 foot to over 4.1 feet), and critical flooding (2 feet over warning stage) locations will be reduced from three to one.