

Keeping Pinellas Above Water: Countywide Flood Mitigation Action Plan

PROPOSAL: 2020 Rebuild Florida CDBG-MIT General Planning Support Program



PROJECT DESCRIPTION

PROJECT PURPOSE

Pinellas County, in coordination with its twenty-four municipalities, is seeking funding to create a countywide flood mitigation action plan. The plan will benefit local governments and other stakeholders by providing more precise data and additional mechanisms to address flood risks. The project will significantly increase our understanding of our flood risks as well as enable us to effectively educate and empower local businesses and citizens to collaboratively work towards reducing our vulnerability. This effort will result in a robust dataset that will be used to educate the public and identify flood resilience strategies to benefit the county and its municipalities as a whole and encourage collaborative projects and policies. Data collection is a key element of this project, and the foundation of such an assessment is based on good information. Also critical is interpretation of the information to a user-friendly format that is easily understandable and readily available to a broad audience.

Proposed Project Components & Outcomes

This project will include the following components with respective activities identified:

- 1) Data Collection & Mapping** – precipitation and groundwater elevation modeling; collection of terrestrial LiDAR data within the Special Flood Hazard Area
- 2) Community Asset Inventory & Risk Assessment** – Inventory community assets in the five (5) targeted Low to Moderate Income (LMI) watersheds; Conduct an asset exposure analyses for a suite of County/municipal owned assets located countywide.
- 3) Adaptation Strategy Development** – Develop geographic-specific mitigation design and strategies for tools, planning, and policy making.
- 4) Public Education & Outreach** – Conduct public workshops/meetings/social media to increase awareness about flood risks and mitigation strategies; Revise existing external outreach tools.
- 5) Mitigation & Modernization Planning**
 - a. **Comprehensive Plan Update (Peril of Flood)** – Prepare ‘Peril of Flood’ update to the Comprehensive Plan.
 - b. **Sustainability and Resiliency Action Plan** – The County is developing this new plan to set high-level goals and standards for sustainability and resiliency related programs and initiatives.
 - c. **Capital Planning Improvements** – Inform existing and future capital improvements projects and plans

- d. **Enterprise Asset Management Strategy** – develop implementation roadmap to incorporating risk data in asset management plans and governmental investment strategies
 - e. **Countywide Flood Mitigation Action Plan** - prepare a multi-decade flood mitigation plan that is tied to local comprehensive planning, floodplain management policy, capital improvement projects and the enterprise asset management strategy.
- 6) Administration** – Hire an internal grant/hazard mitigation specialist for life of the project.

Areas of Benefit

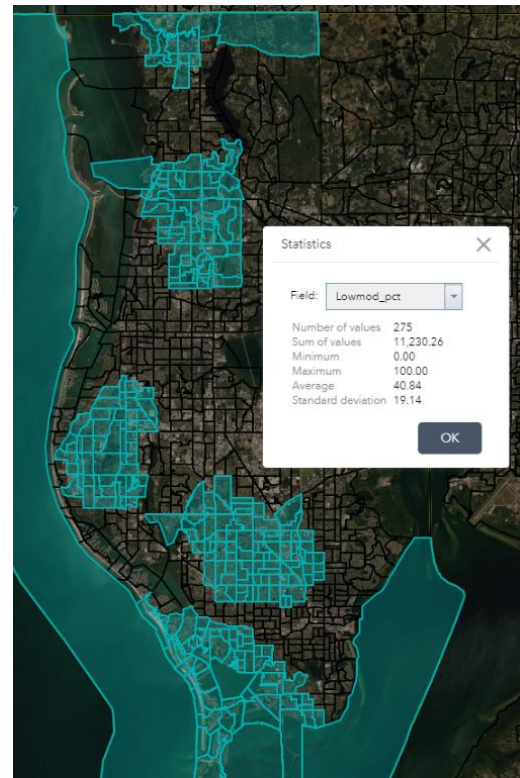
The Areas of Benefit for the project are defined as follows:

- The areas that will benefit from the data collection and mapping component of the project will be all developed land parcels along public streets and roadways within the Special Flood Hazard Area of Pinellas County (see map attachment).
- All critical infrastructure potentially threatened by flooding identified by the county and its municipalities will be included in the exposure analysis as part of the enterprise asset management component of the project.
- For the mapping of community assets and the public outreach component of the project the initial Areas of Benefit shall include the five (5) targeted watersheds and (all of which contain Low-Mod Income census tracts), as follow (see map attachment):
 - Anclote River watershed;
 - Curlew Creek watershed;
 - McKay Creek watershed;
 - Joe’s Creek watershed; and
 - the Southern Keys barrier island cluster.

These targeted demonstration areas are intended to provide a methodology and format that can eventually apply to all watersheds and barrier island clusters countywide.

Targeted Risks to Mitigate in this Project

- Tropical Cyclones
- Coastal, Flash, and Inland Flooding
- Severe Storms
- Coastal Erosion
- Social Vulnerability



PROJECT BACKGROUND

Pinellas County has undertaken a number of initiatives to quantify the risks associated with floods generated by rainfall, storm surge and sea level rise (SLR). Understanding the risks allows for the development of proper flood mitigation strategies and asset management plans.

The initiatives include:

- Watershed management plans (WMPs) provide detailed flood hazard maps within a given catchment
- Sea level rise and storm surge vulnerability assessment quantifies the risks to stormwater, wastewater, water supply, transportation, and natural gas and electricity distribution networks
- Criticality assessment of stormwater pipes, structures, ditches and stormwater management facilities such as ponds, which quantifies risk based on the likelihood of failure and the consequence of failure of those assets

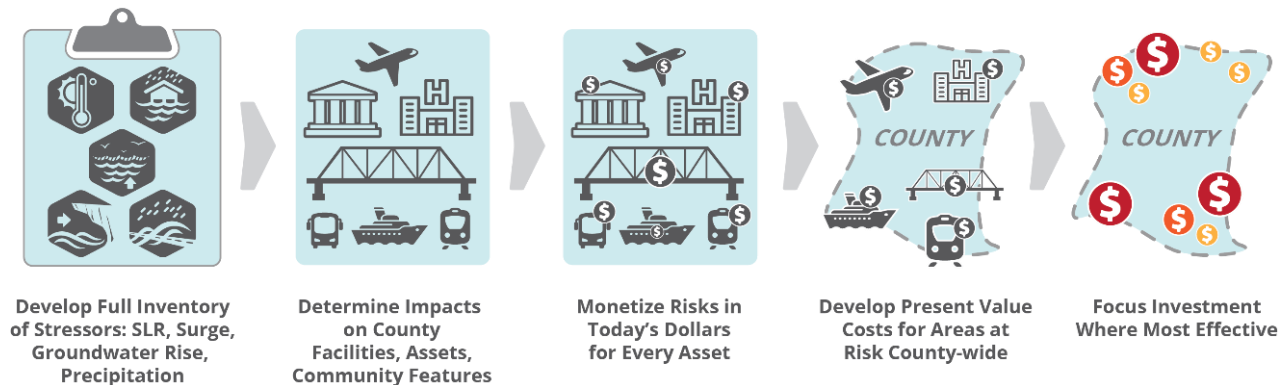
This project will build upon the County's existing resiliency and mitigation investment to ultimately develop a multi-decade flood mitigation action plan that is tied to local comprehensive plans, local mitigation strategy, capital improvement projects and enterprise and community asset management. This funding request will provide for the collection of building lowest floor elevation data collection and adjacent grade elevation data through terrestrial LiDAR survey; assessment of current and future precipitation-based flooding; an asset exposure analyses for a suite of County/municipal owned assets located county-wide; identification of assets at greatest risk based on costs to repair and service loss consequences to the communities; and, the development of public education/outreach tools. This project, in combination with related efforts being undertaken currently by the County, will create a comprehensive understanding of long-term flood risk to provide a foundation for better decision making.

The planning effort will leverage the recently adopted state-approved Local Mitigation Strategy, updated comprehensive plan, and an on-going vulnerability assessment that includes future tidal and storm surge inundation data and maps. Pinellas County has invested in producing exposure mapping for coastal concerns (SLR and storm surge) for asset-based risk assessments. Risk assessment quantifies the likelihood of the asset being exposed to the hazard (e.g., flooding) and the consequences if the asset is exposed. For example, Pinellas County is currently assessing the monetized risk values for a select number of roadways. As proposed herein, this approach will be expanded to include additional stressors and asset types. This assessment will complement and enhance other current and ongoing efforts and vice versa, to

create a comprehensive understanding of long-term risk to create a foundation for better decision making.

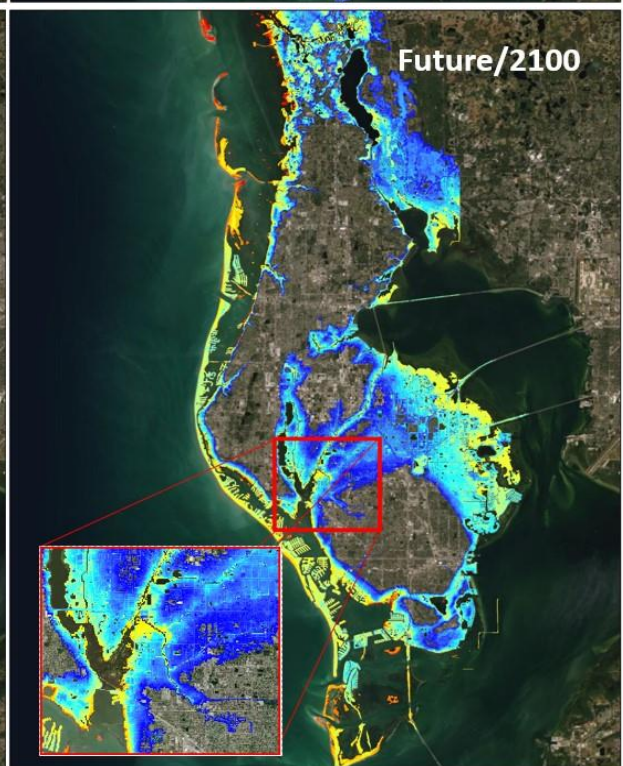
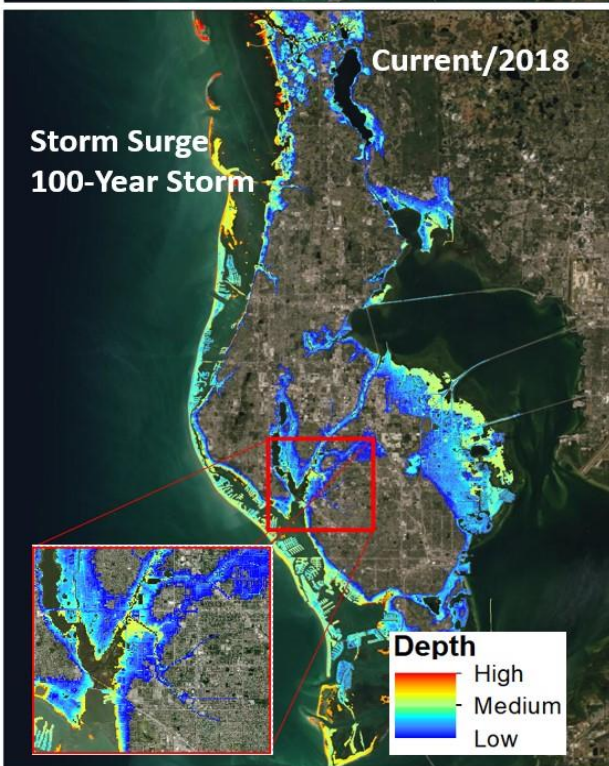
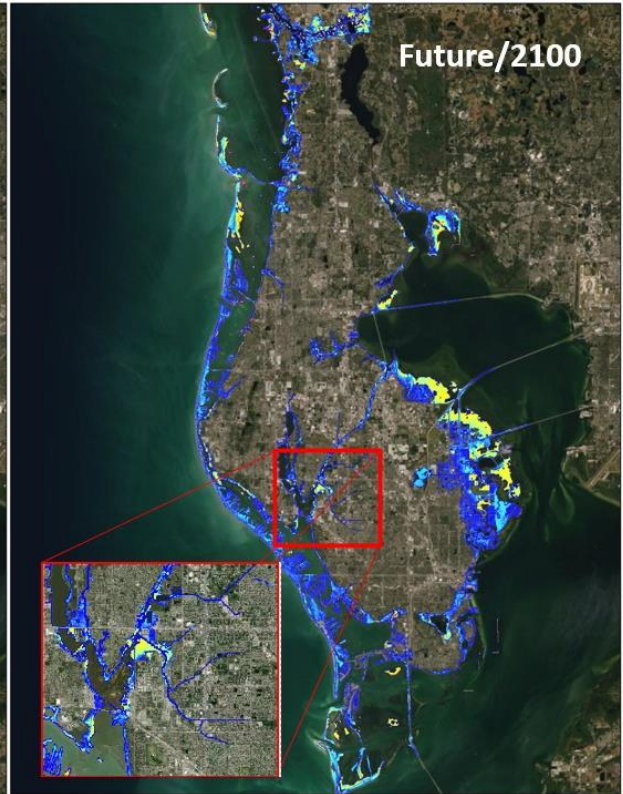
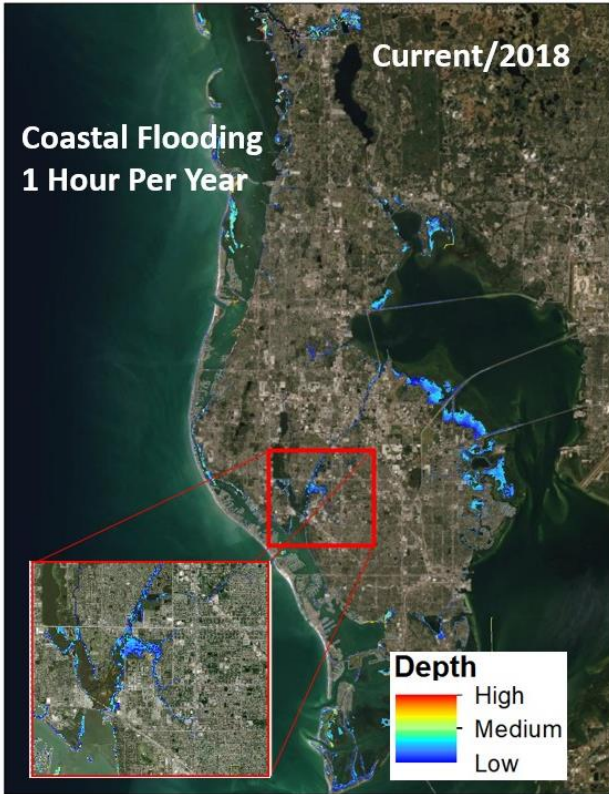
Though other communities are continuing to use an **indicator-type approach** (exposure, sensitivity, adaptive capacity) for assessing vulnerabilities, we have moved into a **risk-based approach** (quantifies exposure and monetizes consequences), expending investments toward generating needed data/information. The prevalence of indicator approaches statewide had led to little action, as the outcomes are neither informative nor compelling. We have found that the foundation of good data to support effective decision is worth the investment – for internal decision-making, for communicating with municipal stakeholders, residents and business owners – and that understanding the risk as the first step toward ensuring long-term resilience.

There is no other community that we are aware of that has approached these concerns in this way, so this investment will go towards creating a solid example for others on assembling needed information to make effective decisions.



Tidal and Storm Surge Vulnerability Assessment

The following graphics below represent the hazard-related data that the County is currently collecting with an expert consultant team. Along with provide future tidal and storm surge data, the project will also conduct an asset exposure analysis for a handful of county-owned assets. This proposed project will build upon this work.

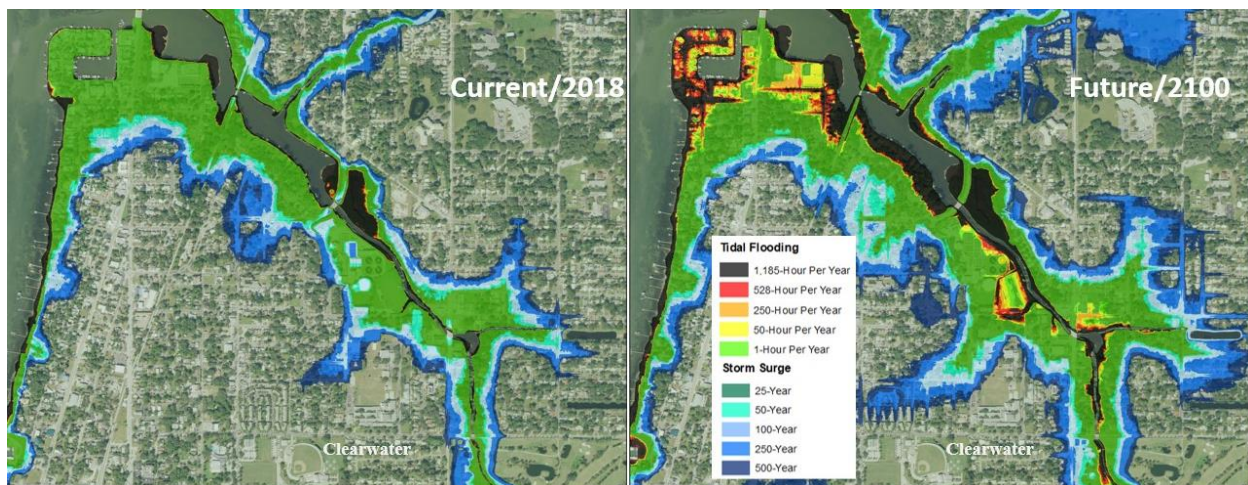


Precipitation Modeling

An initial phase of the project will include obtaining precipitation-induced flooding with climate change, matching both emission/sea-level rise scenarios and storm event return periods conducted within the County's current vulnerability assessment projects. This is necessary because (1) precipitation is likely to become more intense with climate change and (2) there will be interactions with stormwater runoff and sea level rise. Both effects have the potential to increase flooding risks throughout the county. A comprehensive understanding of flood risks to county assets and residents requires consideration of precipitation-induced flooding as well.

The methodology for layering in consideration of precipitation-induced flooding would include the following steps:

1. Develop future precipitation projections under multiple climate scenarios and time horizons and for various durations and return periods to match the existing tidal and storm surge data sets.
2. Conduct groundwater analysis/modeling with sea level rise to determine if water tables will rise appreciably anywhere in the county thereby reducing drainage capacity.
3. Integrate the precipitation induced flood mapping with the existing tidal flooding and storm surge mapping.

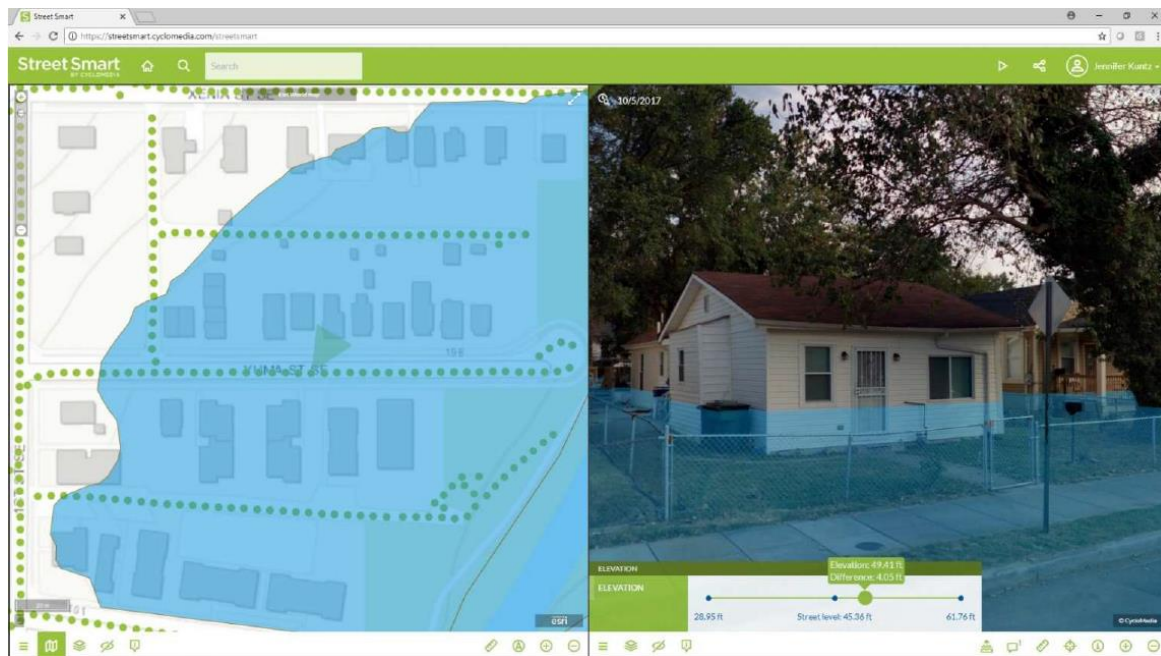


*This graphic represents a combined projection of current and future coastal tidal flooding and storm surge at NOAA's intermediate SLR curve. **Precipitation is missing from this dataset for a complete picture of risk.***

Acquisition of Terrestrial LiDAR

Utilizing terrestrial LiDAR will assist the County to accurately estimate grade elevations and capture elevation data for lowest floor elevations (LFE's) to compile a comprehensive data set of these LFE's for comparison against Base Flood Elevations (BFE's) on changing maps. This data

along with insurance risk rating and premium criteria and formulas can be then used to assess potential impacts to property values. This will allow for more meaningful communication with our local, state and federal leaders to work toward smart solutions that protect the property values yet add to the resiliency of our coastal communities. In addition, this data set, and technology would yield residual products such as upgrading our Storm Surge Protector app; ability to create, update and maintain a complete inventory of assets throughout the jurisdictions; support planning and management of green infrastructure initiatives; and, planning and modeling of proposed community and housing projects.



Blue shaded area on the left shows FEMA 1% risk flood zone. Elevation visualization tool on the right shows depth of flood water at that location. (Depth determined by GIS analysis of flood zone with digital elevation model and slider set manually.)

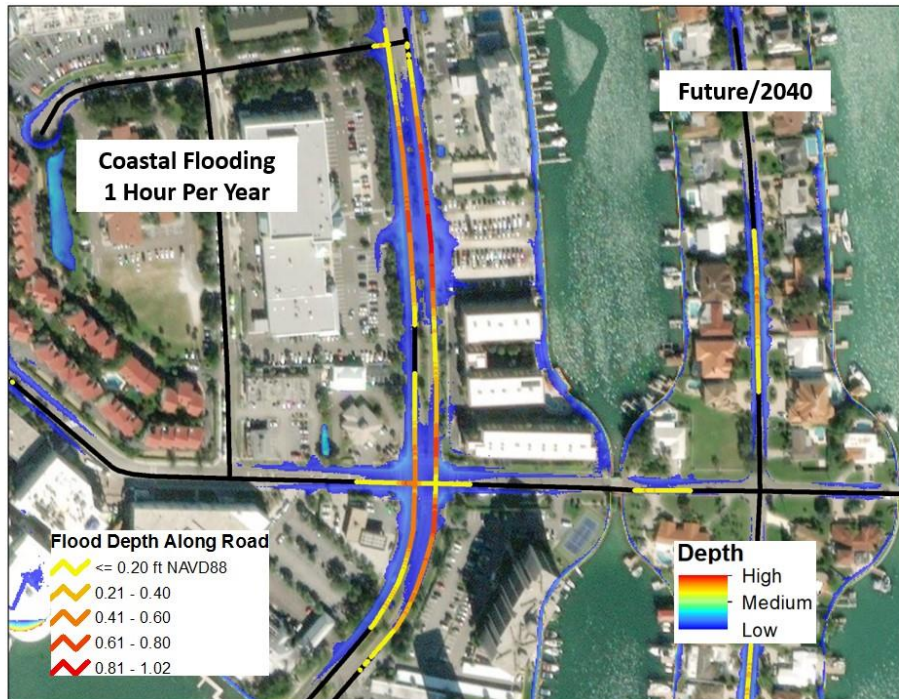
Community Asset Inventory

The Community Asset Inventory component will focus on identifying the physical infrastructure, assets, and attributes (places to live, work, recuperate and recreate) that serve a community's social and economic needs using qualitative and quantitative criteria. Since this is a flood mitigation strategy and "floodwater knows no bounds," a community's boundary shall be defined using the County's watershed map (see attachment). Four (4) watersheds and one (1) barrier island cluster have been selected as demonstration areas with the intent to extend the program countywide after the initial two-year project timeframe. The type of assets that are to be inventoried include: Housing (affordability, redevelopment, and preservation); Employment

including visitor services; Transportation; Schools; Healthcare & medical supply chain; Emergency response & shelter; Power distribution & energy sources; Parks & recreation; Historic properties and legacy small business [project underway]; and, Sacred & spiritual places & spaces.

Enterprise Asset Management (EAM)

Pinellas County Government has begun to establish a “portfolio” approach to Capital Improvement Projects that requires all departments to view their projects in a systemic and holistic manner and to evaluate them against standardized prioritization and funding criteria. Adopting EAM principles and practices throughout the lifecycle can maximize the useful life of assets, reduce service interruptions, maintain customer and stakeholder satisfaction, benefit the environment, and minimize the overall capital costs and operational expenses. It takes a “whole life cycle” approach to delivering the best value for the money, while ensuring that risks are understood and managed as part of the total picture. This project will utilize all the existing and newly acquired climate-related data (e.g., SLR, tidal, storm surge, and precipitation) to add a vulnerability assessment to each of the assets. With the criticality and vulnerability assessments combined, asset owners can then prepare a resiliency-driven asset management plan that will properly inform mitigation and maintenance procedures into the future.



This graphic represents an exposure assessment where flood depth is captured along every 2.5’ segment of roadway in the year 2040 at NOAA’s high SLR curve

Countywide Flood Mitigation Action Plan

A County-wide flood action plan should identify and address current and future flood vulnerabilities by sector (e.g., transportation, water, energy, and so on) and by geography. High level strategies for flood prevention should be developed and presented for specific sectors and geographic areas. The plan will include recommendations on mainstreaming adaptation for flood resilience into county activities, expanding and improving on the work already done by the county on this topic. Further, the plan will involve coordination with municipalities on the results of the vulnerability assessment and adaptation policies moving forward: municipalities and other stakeholders (including, potentially, the general public) should be part of the planning process.

WORK TEAM

Hank Hodde, MS, CFM, ENV SP, has 12 years of experience in the field of hazards and coastal management and works for the County as the Sustainability and Resiliency Coordinator within County Administration. He will serve as the lead for this planning project.

Smita Ambadi, AICP, LEED AP, SCPM, has 16 years of experience as a planner and urban designer, and she currently serves as a principal planner in the Pinellas County Planning Division. She is currently leading the county's local mitigation strategy efforts.

Lisa Foster, MS, CFM, has 15 years of experience in watershed and floodplain management planning and education and serves as the Floodplain Administrator for Pinellas County as well as the Vice Chair of the Florida Floodplain Managers Association (FFMA). She also leads the County's NFIP Community Rating System Program.

Paul Miselis, P.E., CFM, ENV SP, has 26 years of professional experience in water resources engineering and watershed and serves as a lead stormwater engineer in the Pinellas County Public Works Department.

Thomas Scofield, who has worked 27 years for municipal and county governments and serves as the Principal Planner and Historic Preservation Specialist in the Pinellas County Planning Division.

Jeremy Waugh, P.E., has 20 years of experience in civil engineering and serves as the County's Director of the Office of Asset Management.

PROJECT FUNDING METHODOLOGY

The requested funding amount is based on the cost of data acquisition and modeling, staff time and salaries, and services needed for asset analysis and plan development. Cost estimates for tasks have been derived from a combination of past project experience and consulting firms. Two examples are provided in the attachments, including the Vulnerability Assessment Scope of Work and a quote for the Terrestrial LiDAR Acquisition.

INTEGRATION WITH COMPREHENSIVE PLAN

Pinellas County is working through a major update to its Comprehensive Plan, known as PLANPinellas. As part of this effort PLANPinellas has sought new ways to strengthen sustainable practices, including strategies to plan for climate change and sea level rise, focus development away from the Coastal Storm Area, and continue coordination with local and regional partners.

The County's Planning Department is currently on track to have the plan approved in the first quarter of 2021. Given the timing of this project, outcomes will be included as amendments into the future, especially into the Coastal Management Element of the Plan. The County has also applied for the Florida Department of Environmental Protection (FDEP) Resilience Planning Grant with the intent of identifying relevant policies and strategies to meet the Peril of Flood requirements. These efforts will closely tie into the proposed project's intent to create more accurate flood-risk data and identify data-driven mitigation strategies. The proposed project will help develop the basis for fine tuning our strategies to address most critical risks. More information can be found here: <https://planpinellas.wpcomstaging.com/>

COMMUNITY VALUE

PROJECT VALUE

The proposed project will provide substantial benefits to the community by addressing both current-day flooding situations and future conditions, including extreme weather events and impacts from sea-level rise, by providing advanced data and tools for planning and mitigation. This type of information is critical towards making effective decisions given expectations for changing future conditions. Currently, the data collection, risk analysis, and hazards planning process varies at the municipal levels based on organizational capacity and governance protocols. It is known throughout the resilience industry that water knows no bounds and it is prudent to overcome vulnerabilities with a regional, collaborative approach. Thus, this project will provide a unified approach for each local government to address flood risks that persists in the community. Having access to this data (both inventory as well as an understanding of its risk exposure), in advance of disasters will enable us to proactively plan for pre-disaster mitigation; complement damage assessment efforts during a disaster; and assist with decision-making in the post-disaster redevelopment/reconstruction phase.

COMMUNITY LIFELINES

The ultimate goal of the project is to provide local governments with information and guidance to reduce the impacts of flooding to life and property. The project will include an assessment of impact of flood risks on community assets that serve a variety of day-to-day functions and thus impact a range of FEMA community lifelines such as, safety and security; food, water, and shelter; health and medical; energy; communications; transportation; and, hazardous material. One aspect of the project will be to identify connections to these lifelines with the Local Mitigation Strategy and then to add an addendum to that document (currently, this process is not required by the state of Florida). Once this is accomplished, the County will utilize FEMA's Community Lifelines Implementation Toolkit to its fullest potential in the planning and public engagement components of this project.



FEMA Community Lifelines targeted in this project scope.

ENHANCING COMMUNITY RESILIENCE

Once completed, communities will have a more informed and standardized approach to update their internal programs, policies and infrastructure projects to increase resiliency to better protect residents and visitors. They will have a better basis on which to guide future decisions.

With the data anticipated to be developed through this process, the County itself as well as all its member jurisdictions will have the information in-hand to enable the creation of effective stakeholder coordination material. Anticipated outcomes of this project effort include the development of hazard and climate impact data that can be easily incorporated into an online viewer, the development of asset information which includes data on water levels and its impacts on county-wide assets; the development of quantified risks by incorporating estimated probabilities; and an improved understanding of our financial risks by summarizing potential costs to various areas or communities within the County. This information will be translated

into user-friendly factsheets, outreach brochures, and meeting materials to support outreach efforts that help inform citizens of potential risks and related actions needed to ensure long-term resilience.

The risk-based approach we are implementing parlays much of the methodology traditionally developed and tested through hazard mitigation and emergency management. We've expanded the risk-based approach to consider future conditions and monetize the consequences. This approach provides results of risk in dollars and risk levels (opposed to a subjective vulnerability score) – more useful for decision-makers and communicating with private partners and the public. We believe our efforts will lay the groundwork for other Florida communities, providing a roadmap for replication and a demonstration of the effectiveness of the risk-based approach.

PUBLIC NOTICE REQUIREMENT

A public notice was posted on the County's Open Townhall portal on Thursday, July 16, 2020, to allow for a 14-day public commenting period. No comments were received from the public, and a link to the post can be found here: https://www.opentownhall.com/portals/255/Issue_9326

Pinellas County is planning to apply for Rebuild Florida CDBG - Mitigation funding for a proposed Countywide Flood Mitigation Plan. What are your thoughts?

The deadline is near

Introduction Feedback Your Statement Outcome

Keeping Pinellas Above Water: Countywide Flood Mitigation Action Plan

Pinellas County is seeking Rebuild Florida - CDBG Mitigation Funding to create a **Countywide Flood Mitigation Action Plan**. This funding is specifically focused on mitigation efforts and is provided by the U.S. Department of Housing and Urban Development, through the newly created, Community Development Block Grant Program (CDBG-MIT). This funding is specifically designed to support mitigation opportunities that can leverage local resources and involve a collaborative effort towards reducing our risks. As we seek this funding opportunity, we would appreciate your thoughts and ideas on the proposed project.

Learn more about: Rebuild Florida's Mitigation Programs

The proposed Pinellas County Flood Mitigation Action Plan, will be developed in coordination with its municipal partners, regional agencies, various county departments and community leaders.

...
[read more](#)

Your Statement

Add Your Statement

Deadline: Tomorrow at 12:00 AM

Feedback

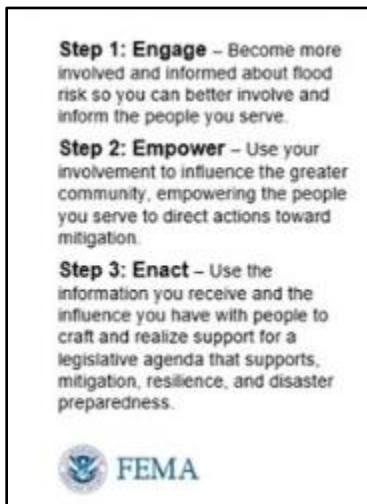
This topic has 5 visitors and 0 statements.

Additionally, the County advertised the project in the Sunday edition of the Tampa Bay Times on July 19, 2020 (attached).

PUBLIC OUTREACH

For the Public Outreach component, the County will partner with applicable municipalities to seek substantial input from members of the respective communities on what these resources

are and how they are used. Also, the information gained from the Data Collection component of the project will be shared with community participants to communicate flood risk in their respective business districts and neighborhoods. A customized tool kit of flood mitigation strategies will be devised specific to the threat and need identified in each watershed in a manner consistent with community identity and character and that enhances community assets for both short and long-term forecasts. Resulting flood mitigation projects and programs endorsed by the County, applicable municipalities, and community groups will be incorporated into the Flood Mitigation Plan and other related documents such as the Post Disaster Recovery Plan (PDRP).



A better understanding of a community is achieved after identifying its assets and strengths. Knowing the community's assets and strengths makes it easier to understand the programs and initiatives possible to address the community's needs. When efforts focus on using the assets and strengths of the community, people are likely to feel more positive, and to believe that success is possible. Public improvement efforts are more effective, and longer-lasting, when community members dedicate their time and talents to the changes that they desire. Community support and buy-in for an effort is easier when emphasis is on positive outcomes, rather than how large a problem is and how difficult it is to solve.

COMMUNITY INVOLVEMENT

Pinellas County will coordinate with stakeholders including its twenty-four municipal partners, Tampa Bay Regional Planning Council and other regional agencies, various county departments, and community leaders. Coordination with these partners will be key to successful completion of this project effort. As seen by the thirteen letters of support from local municipalities, including those in our targeted watersheds, there is a great interest in this project and commitment for collaboration. Of importance is that all of the municipalities recently partnered together on the creation and adoption of the Pinellas County Local Mitigation Strategy, so working together on this project should be seamless and a natural transition, given there is need for local action and planning integration.

While the exact approach for public comment has not been refined, we do intend to leverage existing community outreach and engagement efforts. For example, the development of the Pinellas County Sustainability and Resiliency Action Plan includes an entire phase dedicated to external engagement, which happens to include survey instruments to our most vulnerable populations. Additionally, Pinellas County is also updating its Strategic Plan which has an

outreach component. The same could be said for our community partners, who all have their individual priorities and efforts for community involvement. It is important to align with these efforts so that citizens become fatigued from over-participation.

This said, to fulfill the requirements of 24 CFR 570.486, a detailed citizen participation plan will be developed and properly administered by the County's project leadership team. In particular, the plan will emphasize participation from citizens in low to moderate income areas, as they are the most vulnerable to the hazards and threats identified in our Local Mitigation Strategy and DEO's needs assessment. Execution of this plan will take place through contractual agreements with an outside consultant that will assist with the project.

CAPACITY PLAN

PROJECT GOALS

The goal of this project is to build upon the County's existing resiliency and mitigation investment to ultimately develop a multi-decade flood mitigation action plan that is tied to local comprehensive plans, local mitigation strategy, capital improvement projects and enterprise and community asset management.

TARGETED STAKEHOLDERS

Pinellas County will coordinate with stakeholders including its twenty-four municipal partners, Tampa Bay Regional Planning Council and other regional agencies, various county departments, and community leaders. Coordination with these partners will be key to successful completion of this project effort.

Letters of Support have been provided by:

- 1) City of Belleair Beach
- 2) City of Belleair Bluffs
- 3) City of Clearwater
- 4) City of Largo
- 5) City of Maderia Beach
- 6) City of Oldsmar
- 7) City of Pinellas Park
- 8) City of St Pete Beach
- 9) City of St Petersburg
- 10) City of Tarpon Springs
- 11) City of Treasure Island
- 12) Town of Belleair
- 13) Town of Indian Shores
- 14) Town of Redington Beach
- 15) Town of Redington Shores

TASKS & DELIVERABLES

Overall major project tasks include community engagement, data acquisition, climate modeling, data acquisition, community asset mapping, infrastructure and asset exposure analyses, adaptation strategy development, and development of the final Countywide Flood Mitigation Action Plan. Other benchmarks and outcome include:

- 1) LiDAR collection of building stock to identify first floor elevations across the County
- 2) Model future precipitation depths and identify hot spots of drainage concerns
- 3) Update existing community asset inventory with additional newly released data and expand to integrate additional data layers

- 4) Conduct asset risk and cost exposure modeling
- 5) Develop an exposure mapping interface for communities
- 6) Develop risk metrics and apply to assets exposed
- 7) Identify assets at greatest risk for the community and produce a set of potential adaptation strategies to reduce risk
- 8) Integrate findings and stakeholder engagement into an actionable flood mitigation plan that prioritizes actions for community planning and procedures (e.g. Capital Planning, Enterprise Asset Management, Comprehensive Planning, and Watershed planning).

STAFFING PROFILES & RESUMES

Current resources anticipated to provide service on this effort include dedicated staff across multiple county departments, on-going work from related projects, and internal grants management support. Agency partners from the member jurisdictions will be involved through the generation of consistent data sets for application across the study area. This effort will require assessment of the locational accuracy of data as well as the attribution present within each data set to determine how best to bring them to a common consistency to enable assessments across jurisdictional boundaries. This will require commitment from all project partners to complete effectively.

The project itself will be implemented through an internal project leadership team including County Administration, the Planning Division, and Public Works, and grant management will be supported by the Office of Management and Budget. Implementation will also be conducted in partnership with other departments including the Office of Emergency Management, Office of Asset Management, Office of Technology and Innovation, and the County's Property Appraiser. The six-person leadership team includes:

- **Hank Hodde, MS, CFM, ENV SP**, has 12 years of experience in the field of hazards and coastal management and works for the County as the Sustainability and Resiliency Coordinator. He currently is responsible for creating the County's first sustainability and resiliency program and action plan. He will be the project lead, overseeing all aspects of the award.
- **Lisa Foster, MS, CFM**, has 15 years of experience in watershed and floodplain management planning and education. She is the Floodplain Administrator for Pinellas County as well as the Vice Chair of the Florida Floodplain Managers Association (FFMA) and the immediate past President of the Florida Local Environmental Resource Agencies. She serves on multiple committees for both organizations and the Association of State Floodplain Managers. Foster manages Pinellas County's Comprehensive Floodplain Management Program and NFIP Community Rating System Program (CRS) participation. She was awarded the national Award for Excellence in CRS by the FEMA Federal Insurance & Mitigation Administration in 2018 for her extensive work with the real estate industry and partnerships with communities across Florida.
- **Smita Ambadi, AICP, LEED AP, SCPM**, has 16 years of experience as a planner and urban designer. Her work has been primarily focused on redevelopment and community

revitalization. She has worked on different aspects of resiliency planning and disaster management through research, design, outreach and policy. She is currently leading the county's local mitigation efforts.

- **Paul Miselis, P.E., CFM, ENV SP**, has 26 years of professional experience in water resources engineering and watershed management in the United States and New Zealand. Presently, he is responsible for the delivery of a number of watershed planning, drainage-related and asset management programs for the Pinellas County Public Works Department. He also manages the sea level rise vulnerability assessment project for Pinellas County, so he will help oversee the data collection and modeling portion of this project.
- **Thomas Scofield**, who has worked 27 years for municipal and county governments as a planning professional, 24 of those years for planning departments in Florida. His title is Principal Planner in the Pinellas County Planning Division; is the staff liaison for the Pinellas County Historic Preservation Board; reviews land development proposals, plans and projects that potentially impact historic resources; and serves as an advisor to county departments and the leadership team on cultural resource management/historic preservation matters. He is on the project team to manage the community asset inventory component of the project and will assist with public outreach, coordination with municipalities, and the in-house portion of planning document preparation.
- Jeremy Waugh, P.E., has 20 years of experience in civil engineering and serves as the County's Director of the Office of Asset Management. His role in this project will be to ensure the integration of the project's outcomes in the County's Enterprise Asset Management Program and capital planning processes.

Along with the brief staff summaries described in the Project Description section, their resumes are attached to this file. The County currently has dedicated grants management support through its Grants Center of Excellence, including guidance, oversight, financial reporting and grant reimbursement.

In addition to the above referenced staff, this planning grant does allocate funding to hire a new position to support with project coordination and technical assistance. As such, it is expected this hire will not only process project management skills but also have an educational and technical background to match the needs of the project. It is the desire of the project team to retain this position permanently once the grant concludes.

PROJECT BUDGET

The budget has been informed from experience with existing vulnerability assessment and other planning projects, as well as preliminary quotes from consultants. In addition, the Office of Management and Budget provided a detailed budget for the new staff hire that would have a base annual salary of \$60,000.

STRATEGY FOR PLAN UPDATES

Since one goal of the Countywide Flood Mitigation Action Plan is to inform local governmental capital planning, then the plan itself would need to be updated every ten years to match the planning and funding life-cycle for the 10-year Penny for Pinellas Program (Penny). The Penny program funds and guides county and municipal capital improvements that are supported by a dedicated Local Option Sales Tax, and we are currently at the start of the 2020-2030 plan. That said, is it the intention to inform the existing 10-year plan and then to help guide the creation of the 2030-2040 cycle, and so on. More information can be found here:

<http://www.pinellascounty.org/penny/>

MONITORING/QUALITY CONTROLS

The County's Grants Center of Excellence (COE), in the Office of Management & Budget (OMB), oversees grant functions, in coordination with Accounting and Purchasing. OMB maintains the Grants Operations Manual and internal COE SharePoint site, with resources and requirements for compliance with Federal, State, and County laws and regulations. Established internal controls follow the Standards for Internal Controls in the Federal "Green Book." Key duties and responsibilities are segregated to reduce the risk of error, misuse, or fraud. Each grant has a unique project number in the financial system for tracking, reporting, documentation, monitoring, and accountability. Internal forms, checklists, and monitoring ensure consistent quality and compliance, from project set-up, through procurement, to project closeout. Policies, procedures, and processes meet the requirements of Uniform Guidance for federal awards

BUDGET

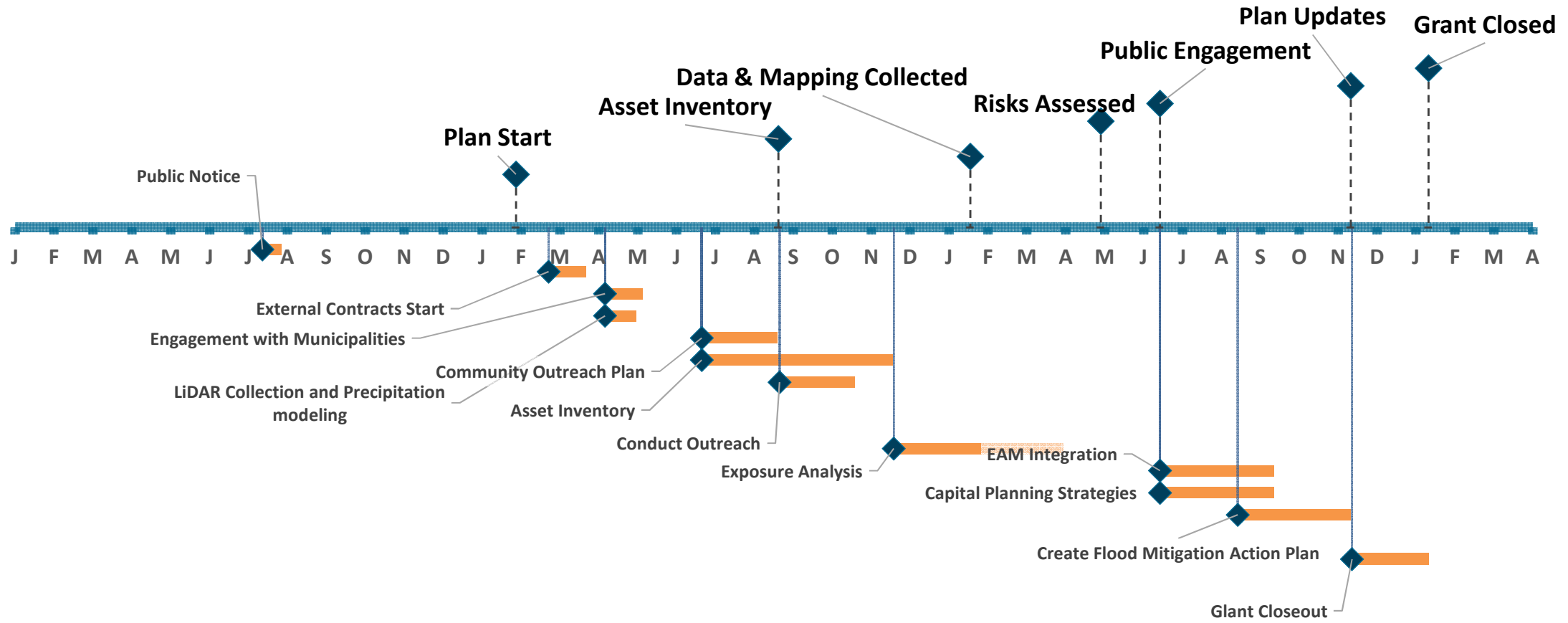
Project Name:	Pinellas Countywide Flood Mitigation Action Plan	Primary Contact Name and Phone Number:	Hank Hodde 727-464-3449	Official Applicant Entity Name:	Pinellas County
Project		Budget			Notes
Description	CDBG-MIT Amount	Other non CDBG-MIT Funds	Source of Funds*	Total Funds (CDBG-MIT and Other)	
Data Collection & Mapping	\$432,000	\$0		\$532,000	Project Component #1: Collection of terrestrial LiDAR data within the Special Flood Hazard Area
	\$100,000	\$0			Project Component #1: Precipitation and groundwater elevation modeling;
Community Asset Inventory & Risk Assessment	\$0	\$100,000	See #1 & #2 below	\$175,000	Inventory community assets in the five (5) targeted LMI watersheds (Project Component #2)
	\$75,000	\$0			Conduct an asset exposure analyses for a suite of County/municipal owned assets located countywide. (Project Component #2)
Adaptation Strategy Development	\$25,000	\$0		\$25,000	Develop geographic-specific mitigation design and strategies for tools, planning, and policy making. (Project Component #3)
Public Education & Outreach	\$30,000	\$0		\$30,000	Conduct public workshops/meetings/social media in five (5) targeted LMI watersheds; Revise existing online tools (Project Component #4)
Mitigation & Modernization Planning	\$0	\$75,000	See #3 Below	\$305,000	Identify policies and strategies to address the Peril of Flood Requirement (Project Component #5a)
	\$0	\$100,000	See #4 Below		Develop a Sustainability & Resiliency Action Plan (Project Component #5b)

	\$60,000	\$0			Capital Planning Improvements – Inform existing and future capital improvements projects and plans. (Project Component #5b)
	\$20,000	\$0			Enterprise Asset Management Strategy – develop implementation roadmap to incorporating risk data in asset management plans and governmental investment strategies (Project Component #5c):
	\$50,000	\$0			Prepare and adopt the Countywide Flood Mitigation Action Plan (Project Component #5d)
Administration	\$200,000	\$25,000	See #5 below	\$225,000	Hire an internal project coordinator (hazard mitigation specialist) for life of the project; other staff time
Totals:	\$992,000	\$300,000		\$1,292,000	

All funds identified for use on your project must be fully disclosed and detailed to ensure budget accuracy and no duplication of benefits. Show the sources and amounts of other funds needed to complete the project below, including local funds and grants from other agencies. Any anticipated or committed funds must also be included.

Source of Other Funds	Amount
1. FDHR Historic Resource Survey of Flood Hazard Areas, Phase 1 (awarded)	\$50,000
2. FDHR Historic Resource Survey of Flood Hazard Areas, Phase 2 (application submitted)	\$50,000
3. FDEP Resilient Coastlines Program Planning Grant (awarded)	\$75,000
4. Pinellas County General Fund appropriation (underway)	\$100,000
5. County in-kind services – Staff time for project support	\$25,000

General Planning Support Implementation Plan Timeline



Tasks

Start	End	Duration	Label
7/16/2020	7/31/2020	15	Public Notice
2/3/2021	3/3/2021	28	DEO Award and Subrecipient Agreement

3/1/2021	4/1/2021		30	External Contracts Start
4/15/2021	4/30/2021		30	Engagement with Municipalities
4/15/2021	5/15/2022		25	LiDAR Collection and Precipitation modeling
7/1/2021	9/1/2021		60	Community Outreach Plan
7/1/2021	11/30/2021		152	Asset Inventory
9/1/2021	7/31/2022		60	Conduct Outreach
12/1/2021	4/15/2022		135	Exposure Analysis
4/15/2022	6/31/2022		60	Conduct Outreach
6/15/2022	8/31/2022		77	Adaptation Strategies
7/1/2022	9/30/2022		91	EAM Integration
7/1/2022	9/30/2022		91	Capital Planning Strategies
9/1/2022	11/30/2022		90	Create Flood Mitigation Action Plan
12/1/2022	1/31/2023		61	Grant Closeout

Milestones

Date	Label
2/3/2021	Plan Start
1/31/2022	Data & Mapping Collected
8/31/2021	Asset Inventory
5/15/2022	Risks Assessed
7/1/2022	Public Engagement
11/30/2022	Plan Updates
1/31/2023	Grant Closed
<i>Insert new rows above this one</i>	

Notes

Record project notes below

Insert timeline notes here