



Recovery and Resiliency Planning Program



Organization Information

- Organization Name:
- Address:
- Organization Type:
- Telephone:
- ► Federal Employer ID #:
- 47-3445874

Village of Estero

(239) 221-5035

Unit of general local government

9401 Corkscrew Palms Circle, Ste 1 Estero, FL 33928

- Organization Website: www.estero-fl.gov
- Unique Entity Identifier: CJLEVP2G6368

Authorized Organization Representative

- Steven Sarkozy Name: Village Manager
- Title:

Contact Person

Name:

- Title:
- Village Manager

Steven Sarkozy

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Plan Information

- Plan Name:
- ▶ Plan Type:

Village of Estero Comprehensive Vulnerability Assessment

Study

Plan Type

- ☑ Comprehensive
- Community Development
- Continuity of Operations
- Economic Revilatization
- Energy Use and Conservation
- Floodplain, Wetlands Management, or other Natural Hazards
- Other:

- Historic Preservation
- Housing
- □ Land-Use
- Open Space and Recreation
- □ Transportation
- Utilities
- Human Services



Target Service Location

- City of Cape Coral
- City of Fort Myers
- City of Bonita Springs
- City of Sanibel
- Other:

- Town of Fort Myers Beach
- ✓ Village of Estero
- Unincorporated Lee County
- All of Lee County

Additional Service Areas

Service Areas Outside Lee County:

No



The scope and projected outcome(s) of the plan

In the wake of the unprecedented devastation brought on by Hurricane Irma and Hurricane Ian, we have initiated the Estero Vulnerability Assessment to conduct a thorough examination of our community's resilience in the face of a wide range of natural hazards. This comprehensive evaluation encompasses the entire municipal land mass of Estero, spanning approximately 25 square miles. Our objective is to gain a holistic understanding of our vulnerabilities to coastal and rainfall flooding, extreme heat, high winds, and wildfires, among other threats. The ferocity of Hurricane Irma revealed our village's susceptibility to wind and rainfall-induced impacts, while Hurricane Ian laid bare our weaknesses to storm surge. Through this expansive study, we aim to identify and address the critical areas that necessitate immediate attention to fortify our community against future natural disasters.

Building upon the insights gained from these experiences, this project will extend the analysis conducted in our initial Stormwater Master Plan to encompass a broader array of threats, ensuring a more robust and inclusive understanding of our community's vulnerabilities. This endeavor will not only update our Stormwater Master Plan and model but also serve as a springboard for identifying targeted, actionable strategies designed to bolster our resilience.

Expected outcomes are twofold: firstly, to provide a detailed vulnerability assessment that encapsulates the full range of hazards facing the Village, thereby laying the groundwork for informed decision-making; and secondly, to develop a suite of tailored mitigation strategies, each aimed at addressing the specific vulnerabilities identified. This comprehensive approach is anticipated to yield significant benefits, from enhancing infrastructure resilience to fostering community preparedness, ultimately safeguarding both life and property against future events.

Implementation Plan - The approach to completing the plan

The Village of Estero intends to initiate a comprehensive Vulnerability Assessment to identify and strategize mitigation for various natural hazards, including coastal and rainfall flooding, heat, high winds, and wildfires. The approach encompasses:

 Consultant Team Procurement: A selection process compliant with local, state, and federal regulations will be used to identify a consulting team with a strong background in environmental science, urban planning, and resilience strategy. This process will identify firms with demonstrated experience in similar municipal projects, innovative data analysis techniques, and a commitment to engaging community stakeholders.
Project Phases Outline:

1. Data Gathering: Initial phase focusing on collecting existing environmental data, community feedback, and historical hazard impacts.

2. Risk Analysis: Utilizing collected data to identify areas of vulnerability across the Village, considering both current risks and future climate change projections.

3. Strategy Development: Based on the risk analysis, the consultant will recommend short- and long-term mitigation strategies, including infrastructure improvements and community resilience initiatives.

4. Community Engagement: A critical component of the approach will be robust



community engagement to ensure the assessment reflects the concerns and needs of Estero residents. This may involve workshops, town hall meetings, and digital forums to gather input and disseminate information.

5. Integration with Existing Plans: The assessment will build upon the Village's previous planning efforts, ensuring a cohesive approach to vulnerability mitigation that complements and enhances existing strategies without duplication.

6. Deliverables and Timeline: The project is anticipated to span two years, with key deliverables including a comprehensive vulnerability assessment report and a strategic action plan outlining detailed mitigation strategies. A clear timeline will be established with milestones for each project phase to ensure progress tracking and accountability.

7. Funding Utilization and Oversight: Detailed plans will be made for the efficient and transparent use of grant funds, ensuring that all expenditures directly support and align with the project's goals. Regular financial and progress reports will be prepared to maintain transparency with stakeholders and funding oversight authorities.

The unmet or mitigation need that is being addressed by the plan and how the plan aligns with community goals

The 2019 Stormwater Master Plan laid the groundwork for understanding rainfall flooding within the Village of Estero. However, the recent events underscored by Hurricane Ian have broadened our perspective on the range of vulnerabilities our community faces, revealing significant gaps in our preparedness for other natural hazards. Beyond rainfall flooding, there is a pressing need to comprehensively assess our resilience against coastal flooding, high winds, heat, and wildfires. This proposed study aims to fill these critical knowledge gaps by conducting a thorough vulnerability assessment that extends beyond the insights of our initial plan. The objective is to equip the Village with a detailed understanding of our multifaceted vulnerabilities, thereby enabling the formulation of targeted, effective mitigation strategies. By addressing these broader concerns, the plan not only seeks to safeguard our community against a wider array of natural threats, but also resonates deeply with our overarching goal of enhancing the resilience, safety, and longevity of all Village residents. It is an essential step towards building a more informed, prepared, and resilient community, ready to face the challenges of today and those on the horizon.

Explain your agency's experience completing plans of a similar size and scope, including federal, state, and/or local government grant experience and capacity of the organization to administer the plan and oversee all compliance requirements

The Village of Estero has a proven track record of successfully completing several comprehensive master planning efforts, significantly contributing to our community's development and resilience. Our notable projects include the Stormwater Master Plan, Parks, Recreation, and Open Space Master Plan, Bicycle & Pedestrian Master Plan, and the ongoing refinement of the Village of Estero Land Development Code and Comprehensive Plan. Each of these initiatives was managed by Village staff from start to finish, showcasing our ability to navigate complex projects with thorough research, robust stakeholder engagement, and a commitment to aligning outcomes with our community's



needs and aspirations. Building on this solid foundation, the Village is poised to undertake the proposed Vulnerability Assessment with the same level of diligence and strategic insight. Our team is equipped with the expertise required to manage all facets of this project, ensuring that it not only achieves its goals but also provides actionable recommendations to bolster our community's resilience against natural hazards. In addition to our experience with comprehensive planning efforts, the Village of Estero has also successfully administered and managed several federal and state grants, further evidencing our capacity for overseeing complex projects and compliance requirements. Notably, we have been awarded and efficiently utilized funds from several key programs, including: • Coronavirus Aid, Relief, and Economic Security (CARES) Funds, receiving \$539,968.96 in Fiscal Year 2020-2021. • Coronavirus State and Local Fiscal Recovery Funds, with an award of \$16,964,413 spanning Fiscal Year 2021 to the present. • Community Development Block Grant (CDBG), totaling \$29,673 in Fiscal Year 2021-2022. • Keep Florida Beautiful Highway Beautification Grant and Highway Lighting Maintenance Grant from the Florida Department of Transportation (FLDOT), amounting to \$59,098 and \$132,728 respectively in Fiscal Year 2021-2022. Leveraging this extensive experience and administrative capability, coupled with a proactive approach to collaboration, the Village is well-prepared to administer the proposed Vulnerability Assessment. This project will benefit from our proven track record of managing both the technical and administrative aspects of complex initiatives, ensuring comprehensive vulnerability insights and effective mitigation strategies are developed in partnership with experts, stakeholders, and the community.



Describe how the proposed plan integrates mitigation measures and strategies to reduce natural hazard risks, including climate-related risks. Mitigation measures include but are not limited to reducing risks to people and property; public service interruption for members who are most vulnerable to natural and climate-related risks; and/or community lifelines.

The Estero Vulnerability Assessment is strategically focused on integrating mitigation measures and strategies that address a broad spectrum of natural hazard risks, including those stemming from climate change. This encompasses evaluating threats such as coastal and inland flooding, extreme weather conditions, and wildfires, with the aim of protecting the community and its infrastructure.

As part of our forward-looking mitigation strategy development, the assessment will facilitate the identification of targeted measures to bolster the Village's resilience. Potential strategies may involve enhancing stormwater management systems and integrating green infrastructure to mitigate identified hazard risks. The specific strategies will be determined through a detailed analysis of current conditions and future climate projections, emphasizing actionable measures to significantly lessen vulnerability.

The assessment will employ both quantitative and qualitative analyses to project climate scenarios and their impacts, guiding the establishment of specific, measurable resilience objectives. For instance, projections of sea-level rise will inform flooding mitigation strategies, with the goal of significantly reducing potential economic and property losses.

Importantly, the assessment will consider the impacts on FEMA's community lifelines, including safety and security, food and hydration, health and medical services, energy, communications, transportation, hazardous materials, and water systems. While the study evaluates how these lifelines may be affected by natural hazards and climate-related risks, it maintains a flexible approach to recommending specific actions. This ensures a comprehensive understanding of the lifelines' vulnerabilities and needs, enabling informed decision-making for enhancing long-term community resilience.

By focusing on these critical areas, the assessment aims to create a sustainable development model that safeguards and improves the quality of life for all Village residents, preparing the community to effectively respond to and recover from climate challenges.

Identify the risks or hazards being reduced and the impacts that those hazards have on people and property

The Estero Vulnerability Assessment is committed to a comprehensive identification and analysis of the risks and hazards that our community faces. This initiative will focus on a wide array of natural threats, including but not limited to: Coastal and High-Tide Flooding: Assessing the impact of rising sea levels and storm surges on residential areas and infrastructure. Rainfall and Stormwater Flooding: Examining the effects of intense and changing rainfall events and the capacity of existing stormwater management systems to prevent urban and rural flooding. Combined Flooding Risks: Evaluating scenarios where coastal and rainfall flooding events coincide, exacerbating the potential for damage. Climate Variability: Understanding the implications of altered rainfall patterns, increased



heatwaves, and prolonged drought conditions on water resources, agriculture, and publichealth. Wind Damage and Wildfires: Analyzing the susceptibility of buildings, landscapes, and natural areas to high wind events and wildfire outbreaks, considering changingclimate conditions. Impact on Community and Property: Our analysis will extend beyondidentifying risks to detailing the direct and indirect impacts these hazards have on thepeople and property of Estero. This includes: Physical and Economic Damages: Quantifying potential damages to homes, businesses, and critical infrastructure to informeconomic resilience planning. Public Health and Safety: Addressing the increased risk ofinjury, loss of life, and health issues arising from natural disasters, with a focus onpreparing and protecting our most vulnerable populations. Environmental and EcologicalEffects: Considering the impact on local ecosystems and wildlife. Commitment toComprehensive Mitigation Recommendations: Armed with this detailed risk assessment, the Village will develop recommendations aimed at minimizing the impact of thesehazards. Strategies will be rooted in the latest scientific research and best practices inhazard mitigation, encompassing engineering solutions, policy interventions, communityeducation, and emergency preparedness plans. The ultimate goal is to safeguard ourcommunity's wellbeing, protect property and assets, and enhance the overall resilience of Estero against the challenges posed by natural hazards and climate change.

Describe the value of the proposed plan to the community. Describe the anticipated short-term impacts during normal circumstances, as well as how the plan will enhance resilience in the long term and during extreme events. Description should include qualitative or quantitative data

The Estero Vulnerability Assessment represents a critical step forward in the community's ongoing efforts to understand and mitigate the impacts of climate change and natural hazards. By identifying areas vulnerable to climate impacts, this study will enable the Village and its residents to proactively prepare for and respond to environmental challenges, thereby enhancing our collective resilience. Short-term Benefits: Immediately following the completion of the Vulnerability Assessment, the Village will be empowered with actionable intelligence, facilitating targeted preparedness efforts. For example, the identification of flood-prone areas will allow for the implementation of emergency response plans and community education programs, ensuring that residents are well-prepared to protect their families and properties during adverse weather events. Long-term Resilience: Over the longer term, the Assessment will lay the groundwork for systematic changes that bolster our community's resilience. By outlining specific mitigation measures, such as infrastructure enhancements and natural resource management strategies, we will not only reduce the vulnerability of our community to future climate impacts but also improve the overall quality of life for all residents. Furthermore, the plan will contribute to sustainable development goals by promoting environmental stewardship and economic stability in the face of climate change.

Community Engagement and Inclusivity: A key component of our approach will be the inclusive engagement of community sectors to ensure the plan's benefits are equitably distributed. Attention will be given to vulnerable populations, who are often disproportionately affected by natural hazards. Through workshops, town hall meetings, and educational campaigns, we will foster a community-wide dialogue on resilience and climate adaptation, empowering every resident with the knowledge and tools to contribute to our collective safety and well-being. Quantitative and Qualitative Measures of Success: Success will be measured through both quantitative and qualitative metrics, including



reduced incidence of property damage from flooding, increased community engagement in resilience activities, and enhanced biodiversity in restored natural areas. Feedback from community members and stakeholders will be instrumental in evaluating the effectiveness of implemented strategies and identifying areas for future improvement.



Timelines of critical tasks to be accomplished for each proposed activity, including a description of the steps you will take to complete the funded activities and describe any dependencies or actions that need to happen before you can start on the activities

The Estero Vulnerability Assessment is structured around a timeline that ensures both the timeliness and feasibility of the project. Recognizing the critical nature of this initiative, the proposed timeline is designed to swiftly mobilize resources following funding approval, ensuring that critical milestones are met within a 2-year framework.

Phase 0: Consultant Procurement and Notice to Proceed (0-3 months)

Prepare Procurement Documentation: This will include an independent cost analysis, scope of work, and contract, in compliance with federal, state, and local regulations. Prior to advertising and initiating the procurement process, the Village will submit the procurement package to Lee County for review and approval.

Competitively Solicit a Consultant: This will include the advertisement of the Request for Proposals/Qualifications (RFP/Q). The City will solicit and select a vendor in compliance with 2 CFR 200 and the Village's procurement procedures.

Facilitate a Kickoff Meeting: During this kickoff meeting with the selected consultant, the Village will review the scope, answer any project questions, and outline goals, milestones, deliverables, timelines reporting requirements, and payment schedule. The kickoff meeting will identify Village-Consultant responsibilities and will be an opportunity to discuss the proposed strategy to complete the Vulnerability Assessment.

Phase 1: Immediate Mobilization and Preliminary Data Collection (3-6 Months)

Initiate Data Collection: Commence with the gathering of existing data, reports, and projections relevant to Estero's vulnerabilities. This phase will focus on rapid mobilization to ensure a foundational understanding of current conditions is established promptly. Stakeholder Engagement: Begin stakeholder consultations to ensure community input and expert advice are integrated from the outset, reinforcing the project's alignment with local needs and expectations.

Phase 2: Detailed Analysis and Model Updating (3-12 Months)

Update Stormwater Model: With preliminary data as a foundation, update and calibrate stormwater models to reflect current and projected conditions. This will include a dual focus on existing conditions for baseline accuracy and the integration of climate change projections to forecast future vulnerabilities. Community Workshops: Conduct workshops to engage the community in understanding the process and preliminary findings, fostering transparency and inclusivity.

Phase 3: Vulnerability Identification and Strategy Development (12-18 Months)

Identify Vulnerabilities: Utilize updated models to identify and delineate areas of vulnerability across the Village, focusing on a detailed analysis that will inform the development of targeted mitigation strategies. Draft Mitigation Strategies: Begin drafting short-term and long-term mitigation strategies, emphasizing community-focused solutions.

Phase 4: Finalization and Reporting (18-24 Months) Develop Final Report: Compile the



findings, analyses, and recommended strategies into a comprehensive final report. This document will serve as a roadmap for enhancing the Village's resilience to natural hazards and climate impacts. Public Presentation: Present the final report to the community and stakeholders, ensuring transparency and fostering a shared commitment to implementation.

Budget Management and Reporting: The Village will maintain a disciplined approach to budget management, with regular reporting and reviews to ensure adherence to the proposed spending plan. Adjustments will be made as necessary to reflect project realities, always with an eye toward maximizing cost-effectiveness and impact. At the conclusion of the Vulnerability Assessment, the Village will prepare a closeout report including all final deliverables, consultant payments, and reports for submission to Lee County.

Monthly spending plans and proposed draw down schedules

Quarter 1 (Months 1-3: Phase 1) Activities: Data compilation, initial stakeholder engagement, and consultant procurement. Budget Allocation: \$35,000.

Quarter 2 (Months 4-6: Start of Phase 2) Activities: Begin detailed analysis with consultants, update stormwater models, and initiate community workshops. Budget Allocation: \$60,000.

Quarter 3 (Months 7-9: Phase 2 Continued) Activities: Continue analysis, model calibration, and community engagement through workshops. Budget Allocation: \$80,000.

Quarter 4 (Months 10-12: Phase 2 Continued) Activities: Finalize analysis, integrate climate change projections, and detailed community feedback sessions. Budget Allocation: \$80,000.

Quarter 5 (Months 13-15: Start of Phase 3) Activities: Develop targeted mitigation strategies based on updated models and collected data. Budget Allocation: \$60,000.

Quarter 6 (Months 16-18: Phase 3 Continued) Activities: Refine mitigation strategies, incorporate community and stakeholder feedback. Budget Allocation: \$60,000.

Quarter 7 (Months 19-21: Start of Phase 4) Activities: Begin compiling findings, analyses, and strategies into the final report. Budget Allocation: \$37,500.

Quarter 8 (Months 22-24: Phase 4 Continued) Activities: Finalize and present the comprehensive report to the community and stakeholders. Budget Allocation: \$37,500.

TOTAL: \$450,000

Reporting schedule for outcomes achieved



To ensure the Estero Vulnerability Assessment progresses transparently and efficiently, a detailed reporting schedule is pivotal. This proposed schedule not only outlines major milestones, but also facilitates ongoing communication with stakeholders, reinforcing accountability and enabling timely adjustments as needed.

Initial Data Compilation and Analysis Report (3 Months): An early-stage report summarizing initial findings from data collection and existing conditions analysis. This will serve as a baseline for the project, offering early insights into potential areas of focus.

Stormwater Model Update Report (12 Months): A comprehensive report detailing the updates to the stormwater model, including calibration results and preliminary vulnerability insights. This will provide an early indication of flood-prone areas requiring immediate attention.

Climate Change Impact Projections Report (9 Months): A standalone report delivered three months prior to the stormwater model update, focusing on the projected impacts of climate change on Estero's vulnerabilities. This will include data on sea-level rise, increased precipitation patterns, and potential for increased storm intensity.

Mid-Project Review and Strategy Outline (18 Months): A mid-project report that identifies vulnerabilities based on updated models and initial mitigation strategies. This pivotal document will outline proposed actions to address identified vulnerabilities and seek feedback from community stakeholders to refine strategies.

Draft Mitigation Strategies and Community Feedback Session (21 Months): Prior to finalizing the assessment, a draft of mitigation strategies will be shared with the community in a public forum, allowing for input and adjustments based on local knowledge and concerns.

Final Report and Implementation Plan (24 Months): The culminating document of the Estero Vulnerability Assessment, detailing all findings, recommended mitigation strategies, and an implementation plan. This report will serve as a roadmap for enhancing resilience in Estero and will include a schedule for ongoing review and updates.

All dates are from project notice to proceed.



Describe the process carried out to determine cost estimations prior to applying

The budget for the Plan draws from Planning Grants by the Florida Department of Environmental Protection and funds from the CDBG-MIT General Planning Support Program by Florida Commerce, aimed at supporting city-wide vulnerability assessments in the fiscal year 2022-2023 and initiatives following Hurricane Irma. To formulate projected costs, expenses from municipalities of similar size and traits across Florida were examined, including Broward County, City of Copper City, City of Miramar, City of Parkland, City of LaBelle, City of Groveland, City of Bradenton, City of Coral Gables, City of Homestead, Key West, and City of Smyrna Beach. This evaluation led to a budget that accommodates a wide array of vulnerabilities, including coastal and rainfall flooding, extreme heat, high winds, and wildfires.

In developing this budget, the Village leveraged insights from prior successful planning projects, conducting a cost analysis against those efforts to anchor our estimates. This analysis reviewed the scope, complexity, and results of past efforts both within the Village and within the State of Florida, thereby establishing a solid foundation for the Vulnerability Assessment's financial planning. Given the Assessment's broad scope, which spans numerous vulnerabilities and incorporates complex modeling, especially for climate change impacts, cost estimates have been refined to ensure it is both comprehensive and adaptable, incorporating a risk-adjusted approach to account for any unexpected challenges.

Describe additional steps you will take, if approved, to manage costs, change orders, and ensure the plan is completed on time and within budget

If approved, the Village of Estero is committed to implementing robust measures to manage costs, oversee change orders, and guarantee timely and budget-compliant completion of the Vulnerability Assessment. Recognizing the significance of fiscal responsibility and project management, our approach includes:

Comprehensive Scope Definition: In collaboration with the procured consulting firm, we will define the project scope to encompass all essential tasks for a comprehensive Vulnerability Assessment. This step ensures a clear understanding of project requirements and cost implications from the outset.

Leveraging Past Experience: The Village will draw upon the experiences and scopes of previous planning efforts, using them as benchmarks to inform the Vulnerability Assessment's planning and execution. This includes leveraging data, insights, and methodologies from past stormwater and vulnerability projects within Florida, ensuring our approach is grounded in proven strategies.

Regular Monitoring and Reporting: Establishing a transparent, regular reporting mechanism to track progress against milestones, budget adherence, and change management.

Vendor Performance Oversight: Implementing standards for vendor performance, including timely delivery of milestones, quality of work, and budget compliance. This will



involve regular reviews and adjustments as needed to align with project goals.

Risk Management: Proactively identifying potential risks to timelines or budgets and implementing mitigation strategies to address these risks before they impact the project.

Stakeholder Engagement: Ensuring continuous communication with all project stakeholders, including Village officials, community members, and external partners. This engagement will facilitate timely decision-making, especially in response to change orders or unforeseen project adjustments.

Adaptive Project Framework: While we have a structured plan in place, we remain flexible and prepared to adapt our strategies based on project findings or external factors. This adaptability ensures the project's objectives are met without compromising on cost or quality.

Describe the actions that will be taken to implement the plan after completing the plan. Describe how the plan will be maintained and updated

Public Education and Engagement The first step will involve public education to disseminate the comprehensive findings of the Vulnerability Assessment. The objective is to cultivate a well-informed community that understands the specific vulnerabilities identified and the implications thereof. Through focused meetings, particularly in areas designated as highly vulnerable, the Village will facilitate discussions around the vulnerabilities, potential impacts, and proactive measures that residents and the municipality can undertake. These interactive sessions aim to not only educate, but also to foster a collaborative spirit among all stakeholders towards resilience-building. Strategic Implementation of Recommendations Armed with the assessment's recommendations, the Village intends to systematically implement both short-term and long-term mitigation strategies. This will likely involve infrastructural upgrades, policy revisions, and community-based initiatives designed to fortify the Village against identified vulnerabilities. The Village will actively pursue grants and other funding opportunities to support these implementation efforts, ensuring that financial constraints do not hinder progress towards enhanced resilience. Ongoing Maintenance and Updates Acknowledging the dynamic nature of climate change and its impacts, the Village will regularly review and update the Vulnerability Assessment. Proposed to occur every five years, this process will entail a thorough evaluation of the existing data, assumptions, and recommendations in light of new information, technological advancements, and changing community needs. This iterative approach ensures that the Village's resilience strategies remain relevant, effective, and aligned with best practices. Incorporation into Broader Planning Efforts Furthermore, the findings and recommendations of the Vulnerability Assessment will be integrated into the Village's broader planning and development initiatives. This integration ensures a cohesive approach to resilience, where every aspect of municipal planning-from land use to emergency preparedness-is informed by a deep understanding of the local vulnerabilities and risks. Expert Guidance and Community Involvement Throughout the implementation and maintenance phases, the Village will continue to engage with experts in the field, leveraging their knowledge to guide the execution of the plan's recommendations. Equally important will be the ongoing involvement of the community, whose insights, needs, and preferences will be central to tailoring resilience measures that are both effective and culturally competent.



Describe how the plan is innovative, based on national best practices, and designed in accordance with an existing evidence-based program

Recognizing the unique challenges posed by climate change and natural hazards, the Village of Estero is committed to leveraging national best practices and evidence-based approaches to create a comprehensive, forward-looking plan that not only addresses current vulnerabilities but is also adaptable to future conditions. Innovative Approach: Our plan's innovation lies in its integrative approach, combining cutting-edge scientific research with practical, community-focused solutions. By engaging recognized experts in the field, we ensure that our assessment is grounded in the latest advancements in environmental science, engineering, and urban planning. This expert guidance will enable us to utilize the most accurate data and sophisticated modeling techniques available, providing a solid foundation for our vulnerability analysis. Alignment with National Best Practices: The methodology underpinning our assessment is aligned with national best practices in several key areas: • Data Utilization: We will employ the best available data, incorporating real-time climate projections and advanced modeling to anticipate future vulnerabilities. This approach allows us to go beyond static assessments, offering dynamic, scenario-based planning that can adapt to new information and changing conditions. • Community Engagement: Recognizing the importance of local knowledge and participation, our plan includes a robust community engagement component. This ensures that the strategies developed are not only technically sound but also responsive to the needs and values of Estero residents. • Interdisciplinary Collaboration: Our team will consist of experts from a diverse range of disciplines. This approach fosters innovative solutions that address the multifaceted nature of vulnerability and resilience. Evidence-Based Design: The assessment's design is informed by an extensive review of existing evidence-based programs and studies, ensuring that our strategies are not only innovative but also proven effective in similar contexts. We will draw upon successful models from other municipalities and adapt these strategies to fit the unique characteristics of Estero, ensuring that our plan is both cutting-edge and practically applicable. Adaptable Framework: This plan will not only serve to mitigate immediate risks but also to foster long-term resilience amidst uncertain future scenarios. It will incorporate flexible adaptation strategies that allow for adjustments based on evolving data and changing conditions, ensuring enduring resilience for the Village. Additionally, it seeks to align with and bolster existing planning efforts, ensuring our vulnerability assessment both complements and advances the broader goals of community development.



A description of how you will coordinate with other planning, community development, and/or recovery or resilience plans and initiatives that are underway

In the development of the Estero Vulnerability Assessment, the Village of Estero is committed to a strategic approach that ensures comprehensive alignment and coordination with existing and ongoing planning, community development, and recovery or resilience initiatives. Recognizing the interconnected nature of environmental challenges and the need for cohesive action, our coordination strategy is designed to leverage insights, data, and outcomes from a spectrum of relevant plans to foster a unified resilience framework for the Village.

The Estero Vulnerability Assessment will contribute to a collaborative framework that integrates the procured consultant's efforts with the foundational work laid out in previous studies, such as the Village of Estero Stormwater Master Plan, the South Lee County Watershed Initiative, the South Lee County Watershed Plan Update, and the South Lee County Flood Mitigation Plan. These documents will serve as critical reference materials, ensuring that our vulnerability assessment builds upon existing knowledge and avoids redundancy in efforts to address the Village's susceptibility to natural hazards.

Moreover, the Assessment will be coordinated with the Lee County Critical Infrastructure Risk & Resilience Plan, among other ongoing studies, to ensure that our efforts complement and enhance each other. This strategic alignment aims to create synergies between various resilience-building initiatives, maximizing resource efficiency and impact. By adopting a consultative approach with county officials, stakeholders, and the community at large, we aim to align our project's objectives with broader regional resilience goals, ensuring that our efforts are not only locally significant but also contribute to the wider community's resilience.

Central to our coordination efforts is the engagement with other partners and stakeholders involved in related activities. Through meetings, workshops, and public forums, we will foster a collaborative environment that encourages the exchange of ideas, data, and strategies. This participatory approach ensures that the Estero Vulnerability Assessment is informed by a broad spectrum of perspectives, including those from local government, community organizations, environmental groups, and the general public. Our goal is to cultivate a shared vision for resilience that is reflective of the community's diverse needs and aspirations.

The Estero Vulnerability Assessment will not be a study in isolation but a pivotal component of a larger ecosystem of planning and resilience efforts within the Village of Estero and beyond. By ensuring close coordination with existing plans and ongoing initiatives, and through active engagement with a wide range of partners, we will set the stage for a more resilient and sustainable future for the Village of Estero and its residents. This holistic and integrated approach underscores our commitment to not just understanding vulnerabilities but actively working towards mitigating them in collaboration with the broader community and regional stakeholders.

Are there any existing plans?



Alignment and Coordination

Yes



Plan Name:

Village of Estero SW Master Plan

Plan Website URL:

https://estero-fl.gov/wp-content/uploads/library-ada/Public %20Works/Estero%20Stormwater%20Master%20Plan.pdf No

Is this plan in progress?

Plan Description

The Village of Estero Stormwater Master Plan comprehensively addresses rainfall-driven flooding events within the Village, extending its hydrological models to encapsulate the Estero River & Halfway Creek watersheds in their entirety. This foundational document serves as a crucial resource for understanding the current stormwater infrastructure and its capacity to manage rainfall events.

Interaction with Proposed Activities

The insights and data from this plan will serve as a cornerstone for the stormwater management component of our Vulnerability Assessment. By leveraging the extensive modeling and findings, we aim to build upon and refine our understanding of stormwater dynamics, ensuring that our proposed mitigation strategies are both robust and aligned with existing capacities.



- Plan Name: South Lee County Watershed Initiative
- Plan Website URL: https://www.sfwmd.gov/sites/default/files/documents/South %20Lee%20County%20Watershed%20Initiative%2012_3 0_21%20FINAL%20Report%20for%20web.pdf
- Is this plan in progress? No

Plan Description

Focused on the broader implications of water management, this initiative examines the long-term impacts on water resources, habitats, and wildlife resulting from human-made flow diversions and drainage practices. It offers a comprehensive overview of the ecological balance and sustainability of water use in the region. This report did not focus on flooding events.

Interaction with Proposed Activities

The findings of this initiative will inform the ecological and water management aspects of our project, particularly in developing strategies that balance flood mitigation with ecological preservation. It underscores our commitment to holistic environmental stewardship as part of our vulnerability assessment and planning.



- Plan Name: South Lee County Watershed Plan Update
- Plan Website URL: https://www.leegov.com/naturalresources/Documents/Sout h%20Lee%20County%20Watershed%20Plan%20Update %20Final%20Report.pdf
- Is this plan in progress? No

Plan Description

Completed in 2011, this report includes drainage and flooding issues specific to Southern Lee County, including the Village of Estero. It presents a detailed analysis of the area's water management challenges and opportunities, informed by extensive data collection and modeling.

Interaction with Proposed Activities

The methodologies and data sets from this update will be integrated into our assessment to ensure continuity and relevance in our approach to addressing stormwater and flooding vulnerabilities. It represents a key resource in aligning our strategies with the broader regional context.



Plan Name:

ee (

- South Lee County Flood Mitigation Plan
- Plan Website URL:
- https://www.leegov.com/flooding/tasks/task12
- Is this plan in progress?

Plan Description

Completed in 2020, this plan articulates a vision for reducing flood risk across Southern Lee County through long-term mitigation efforts. It identifies critical areas of concern and proposes a range of solutions to alleviate flooding impacts on communities and infrastructure.

No

Interaction with Proposed Activities

Our project will draw directly from the recommendations and insights of this plan to inform our flood mitigation strategies. By aligning with its objectives, we ensure that our efforts complement and enhance the region's overall resilience to flooding.

Plan Name:

эе (

- Waterway Infrastructure Risk & Resiliency Plan.
- Plan Website URL:
- Is this plan in progress? Yes

Plan Description

This ongoing project addresses the risks associated with tidal storm surge, coastal and riverine compound flooding, and sea level rise impacts. It aims to fortify critical infrastructure against these evolving threats through comprehensive risk assessments and resilience planning.

Interaction with Proposed Activities

Collaboration with this project is essential to avoid duplicative efforts and ensure that our vulnerability assessment enhances the county-wide resilience framework. We will coordinate closely with the county to align our findings and strategies, particularly in areas of overlapping concern.





A description of the area of high need that will be addressed by the plan

The Village of Estero's application emphasizes a critical area of high need: enhancing the community's understanding and capacity to prepare for, mitigate, and ultimately reduce the impacts of vulnerabilities posed by natural hazards and climate change. This focus is not only timely but essential, given the increasing frequency and severity of such events.

In the heart of Estero, there lies a pressing need to fortify our community against the unpredictable, yet inevitable, threats of our changing environment. The proposed plan seeks to bridge the gap between current vulnerabilities and future resilience, marking a pivotal step towards safeguarding the well-being of our residents and the integrity of our infrastructure.

Through a comprehensive vulnerability assessment, this initiative will illuminate the specific risks facing Estero, ranging from flooding and storm surges to wildfires and extreme weather events. By mapping these vulnerabilities against the backdrop of our community's landscape, the plan promises to deliver actionable insights that will empower residents, businesses, and local government alike.

Moreover, the plan's recommendations will extend beyond mere preparation, aiming to embed resilience into the fabric of our community. Strategies will be devised not just to withstand the immediate aftermath of natural hazards but to ensure a swift and sustainable recovery. This forward-looking approach will equip Estero with the tools and knowledge needed to adapt to our changing world, making resilience an integral part of our community's DNA.

In essence, this plan will be more than a roadmap for disaster preparedness; it stands to serve as a commitment to the long-term safety of our community. By prioritizing the needs of those most vulnerable and leveraging the latest in science and technology, we hope to transform Estero into a model of resilience, ready to face the challenges of tomorrow with confidence and resolve.

A description of the intended impact the plan will have on the community and area of high need

The proposed Estero Vulnerability Assessment aims to profoundly transform our understanding and management of environmental vulnerabilities, thereby significantly enhancing the resilience of the Village of Estero and its inhabitants. This plan will illuminate the specific challenges posed by natural hazards and climate change, ensuring that every segment of our community is prepared to respond effectively and minimize risks.

Comprehensive Community Impact: By identifying vulnerabilities across the Village, this assessment will lay the groundwork for a future where Estero is not only more resilient to natural disasters, but also a community where every resident, regardless of their socioeconomic status, has the knowledge and resources to safeguard their well-being. The plan will include areas of high need, particularly those where low- and moderate-income families reside, who are often most at risk from environmental hazards. Through detailed mapping and analysis, the plan will pinpoint these critical areas,



ensuring our mitigation strategies are precisely targeted to where they are most needed.

Engagement and Empowerment: Engagement with stakeholders forms a cornerstone of our approach. By fostering an inclusive dialogue with residents, local businesses, governmental agencies, and community organizations, we aim to build a shared vision for resilience. This collaborative process will not only inform the assessment's direction but also ensure that the resulting recommendations reflect the diverse needs and strengths of our community.

Updates: Following the assessment's completion, the Village of Estero is committed to actionable steps to bring our findings to life. This includes public education initiatives to raise awareness about identified vulnerabilities and how residents can prepare for and mitigate these risks. Moreover, we plan to regularly update the assessment, incorporating the latest data and reflecting on the effectiveness of implemented strategies. This commitment to continuous improvement ensures that our resilience efforts evolve in line with emerging challenges and opportunities.

A description of the intended beneficiaries of the plan, including any HUD-defined vulnerable populations and communities who are the intended beneficiaries of the plan

The Estero Vulnerability Assessment will focus on benefiting the entire community of the Village of Estero, prioritizing not just the universal aspects of vulnerability but also the unique challenges faced by specific segments of our population. Recognizing that the impacts of climate change and natural disasters do not affect all community members equally, the plan will utilize a targeted approach to ensure that those most in need receive focused attention and support. Central to the assessment will be the understanding that areas of low- and moderate-income within our village, often situated in lower-lying regions, are disproportionately at risk from the adverse effects of flooding, extreme weather, and other climate-related hazards. These areas are home to residents who may lack the resources to effectively prepare for or recover from such events, underscoring the necessity of intervention. Moreover, the plan will include efforts to support HUD-defined vulnerable populations, including elderly individuals, children, people with disabilities, and those facing economic disadvantages. By tailoring our strategies to address the specific vulnerabilities of these groups, we aim to foster a more resilient community where every resident has the capacity to withstand and recover from the challenges posed by our changing environment. The Estero Vulnerability Assessment will involve a series of steps designed to engage these vulnerable communities directly, ensuring they are not only informed of the risks but also actively involved in the planning and execution of mitigation measures. This inclusive approach will extend to the maintenance and periodic updating of the plan, with ongoing community input serving as a cornerstone of our efforts to adapt to new challenges and information over time.

Authorized Organization Representative

Census Tract	Block Group
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Community Impact and Community Engagement

1	50104	1,2,3
2	50313	1,2,3
3	50203	1,2

The types of entities benefitting from the plan

☑ Residents

Businesses $\overline{}$

☑ Local Government

- Other:
- If "Residents" is selected, list the projected number of beneficiaries and number of LMI beneficiaries who will benefit from the plan, if it were implemented

Total Number of Beneficiaries:	29590
Total LMI Beneficiaries:	7565



The target populations from the table below who would benefit from the plan if it were implemented

- Populations presumed by HUD to be LMI persons:
 - Abused children
 - Elderly persons (62 and older)
 - Battered spouses
 - Homeless persons
 - Severely disabled adults (as defined by the Census)
 - Illiterate adults
 - Persons living with AIDS
 - Migrant farm workers
- Protected classes (groups protected from discrimination under federal civil rights law based on the following):
 - Race
 - Color
 - National origin
 - Sex (including sexual orientation and gender identity)
 - Religion
 - Familial status
 - Disability
 - Age
- □ Vulnerable populations, as defined by HUD in the Consolidated Notice:

• Groups or communities whose circumstances present barriers to obtaining or understanding information or accessing resources, based on such factors as the following:

- Geography
- Markets
- Prevalent housing stock and tenure
- History
- Prejudice
- Underserved communities, as defined by HUD in the Consolidated Notice:
 - Populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life



A description of the method used to identify the intended beneficiaries of the plan if it were implemented

To identify the intended beneficiaries of the proposed vulnerability assessment, the Village used a data-driven approach by leveraging the latest census data. This methodology will ensure an accurate and broad understanding of the community's demographic composition, without pinpointing specific subsets. The census data provided valuable insights into population distribution, age, income levels, and other socio-economic indicators, which are essential for tailoring the plan's recommendations to the community's overarching needs. The utilization of census data is aimed at providing a baseline understanding of Estero's demographic landscape. This approach is not intended to single out specific areas of need based on economic status but rather to offer a comprehensive overview of the community. This ensures that the planning process considers the diverse needs of all residents, contributing to the development of a plan that seeks to enhance the quality of life across the entire district. By grounding the methodology in empirical data, the Village aims to ensure that, if implemented, the plan would have a targeted yet inclusive impact, aligning with the goals of sustainability and resilience for the community at large.

A description of the community outreach and engagement that has happened to date, including a description of the stakeholders and approaches to outreach and engagement

Since the inception of the Estero Vulnerability Assessment initiative, the Village of Estero has proactively engaged with the community to ensure transparency, inclusivity, and collaboration. A pivotal moment in this ongoing engagement was the Village Council's approval of Resolution No. 2024-03 on February 7, 2024. This resolution not only underscored the Village Council's commitment to the project by officially authorizing the submission of the CDBG-DR Grant application but also set the stage for active community involvement. The public advertisement of this resolution, as part of the Village Council agenda, invited the community to participate in the dialogue, offering a platform for residents to voice their thoughts, concerns, and support for the Estero Vulnerability Assessment. This initial phase of outreach aimed to lay a solid foundation for transparent communication and stakeholder involvement, emphasizing the project's significance to Estero's resilience and well-being.

A description of additional community outreach, engagement, and partnerships that will occur as part of the development of this plan, including the approach to engaging new stakeholders, if applicable

Looking ahead, the Village of Estero is committed to expanding its community outreach and engagement efforts as the Vulnerability Assessment progresses. Recognizing the importance of comprehensive community involvement, the project will seek to engage all sectors of the community, from residents and local businesses to educational institutions and non-profit organizations. The approach will be multifaceted, employing a variety of



engagement strategies tailored to meet the diverse needs and preferences of Estero's population. This may include public workshops, informational sessions, digital engagement platforms, and targeted outreach to vulnerable populations to ensure that everyone has a voice in the process.

Furthermore, the Village plans to foster strong partnerships with local and regional stakeholders, leveraging these relationships to enhance the project's impact and ensure alignment with broader resilience and sustainability goals. Through collaborative efforts with environmental groups, academic institutions, and other municipalities, the project aims to not only address Estero's unique vulnerabilities but also contribute to regional resilience initiatives.

This emphasis on inclusive and proactive community engagement reflects the Village of Estero's dedication to a participatory planning process. By involving the community every step of the way and forging strategic partnerships, the Estero Vulnerability Assessment is poised to develop robust, informed, and community-driven strategies to enhance the Village's resilience to natural hazards and climate impacts.



A description and justification of the proposed costs

The Village of Estero proposes a \$450,000 budget to complete the comprehensive Vulnerability Assessment. The Village considered man factors when determining costs, including researching similar assessments previously conducted throughout Florida, both at the County and State levels, and especially within communities of similar sizes and populations. The cost estimation process for the Vulnerability Assessment also draws upon the Village's previous experience in executing large-scale planning efforts, specifically those having been successfully executed previously, to ensure the budget was as comprehensive, realistic, and accurate as possible.

A description of whether the plan will be implemented with applicant staff, vendor support and/or other

The Village of Estero intends to utilize consultants that are experts in the field to conduct the proposed Vulnerability Assessment. Village of Estero Staff will support the consultants. The consultant team will include a public relations expert that will be tasked to maintain continual community engagement and feedback throughout the process to ensure the Communities' needs and preferences are met.

Village staff will provide critical insight needed to complete the proposed Assessment based on previous lessons learned in order to maintain the integrity of the Village and its community members. The procured consultants will be experts in the field who can leverage their knowledge to best execute the plan, while also implementing the latest advancements in environmental science, engineering, and urban planning. This partnership will allow the Village's vulnerabilities to be considered from multiple vantage points, ultimately yielding the best result for the Village of Estero and its community members.

A description of the timeframe, dependencies, and methods for obligating grant funds, and how the applicant plans to ensure funds are spent timely. A description of how the applicant will address and control for dependencies, if applicable

As noted in earlier sections of the application, the Village of Estero intends to conduct the proposed comprehensive Vulnerability Assessment for a total of \$450,000 over a two-year period, broken into four major (4) phases. A quarterly spending schedule for the entire project can be found under the Timeliness and Urgency portion of the application. Based on the proposed Phasing of the Vulnerability Assessment, invoices will be issued monthly so that the Village can best track dependencies, project milestones, and activity delivery costs in monthly increments. Likewise, the Village will maintain Phase status reports throughout the Assessment's duration to ensure adherence to the proposed spending plan. Additionally, the Village will maintain interim progress reports (every six months) to ensure ongoing communication, while also detailing the Assessment's progress including data collection, community engagement activities, and any findings or



adjustments that need to be addressed.

Any contracts executed with consultants will be task-based and provide an allocation of the total budget based on the severity of the particular vulnerability identified so that funds are prioritized accordingly. The method for obligating and drawing down funds will follow an advance method where funds are transferred from Lee County to the subrecipient based on invoices received and determined eligible for payment, but not yet paid by the subrecipient. This approach allows for additional oversight and control of the grant funds to ensure transparency and fiscal responsibility throughout the assessment's duration.

Within the first Phase (0-3 Months), the Village's primary objective for this Phase is to compile and summarize initial findings from data collection and analyze current, existing conditions. Additionally, the Village will begin engaging with stakeholders so that community input and other expert advice can steer the project's alignment with local needs and expectations. This, in turn, will allow for the establishment of project dependencies and measurable objectives that can better inform the Village on the obligation of grant funding. The Village will assemble all data currently available and begin procuring expert consultants to assist in prioritizing the vulnerabilities requiring the most resources. The estimated spending associated with Phase 1 equates to 4.5% of the total budget, \$20,000, over the proposed 3-month timeframe.

The second Phase (3-12 Months) will encompass a more detailed analysis based on initial findings, consultant expertise, and community feedback. With the preliminary data, the Village will work with its consultants to update and calibrate its stormwater model to reflect current and forecasted conditions. The baseline knowledge of current conditions coupled with expert integration of climate change projections will allow the Village to better forecast future vulnerabilities. A crucial part of this Phase will be the continued community engagement via workshops. This will allow for community engagement and a better understanding of the vulnerabilities on hand, ultimately informing the Village members on what to expect and actions they can take to prepare for and respond to the identified vulnerabilities. The estimated spending associated with Phase 2 equates to 50% of the total budget, \$250,000, over the proposed 9-month timeframe.

Building upon Phase 2, Phase 3 (12-18 Months) will utilize the updated models and collected data to pinpoint the identified vulnerabilities across the Village and begin developing targeted mitigation strategies. In collaboration with community and stakeholder feedback, the Village staff will work with consultants to draft mitigation strategies to address the vulnerabilities, current and future, faced by the community. This Phase will be the culmination of all compiled data, research, modeling, and community feedback and allow for the village to materialize its findings into strategic planning to ultimately benefit and preserve the Village of Estero. The estimated spending associated with Phase 3 equates to 33% of the total budget, \$130,000, over the proposed 6-month timeframe.

The final stage of this Plan, Phase 4 (18-24 Months), aims to compile findings into a final report. This comprehensive report will include a summary of new findings, analyses, and recommended strategies that will inform the Village of its current and forecasted vulnerability as a result of our changing climate, as well as enhancing the Village's resilience to natural hazards and climate impacts. The final report will also be presented to the community and stakeholders, ensuring transparency and accountability for implementation. The estimated spending associated with Phase 4 equates to 12.5% of the total budget, \$50,000, over the proposed 6-month timeframe.



Budget Form & Duplication of Benefits

Description	Total Requested
Development of Plan (Comprehensive, Land Use, Resiliency and Mitigation)	\$450,000.00
Mapping and Data Upgrades	\$0.00
Education or Outreach Programs	\$0.00
Building Codes	\$0.00
Zoning Ordinances	\$0.00
Other Eligible Costs	\$0.00
Funding Requested from CDBG-DR	\$450,000.00

Sources of Leveraged Funds

Source of Funds	Amount	% of Total	Status of Funds
FEMA Building Resilient Infrastructure and Communities (BRIC)	\$0.00	0.00	N/A
Use of Funds:		I	1
Purpose of Funds:		N/A	
FEMA Hazard Mitigation Grant Program (HMGP)	\$0.00	0.00	N/A
Use of Funds:		I	
Purpose of Funds:		N/A	
FEMA Public Assistance (PA)	\$0.00	0.00	N/A
Use of Funds:		1	
Purpose of Funds:		N/A	
Local (Municipal) Funds	\$0.00	0.00	N/A
Use of Funds:			1
Purpose of Funds:		N/A	
Other CDBG-DR Funds (from Florida COM)	\$0.00	0.00	N/A
Use of Funds:			
Purpose of Funds:		N/A	
Other State Funds	\$0.00	0.00	N/A
Use of Funds:		·	·
Purpose of Funds:		N/A	
Resilient Florida	\$0.00	0.00	N/A
Use of Funds:			



Budget Form & Duplication of Benefits

Source of Funds	Amount	% of Total	Status of Funds
Purpose of Funds:		N/A	
US Army Corps of Engineers (USACE)	\$0.00	0.00	N/A
Use of Funds:		·	
Purpose of Funds:		N/A	
US Department of Transportation	\$0.00	0.00	N/A
Use of Funds:		·	
Purpose of Funds:		N/A	
Total	\$0.00		

Funding Summary

Item	Total Amount
Other Funding Sources	\$0.00
Total Funds Available for Plan	\$450,000.00
Remaining Unmet Need	\$0.00



Application Certification

I/We, the undersigned, certify under penalty of perjury that the information provided above is true and correct and that the application and all support documentation has been duly authorized by the governing body of the applicant. I further certify that I am authorized to submit this application and have followed all policies and procedures of my agency regarding grant application submissions.

	Authorized Organization Representative Name:	Village of Estero
	Authorized Submitter Representative Name:	Steve Sarkozy
Þ	Authorized Submitter Representative Title:	Village Manager
▶	Certification Date:	02/23/2024
Þ	Authorized Submitter Representative Signature:	Steve Sarkozy
	Authorized Submitter Representative IP Address:	8.17.2.18