Date: 07/31/20

Rebuild Florida CDBG - Mitigation
General Planning Support Program Application

Official Project Title

Key West Comprehensive Adaptation and Resilience Implementation Plan

Applicant Information

Official Applicant Entity Name:	City of Key West			FEIN #:	596000346
Primary Project Contact Name:	Alison Higgins			DUNS #:	079864898
Title:	Sustainability Coordinator		E-mail:	ahiggins@cityofkeywest-fl.gov	
Mailing Address:	PO BOX 1409			Phone Number:	305-809-3726
City:	Key West	State:	Florida	Zip Code:	33041-1409

Please list co-applicant entities if any:	Contact Person:	E-mail Address:

Project Description (2,500 word limit)

Write an overview/summary of the project being proposed:
1) State the project purpose, area of benefit and a description of the proposed activity. 2) Specify the risk(s) that will be mitigated by completion of this project. 3) Describe how the work will be done and the team that will do it. 4) Explain the method used to determine project funding requirements. 5) Describe anticipated outcomes. 6) Has a comprehensive plan already been created? If yes, describe how the proposed plan or activity will integrate with the comprehensive plan and attach the Executive Summary of the comprehensive plan.

Insert Attachment:		Please title zip folder: EntityNamePD_GPS

Community Value (1,500 word limit)

Describe: The project's value to the community in normal circumstances and in times of natural disasters. Include: The community lifelines served this project; How the project enhances community resilience; Public notice of the planned project; and Community involvement in the project planning process.

Insert Attachment:		Please title doc: EntityNameCV_GPS

Capacity Plan (1,500 word limit)		
Provide a strategic plan overview that addresses goals, stakeholders, the work plan, (major tasks and deliverables), resources (staffing and budget) and monitoring/quality controls. Identify the staff members who will be responsible and/or positions that will be filled for the GPS project management and maintenance. Provide a short profile on each person on your current staff who perform project-related tasks and a position description for any new hires who will be assigned to project work. If your project will require specific tools or skilled personnel, such as mapping do you have the capabilities and the staff to complete your plan? Attach a Word document with the planning team's CV/resumes into the zip folder. Describe the circumstances under which this plan will be updated and detail how subsequent updates will be funded.		
Insert Attachment:		Please title zip folder: EntityNameCP_GPS

Implementation Plan		
Use the Implementation Plan Template provided in Appendix D to prepare a chronological timeline for the entire life of the project that organizes work into logical, manageable tasks and deliverables.		
Insert Attachment:		Please rename template: EntityNameIP_GPS

Budget			
Include your project budget using the Budget Worksheet provided as Appendix E (and in the GPS Application, Appendix A). Ensure your budget is reasonable, appropriate and accurate. Are the budgeted items consistent with the project description and tasks? Does the amount requested fall within the GPS's allowable minimum ($20,000) and maximum ($10,000,000)? Ensure there is no duplication of benefits.			
Insert Attachment:		Please rename template: EntityNameBudget_GPS	
Is there any duplication of benefits?	Yes: ☐	No: ☒	
All funds identified for use on your project must be fully disclosed and detailed to ensure budget accuracy and no duplication of benefits.			
Will funding – other than CDBG-MIT funding – be used to fund this project? If yes, detail the anticipated or committed funds in the Leveraged Dollars section.	Yes: ☒	No: ☐	

Public Notice Requirement

Units of General Local Governments (UGLG) must receive public input on their application by abiding by one or both of these new notice formats:

1. Post information about the project online: Post the information about your project to your public website and allow for a 14-day public comment period. State the type/s of project/s to be undertaken, the source, the amount of funding available for the activities, the date by which comments must be made, and a contact person for a copy of the proposed application. Please submit a copy of the post and any public comments to DEO by submitting an attachment below.

2. Host a virtual public meeting: Applicants should supply the same documentation that would normally be required to demonstrate that a meeting was held, including minutes and a public meeting notice. The notice should be posted in a newspaper of general circulation and to your UGLG website. State the type/s of project/s to be undertaken, the source, the amount of funding available for the activities, the date by which comments must be made, and a contact person for a copy of the proposed application. Applicants must provide for a 10-day comment period, which must be published prior to the submission of the application.

Evidence of the public notice must meet the following requirements:

- Documentation of newspaper advertisement.
- Print-out of UGLG webpage showing public notice.
- Documentation that the needs of non-English speaking citizens have been met wherever a significant number of non-English speaking citizens might be reasonably expected to participate. In this case, documentation will need to be translated into Spanish and Haitian Creole.

Evidence of a public meeting with city and tribal governments must meet the following requirements:

- Notice of the public meeting must be provided at least five days prior to the meeting.
- Documentation of a meeting must include sign-in sheets and minutes.

Prior to submitting an application for CDBG-MIT funding, applicants are required to select their public notice format (choice #1 and/or #2 above) and upload the required documents.

In addition to following these instructions please include relevant notice dates on your Implementation Plan template. Applications will not be complete until Public Notice requirements are fulfilled. All Public Notice evidence must be submitted to DEO, by attaching documents to this application, before the application close date of July 31st.

Leveraged Dollars
If your project involves the qualified use of matching or leveraged funds or services, describe the specifics of leveraged fund/service usage. Are there local or other funds available to address the proposed project in whole or in part? If yes, report all sources of funding and the amount available. Disclose sources and uses of non CDBG-MIT funds. What other federal, state and/ or local entities have you contacted concerning funding for the proposed project and what were the results? Put "N/A" if this section is not applicable to your project.
$394,438 and Source: Stormwater Master Plan and Staff In Kind

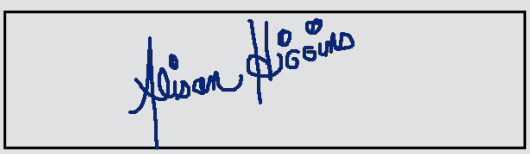
Compliance		
According to 84 FR 45838 August 30, 2019 Section V.A.(18), "The State shall make reviews and audits, including on-site reviews of any subrecipients, designated public agencies and local governments, as may be necessary or appropriate to meet the requirements of section 104(e)(2) of the HCDA, as amended, as modified by this notice. In the case of noncompliance with these requirements, the State shall take such actions as may be appropriate to prevent a continuance of the deficiency, mitigate any adverse effects or consequences, and prevent a recurrence. The State shall establish remedies for noncompliance by any designated subrecipients, public agencies, or local governments."		
Can you certify to comply with state and federal register regulations as outlined in 84 FR 45838?	Yes: [X]	No: [ ]

Sign and Date

As the primary entity contact for this project, I certify:

A. All staff, contractors, vendors and community partners of our mitigation initiative:
   1. Will comply with all HUD and Florida requirements in the administration of the proposed CDBG-MIT funded activities;
   2. Will work in a cooperative manner to execute the Subrecipient Agreement that provides the pathway for successful CDBG-MIT program(s) and/or project(s) and;

B. All information submitted in this Application is true and accurate.

Signature: 

Date: 07/31/20

Print button will only print application and not attached documents. Submit button will deliver application to email to the cdbg-mit@deo.myflorida.com. Please attach all relevant documents to this email.

Print Application

Submit Application

Alison Marie Higgins

City of Key West, Sustainability Coordinator **Jan 2012 - Present**
Coordination lead for 30 applications to FEMA/Florida current Grant Programs. Founding partner of Southeast Florida Regional Climate Change Compact. Active participant in Unified Sea Level Rise predictions, Vulnerability Analysis and Regional Climate Action Plan. Lead PI on Compact's Resilient Redesign, adaption planning exercise around 2' of sea level rise across the southeast section of Key West. Co-wrote City "Building Permit Allocation System" requiring basic green certification, cisterns and BFE 1.5 for all new residential buildings. Lead on Height Referendum vote to allow single family homes to raise out of the Base Flood Elevation.

Green Living & Energy Education, Inc. (GLEE), Executive Director **Dec 2005 – Jan 2012**
Founded and provided vision and leadership during startup of sustainability-based non-profit designed to serve as a catalyst to produce a culture change for individuals, businesses, and policy makers. Developed and nurtured productive relationships with key players at Keys Energy Services, Florida Keys Aqueduct Authority, Waste Management, Naval Air Station Key West, and all six Keys municipalities. Coordinated GreenGov, a bi-annual seminar for local policy makers which advocates and models possibilities for emission reductions. Provided research, support and advice to Key West and Monroe County on Climate Action Plans. Created annual Green Living Awards event to recognize local efforts. Served on Planning Team, Vulnerability Mapping Team, and Transportation Team for the Southeast Regional Climate Compact. Coordinated annual Green Living Expos, with budget of $60K, serving 5,000 attendees.

The Nature Conservancy, Land Conservation Program Manager **Dec 1997 - June 2011**
Chair for multi-agency Florida Keys Invasive Exotics Task Force, received the U.S. Department of the Interior Cooperative Conservation Award and USFWS Power of Partnerships Award. Project Manager for Caribbean & Florida Fire & Invasives Learning Network, coordinated webinars and an annual workshop involving eight nations across the Caribbean. Developed and piloted Python Patrol Early Detection Rapid Response program, currently used throughout Florida. Project Manager for Florida Keys Sea Level Rise Coastal Resilience Tool project and Conservancy delegate for Gulf of Mexico Climate and Resiliency Engagement Panel. Applied, secured and managed over $1 million in grants.

Friends And Volunteers Of Refuges (FAVOR), Chair **Dec 1998 – Jan 2012**
Volunteer for non-profit organization supporting the Florida Keys National Wildlife Refuges. Spearheaded Our Animal Family campaign (www.ouranimalfamily.org) to get "cat people", "raccoon people" and "bunny people" collaborating on a positive project to address predator impacts on the endangered Lower Keys Marsh Rabbit. Lobbied in congress for increased support for the National Wildlife Refuges. Designed and implemented opening of FAVOR's bookstore in 2000, now grossing $36,000 annually. Supported international White-crowned pigeon workshop for twelve experts from six countries. As part of graduate school project, created "Keys Kids in Nature," a weeklong local environmental education and field trip program, tied to sunshine state standards for the 4th grade curriculum.

Education

Antioch University, Seattle
Master of Arts: Environment and Community, Graduated December 2005

University of California, Santa Barbara
Bachelors of Science: Aquatic Biology, minor in Zoology, Graduated December 1996

University of Queensland, Australia
1995: Two semester Study Abroad Program, focus on Marine Biology

CAROLYN D. SHELDON

Senior Grants Administrator

Phone: 305.809.3741 / Email: csheldon@cityofkeywest-fl.gov

PROFILE

A meticulous, dependable and personable professional with over 15 years of state and local government experience administering grants. Instrumental in obtaining over $25 million in grant reimbursements.

WORK EXPERIENCE

Mar 2013 – Present

Senior Grants Administrator | City of Key West | Key West, FL

Monitors grant compliance and the financial and budgeting aspects of grant funding, develop and maintain professional relationships within the City as well as with grantors, community partners and other agencies to effectively carry out the administration and management of a wide variety of federal, state and local grants related to Police, Fire, Engineering, Port, Urban Forestry and Utilities. Participates in the grant process beginning with coordination with grant writing consultants to grant award to procurement and ultimately project close out. Prepares and submits all grant disbursement requests. Monitors public benefit lease with the United States Navy and assists with the preparation of annual financial audits.

Feb 2009 – Mar 2013

Grants Administrator | City of Key West | Key West, FL

Administered grants for the Engineering Department working primarily with Florida Department of Transportation Local Agency Program grants. Coordinated with City staff and granting agency to ensure compliance with grant requirements including reporting and disbursement requests.

Mar 2002 – Jan 2006

Wastewater Finance Coordinator | Florida Keys Aqueduct Authority | Key West, FL

Managed general ledger for Authority's start up wastewater utility, including payables, receivables and account reconciliations. Assisted in the monthly preparation of wastewater financial statements. Prepared year end audit schedules. Tracked project expenditures and coordinated payments to contractors for up to four concurrent multimillion-dollar construction contracts. Monitored compliance with terms of grant agreements in accordance with state and federal regulations. Developed non-ad valorem assessment tax rolls for four service areas.

Jul 2000 – Mar 2002

Wastewater Admin Coordinator | Florida Keys Aqueduct Authority | Key West, FL

Provided administrative coordination during utility's start up wastewater phase. Compiled data from Monroe County Property Appraiser and Tax Collector to develop service areas. Calculated system development fees.

EDUCATION

Nova Southeastern University
Master of Business Administration, Mar 1997

Florida State University
Bachelor of Science in Accounting, Apr 1995

Historic Preservationist Enid Torregrosa-Silva Key West. Florida

SUMMARY OF QUALIFICATIONS

Over twenty-nine years of professional experience with both government and private sectors, which have given me the opportunity to work on all aspects of historic preservation, including public policy, compliance with federal, state and local law and regulations, review and compliance of construction plans involving historic buildings, construction field and historic districts management.

EXPERIENCE

CITY OF KEY WEST-FLORIDA. Historic Preservation Planner
September 2008- Present

Assisting the City of Key West as principal staff member for all aspects of review and compliance and implementation of ordinances related to historic preservation. Review of proposed projects to assure compatibility with historic preservation regulations. Revisions and adoption of local regulations pertaining historic preservation. Education of citizens, professionals, and public on historic preservation issues in the city. The Key West Historic District is the largest district in the State of Florida and is one of the most important districts in the Nation that contains frame vernacular structures.

CITY OF FORT MYERS-FLORIDA. Historic Preservation Coordinator
February 2008- September 2008

Assisting the Fort Myers Historic Preservation Commission as staff member on the implementation of the City's Historic preservation Ordinance. Educate citizens, professionals, and contractors on historic preservation regulations, guidelines, and federal standards. Responsible for the preparation of agendas for the Historic Preservation Commission, staff reports, and presentation of findings and recommendations for public hearings.

COMMONWEALTH OF PUERTO RICO. State Historic Preservation Officer
January 2001- July 2004

Appointed by the Governor and confirmed by the Senate as the State Historic Preservation officer for the Commonwealth of Puerto Rico. Responsible of all aspects of public policy related to historic preservation nationwide. Advisor to local, State and Federal Governments on issues related to conservation and historic preservation. Responsible for the restoration of various buildings and structures dated prior to the 1800 listed in the National Register of Historic Places and the UNESCO. Participated in multi-agency meetings, with State and Federal agencies, to develop planning and construction strategies that ensured the preservation of historic buildings and archaeological sites. Responsible for the National Register of Historic Places listings of Puerto Rico. Supervised 42 employees with an annual budget of 2.8M. Capital projects investment of 58M.

CITY OF SAN JUAN- PUERTO RICO. Urban Manager for Rio Piedras Town
September 1997- December 2000

Appointed by the Mayor of San Juan, as urban manager for Downtown Rio Piedras. Downtown Rio Piedras is one of the main urban areas in Puerto Rico comprised of approximately sixteen

square miles, with 15,000 residents, 130,000 daily visitors. Represented the Mayor in all infrastructure and planning meetings, concerning Rio Piedras, at State level. Responsible of all capital projects of the city within the Rio Piedras Downtown area with an investment of 27M. Responsible for the restoration of various historic buildings, including the re-adaptive use of the oldest house. Assisted in the infrastructure improvement construction projects and represented the city's interests during the construction of the new urban train system. Assisted local business owners in improving economic development of the downtown area during infrastructure construction phases. Worked with business owners, schools, and residents to achieve a better balance between residents and commercial interests for a better quality of life. Direct supervision of 11 employees.

THE MASTER'S GUILD- PUERTO RICO. Project Manager

March 1994-September 1997

The Master's Guild was a private owned company that provided building and consulting services to architectural firms as well as local and state governments, with emphasis on historic preservation. Responsible for various interior and exterior restoration projects including the Capitol Building of Puerto Rico. Consultant on historic preservation projects including preparation of Historic Structure Reports, evaluation of building decay, and design of methodologies and construction specifications for architectural and engineering firms.

THE BUILDERS GROUP-PUERTO RICO. Project Consultant

August 1991-1994

Private owned design and built company specialized in historic preservation. Managed and supervised several restoration projects including Casa Aboy-Llompre, a 1917 concrete bungalow house, and Capilla Nuestra Senora de Lourdes, a neo-gothic church built in 1907, both listed in the National Register of Historic Places. Participated in the restoration phase of Casa de la Massacre de Ponce and Parque de Bombas, the latest the most iconic frame building in the country. Drafted and rendered as built and inventories of several historic buildings and sites, including Caja de Muertos Lighthouse, Las Catalinas Old Sugar Mill Factory, and the Old Catholic Cemetery of Ponce.

EDUCATION

BALL STATE UNIVERSITY - College of Architecture and Planning-Muncie, Indiana

Fall 1989 through Summer 1991

Master's in Science in Historic Preservation (MSHP)

Thesis- Restoration Project for Central Aguirre- The first American Company Town in Puerto Rico.

UNIVERSITY OF FLORIDA- College of Architecture- Gainesville, Florida

Summer 1988

PIC-1- Preservation Institute: Caribbean- first summer

UNIVERSITY OF PUERTO RICO- School of Architecture- San Juan, Puerto Rico

Fall 1983 through summer 1988

Bachelor's Degree in Environmental Design

KATIE PEARL HALLORAN

1008 South Street, Key West, FL 33040 • (305) 809-3746
katiepearlhalloran@gmail.com

PROFESSIONAL EXPERIENCE

City of Key West, Planning Department Key West, Florida
Director February 28, 2020- Current

- Supervision of all City of Key West current and long range planning reviews and projects for compliance with Land Development Regulations and consistency with the City's Comprehensive Plan. Active member of Key West's interdepartmental Adaptation Team to plan City's coordinated approach for mitigating climate change impacts. Manage nine full-time staff members, including Urban Forestry and Historic Preservation divisions, with direct oversight for the City's Planning Board and Development Review Committee.

City of Austin Design Commission, District 7. Austin, Texas
Design Commissioner 1/26/17- 2/14/2020

- Appointed to review applications to the City's Downtown Density Bonus Program to determine substantial compliance with Austin's Urban Design Guidelines. Experience reviewing City facility and park designs and collaborating with interdisciplinary design professionals to provide policy recommendations on urban design, including mobility and sustainable development.

Office of Council Member Leslie Pool, District 7, Austin City Council, Austin, Texas
Land Use and Development Policy Advisor 1/6/15- 3/21/16

- Effectively managed multiple tasks and deadlines to research and prepare technical advice on zoning and land development issues on City Council agenda. Strong public speaking skills, and results-driven coordination with citizens to resolve land use/zoning concerns. Strong professional writing skills: delivered a research report on broadening finance options for Austin's public park system.

Miami-Dade County, Department of Regulatory and Economic Resources,
Principal Planner, Metropolitan Planning Section Miami, Florida
9/8/08- 9/5/12

- Effective regional coordination to assess climate change policy options, particularly adaptation to sea level rise: policy development as a member of the South Florida Regional Climate Change Compact's Land and Natural Systems Working Group. Experience managing multi-departmental team to review and draft new Comprehensive Development Master Plan policies to mitigate climate change impacts throughout the County.
- Designated Point of Contact for U.S. Environmental Protection Agency to research Urban Development Boundary and growth management study for Miami-Dade County.
- Experience with the County's Post Disaster Redevelopment Plan: developed policy as co-chair of the County's Land Use Technical Committee and a Steering Committee member representing my department.
- Managed the County's review of highly controversial nuclear reactors and high voltage

transmission line corridors. Multi-year project included extensive Inter-agency and inter-departmental coordination to analyze urban and environmental impacts, and prepare County's responses to state and federal agencies.
- Research and report preparation, including GIS analysis and map design, to process Comprehensive Land Use Plan amendments, particularly related to growth boundary and entitlement requests.
- Familiarity with wetland and well field protection, agricultural land preservation strategy, rock mining and saltwater intrusion issues, and water and waste water management standards.

Neighborhood Planning and Zoning Department, Austin, Texas
Neighborhood Planner 1/3/05 - 12/8/07
- Planning expertise to assist in the development of future land use plan maps, zoning, and policy recommendations for watershed management. Designed public outreach strategies, including graphic materials, and regularly facilitated public meetings to gather data. Skilled research and analysis to effectively adopt land use code amendments with community and stakeholder input. Served as Chair of interdepartmental committee to integrate Austin's neighborhood plan recommendations into departmental business plans for implementation.

EDUCATION

University of Texas at Austin
Master of Science in Community and Regional Planning

University of Florida, Gainesville
Bachelor of Arts in Political Science, Certificate in Latin American Studies

PLANNING JOURNALISM

- "Welcome to Cuba", *Planning,* American Planning Association magazine, August/September 2016 issue.
- "A General Plan, But No Zoning", *Planning,* American Planning Association magazine, November 2014.
- "What's Next for Rosewood?", *The Austin Chronicle,* August 22, 2014 issue.
- "Rethinking Disaster Housing", *Planning,* American Planning Association magazine, July 2014 issue.

ADDITIONAL PROFESSIONAL QUALIFICATIONS

Fluent Spanish speaker * Facilitator training * ArcGIS design skills

Kelly Crowe, P.E.

Education

Bachelor of Science, Civil Engineering. Cal Poly San Luis Obispo (2003)

Professional Credentials

Licensed Professional Engineer, California, Florida
Qualified SWPPP Developer (QSD), California
LEED Accredited Professional
Incident Command System (ICS) 100, 200, 300, 400, 700 and 800 certificates

Professional Experience

City Engineer *6/2018-Current*
City of Key West Key West, FL

- Responsible for oversight of engineering projects
- Developed the City's Pavement Management Plan and currently delivering approximately $4M in paving and sidewalk projects in FY 2019/20
- Local Agency Responsible Charge for the Local Assistance Program (LAP) through the Florida Department of Transportation (FDOT)
- Manage consultant contracts for design projects
- Manage construction contracts and perform field review of projects
- Manage city owned traffic signals
- Work with Department Head to develop annual Capital Improvement Program budget
- Work with other city staff on the development of a sea level rise vulnerability assessment and adaptation plan
- Review and approve development plans

Senior Civil Engineer *3/2015-5/2018*
Town of Corte Madera Corte Madera, CA

- Currently managing 15 Capital Improvement Projects with an estimated cost of $11M
- A record of delivering projects within the approved budgets
- Procure design consultants, manage contracts, review plans, specifications and cost estimates for constructability and completeness
- Advertise projects for public bid, award and manage construction contracts, review contractors work, review billings, process invoices Review and approve development plans and issue associated permits
- Direct emergency repairs to infrastructure and provide engineering guidance in the field as needed
- Manage the FEMA Community Rating System (CRS) program. Corte Madera was recently verified as a Class 7 community
- Staff liaison to the Flood Control Board. Develop flood control infrastructure budgets for approval by the Town Council
- Assist the Director of Public Works in developing the Capital Improvement Project budget for the town as well as Sanitary District No. 2 of Marin County
- Town representative to Marin County for the development of the current Multi-Jurisdiction Local Hazard Mitigation Plan

- Contributed to the development of the Marin Bay Waterfront Adaptation Vulnerability Evaluation (BayWAVE) as it related to sea level rise impacts on infrastructure assets within Corte Madera
- Develop the town's Pavement Management Plan and long term roadway resurfacing goals.
- Prepare staff reports and present to the Town Council

Project Engineer *4/2014-3/2015*
Carlson, Barbee and Gibson San Ramon, CA

- Lead engineer on large scale single and multi-family development projects
- Provided solutions for complex drainage and Low Impact Development (LID) issues
- Managed project teams and coordinated the work of consultants to meet project timelines
- Successfully coordinated with municipal staff and clients to overcome permitting challenges

Project Engineer *11/2011-3/2014*
Summit Engineering Inc. Santa Rosa, CA

- Lead engineer on development projects including a public school, wineries, and wastewater storage projects
- Coordinated complex utility layouts for wineries Prepared grading and drainage plans and obtained associated permits
- Prepared hydrologic and hydraulic calculations for local jurisdictional approval
- Mentored junior staff members in grading and drainage design

Project Engineer *9/2003-11/2011*
Rick Engineering Company San Diego, CA

- Lead engineer on large scale single, multi-family and senior assisted living facility development projects
- Designed large scale mass grading projects and performed earthwork calculations
- Prepared drainage studies and hydraulic calculations in association with the design of storm drainage systems including: pipes, box culverts and detention basins
- Prepared final subdivision maps and easement plats for recordation
- Coordinated the design work on projects with several design disciplines: traffic, water systems and geotechnical engineers, landscape architects, architects and urban planners
- Worked closely with our survey department to improve plan set constructability

PROJECT DESCRIPTION

PURPOSE AND BENEFIT

The City of Key West, in coordination with its utilities and critical facilities departments, is seeking funding for a Comprehensive Adaptation and Resilience Implementation Plan. The Plan will provide benefit to the entirety of our residents, our workforce from unincorporated Monroe County, and our domestic and international tourist base, which makes up half of our population on an average day. The Plan will also provide long term benefits to our built environment, our resource consumption, our natural area buffers, our economic diversity, our historic and cultural heritage, as well as our social cohesion and overall health. We also believe that the area specific Chapters of the Plan will be of great interest to other low lying coastal communities that are just getting started. The need for this Plan has been established by the City's Comprehensive Plan and the final product will provide at a minimum, a 10 year Implementation Plan for Adaptation and Resilience.

Even as a small city, Key West has a proven track record of dedicating its resources to adaptation. Sitting at an average of 4.7' above sea level, the City created its first Stormwater Master Plan in 1989, and was recognized by FEMA for installing the first tidal valves in South Florida in 1997. However, Key West recognizes that we need to analyze threats and mitigate in new ways, beyond what our Stormwater Master Plan can accomplish.

The first steps toward an Adaptation Plan are a Vulnerability Analysis of Critical Facilities and Roads. To this end, the City has collaborated on an additional MIT Planning grant with Monroe County as lead, to bring onboard the other four municipalities in the Florida Keys, including Islamorada, Layton, Key Colony Beach, and Marathon to achieve this as a region. Key West considers this it's duty to ensure that smaller local governments that lack the staff, the funds and/or the bandwidth to procure this level of planning. The Florida Keys Regional Resilience Plan and Neighborhood Livability Outreach and Planning grant will gather state of the art mobile LiDAR and take those first, necessary steps of analyzing the vulnerability of our critical facilities and roads across the Keys. This study will become the 1st Chapter in the Key West Comprehensive Adaptation and Resilience Implementation Plan. This grant application seeks to write Chapters 2-8, which have broad and specific aspirations for local scenarios, and which will partially rely on data gathered from the Regional effort.

The Key West Comprehensive Adaptation and Resilience Implementation Plan works off the following (*slightly modified**) subject areas from FEMA's National Disaster Recovery Framework and merges them with the State of Florida Adaptation Planning Guidebook to create the following Plan Chapters:

- Historical and Cultural Preservation (**added*)
- Land Use and Reconstruction Standards
- Power and Water (**Infrastructure and Transportation are in the Regional Plan*)
- Housing
- Economic Development

- Environmental Restoration
- Health and Equity

Each one of these areas are complicated Chapters and require separate efforts in data gathering, adaptation analysis, strategy choices, policy integration and implementation budgeting. As such, the City plans to accomplish each separately, on a chronological timeline, devoting to each Chapter an appropriate consultant team and the time necessary for due diligence and community participation. Overall project goals are:

- Integrate plans, departments, leaders and neighbors into long-term adaptation and resilience planning and implementation.
- Identify cost effective, no regrets options as well as difficult, but well-justified options and strategies for our community and leaders to explore, rank and adopt.
- Incorporate less explored areas of Adaptation and Resilience, including economic development, historical preservation and equity.
- Collaborate regionally with critical facilities stakeholders, to advance together by analyzing Strengths, Weaknesses, Opportunities and Threats (SWOT) to achieve understanding and implementation support.
- Creation of a living, implementable, chronologically-based document that we will continue to revisit and revise as a community.

RISK

- The risks mitigated through the completion of this plan are plentiful:
- **Building Flooding**: Hurricane surges as well as long term sea level rise easily flood our grade level homes and businesses. Prioritizing areas to fortify, elevate, or retreat, as well as identifying funding mechanisms for these actions will greatly increase our resiliency by reducing the damage, costs, grief and health risks for building owners and inhabitants.
- **Nonpoint Pollution**: Inundation of rain in short periods of time overwhelms the existing stormwater system and results in city waste being washed into the wetlands surrounding the city, causing pollution and harm to waters of the Florida Keys National Marine Sanctuary. Identifying green infrastructure and rain harvesting projects that allow reuse or retention will greatly reduce nonpoint pollution.
- **Sea Level Rise**: On sunny days in fall, King Tides regularly wreak havoc on our transportation system. In the coming decades, these omens will literally be at the doorstep of some of our critical facilities. Determining the best actions to take will help us afford the large changes needed for infrastructure protection.
- **Transportation Break Down**: Even when the tide is not apparent on top of the road, the damage created by the rise and fall of the tide within the roadbed strips the fine sand support and leads to potholes. Large storms cause erosion of coastlines that expose, bury or undermine main roads. Recommendations on how to employ different materials, methodologies, or mangroves will help preserve evacuation routes and reduce premature repairs.

- **Loss of Shelter**: Winds also destroy homes and businesses, allowing rain in to further damage the structure. Policies that require stronger roofs, windows and doors as well as restrict easily damaged materials like drywall in on grade houses will make all homes more livable and healthier post hurricane.
- **Breakdown of Communications**: Even in this day and age, our Emergency Management teams were cut off in communication with others across the keys during Hurricane Irma. Research into mesh networks and other smart city technologies will increase communication abilities for everyone in all weather.
- **Energy and Water Failure**: While all Floridians are told to have water and food in the event of a hurricane, most are woefully underprepared. While Key West did not experience as much building damage as the lower and middle Keys, our water system was gutted by fallen trees to the extent that only a third of our Utilities' reserve water reached its destination post storm. Increasing options for energy and water resilience helps flush toilets, and preserve medicines.

WORK PLAN AND TEAM

For the overall Plan, as well as for each Chapter, Plan development will begin with steering committee meetings with the City's Adaptation Planning Team and our critical facility stakeholders within the Key West region: Keys Energy Services, Florida Keys Aqueduct Authority, Lower Keys Medical Center, Monroe County School District, US Naval Air Base - Key West, UF-IFAS Extension Service and Monroe County. The Steering Committee will reach consensus on the scope of each Chapter and act as the ranking body for responses for the resultant RFPs.

The City's Adaptation Planning Team will seek input from the public via an online survey and provide an email address through which the public may communicate concerns. In addition, a total of three public meetings will provide community members the opportunity to express hazard concerns and suggest mitigation strategies. The meetings will be held at the following intervals: prior to the first committee meeting; during the risk assessment phase; and after the risk assessment is complete.

- The City's Adaptation Planning Team will also be responsible for writing the plan, grant administration, and shepherding the entire process. The Team includes representatives from Planning, Engineering, Transportation, Community Services, Community Safety, Utilities (stormwater and sewer). The Teams core consists of the following 4 members:
- Alison Higgins is the City Sustainability Coordinator, Adaptation Team Chair and Lead for this Plan. She has worked from within the Planning and Engineering Departments for the City for the last 8 years and holds an M.A. in Environment and Community from Antioch University. Previous experience includes 7 years serving as Executive Director of Green Living Energy Education (GLEE), a Keys-focused nonprofit, and 14 years as a Land Conservation Program Manager for The Nature Conservancy in the Florida Keys.
- Kelly Crowe has been the City Engineer for the City of Key West for the past two years. Kelly has 23 years of civil engineering experience and has been in the public sector for 5 years. Prior to working for municipal government, he worked as a civil engineer in

private land development firms with a focus on grading and drainage design. Prior to working for the City of Key West, he worked for the Town of Corte Madera in Northern California. During that time, one of his duties was to act as the town's Floodplain Administrator and manage the Community Rating System (CRS) program where he was able to maintain the town's Class 7 rating. In addition, he served as a technical advisor for the Marin Bay Waterfront Vulnerability Evaluation (BayWAVE) which identified community assets that were vulnerable to sea level rise. Kelly graduated from California Polytechnic University, San Luis Obispo with a bachelor's degree in Civil Engineering. He is a licensed professional engineer in California and Florida.

- Katie P. Halloran is the City Planner and was born and raised in Key West. She worked on water and climate change policy as a planner in Miami-Dade County and participates in the Southeast Florida Regional Climate Change Compact. She holds a MS in Community and Regional Planning from the University of Texas at Austin where she focused on water issues and participatory development; she is bilingual in Spanish.
- John Paul Castro is the City Utilities Director and manages Stormwater, Sewer and Solid Waste. He has nearly a decade of experience at the City from operations and construction at the city marinas to managing wastewater, stormwater, and solid waste departments. Previous to working for the city John Paul worked in private sector construction for 6 years. John Paul is a graduate of the University of Tampa.

Our first Chapter will be co-led by:

- Enid Torregrosa Silva has served as the City Historic Preservation Planner for 12 years. She holds a Bachelor Degree in Environmental Design from the School of Architecture at the University of Puerto Rico and a Master's degree in Science in Historic Preservation from the School of Architecture and Planning at Ball State University. Enid has over 29 years of experience in the historic preservation field including the private sector, and State and local governments, including as Puerto Rico's State Historic Preservation Officer from 2001- 2004.

The entire process is overseen by:

- Carolyn Sheldon is the Senior Grants Administrator for the City of Key West. Her 11 years with the City have honed her excellent skills in grant compliance, financial reporting and other grant processes and practices, handling over $25 Million in federal, state and local grants. Carolyn is a graduate of Nova Southeastern University with a Master's degree in Business Administration.

FUNDING METHODOLOGY

The requested funding amount is based on the review of 30 of FDEP's Coastal Resilience Grant awardees, six months of Adaptation Planning Team and grant management salaries, and estimated administration costs. We did decrease the expense of Public Workshops as virtual formats have led to exponential involvement in regular city meetings since March. This cost reduction also allowed us to hold more public meetings as well as record the presentations so that any schedule could participate. While at first, we believed that some Chapters might be more or less costly than another, discussion over the possibilities of each one led us to treat them all equally in cost and importance.

OUTCOMES

The anticipated outcome is an overarching, integrated Comprehensive Adaptation and Resilience Implementation Plan for the City of Key West that identifies current and future hazards and vulnerabilities, as well as community assets; establishes mitigation goals as prioritized by the community and stakeholders; and presents an implementation strategy with at least a 10 year budget.

COMPREHENSIVE PLAN INTEGRATION

Each Chapter will include recommendations for Policy changes, which will be integrated with the Comprehensive Plan in the year that Chapter is completed. The City of Key West currently has a Comprehensive Plan that calls for Adaptation and Resiliency planning. See attached Executive Summary and links to specific sections regarding adaptation and resiliency planning.

Each Chapter of the Key West Comprehensive Adaptation and Resilience Implementation Plan will also be integrated with our Capital Improvements Plan, Strategic Plan (being updated now), Climate Action Plan, Local Mitigation Strategy (being updated now) and any previous Chapters of the Key West Comprehensive Adaptation and Resilience Implementation Plan.



I. INTRODUCTION
CITY OF KEY WEST COMPREHENSIVE PLAN

PURPOSE

The City of Key West Comprehensive Plan (Plan) has been developed in response to the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act (Chapter 163, Part II, Florida Statutes). This Plan and its updates are consistent with the State, Regional and County plans; and will serve as the basis for all land development decisions within the City of Key West. In addition to fulfilling legislative requirements, the City's Plan: protects and maintain its natural, historic and cultural resources; preserves its community character and quality of life; ensures public safety, and; directs development and redevelopment in an appropriate manner.

VISION

The City's vision for honoring its past and advancing its present and future provides the foundation of the Comprehensive Plan. The following vision and mission were adopted by the City Commission in the 2011 Key West Strategic Plan:

VISION - Key West is a beautiful natural environment with a vibrant culture, an interesting historical architecture, active neighborhoods, and community-wide interests that are supported by involved residents from all walks of life and a responsible and responsive government.

MISSION – Our mission is to protect our natural and built environment and honor our local heritage and cultural identity with citizens actively engaged in the life of our neighborhoods and community. Together we shall promote ongoing redevelopment of a sustainable economy, quality of life, and modern city infrastructure. Our government shall act on behalf of the long-term, generational interests of residents and visitors of Key West.

CORE VALUE – All people are created equal members of one human family.

COMMUNITY PROFILE

The City of Key West occupies a 7.4 square mile area encompassing the island of Key West, the portion of Stock Island north of U.S. 1, Sigsbee Park (north, originally known as Dredgers Key), Fleming Key (north), and Sunset Key (west). Both Fleming Key and Sigsbee Park are part of Naval Air Station Key West. The City is the southernmost City in the continental US, and is the County seat of Monroe County. Land access is provided by US 1, air access is provided by the Key West International Airport, and sea access by the Port of Key West. The island's natural perimeter restricts the expansion of its boundaries. Unincorporated Monroe County to the north is the only adjacent local government. The City has not expanded in size through annexations since the Plan was adopted.

The City's 2010 permanent population is 24,649, and is projected to decrease slightly during the five-, ten-, 15- and 20-year planning periods due to growth limitations and the lack of significant amounts of vacant and developable land. In addition to the permanent population, the City is a world renowned tourist destination and a popular location for second homes. The total number of people on Key West on an average day, including permanent residents, seasonal residents, the maritime population, overnight tourists, day-trippers, cruise ship visitors, commuters, and shoppers, is estimated to be 56,335. This number would likely spike

significantly during special events such as Fantasy Fest or New Year's Eve.

COMPREHENSIVE PLAN BACKGROUND

The City of Key West prepared its current Comprehensive Plan in 1990, and it was found sufficient by the State in 1994. In 1995 the Plan was amended to extend the extraterritorial powers 600 feet into the tidal waters around the City, and to make several small scale amendments to land use districts. In 1997 Land Development Regulations based on the Comprehensive Plan were adopted.

In 2005 the City adopted its Evaluation and Appraisal Report (EAR) in order to measure progress in implementing the Comprehensive Plan, address major community issues, and evaluate the impacts of changes in growth management requirements. The EAR identified eight major issues, including the quality of marine ecosystems, affordable housing, hurricane safety, coordinated transportation, the Key West Port, capital improvements and concurrency management, historic preservation, and a secure local economy. Due to the State mandated schedule the City was required to update the EAR the following year, and a revised EAR was adopted in 2007. There was very little difference between the two documents. The EAR made a series of recommendations to update the plan to reflect current conditions and address the major issues. These recommendations were the basis of the 2012 Evaluation and Appraisal Report Based Amendments to the Comprehensive Plan. In addition to the EAR recommendations, the City has also updated the supportive data and analysis on which the plan is based. The updated data and analysis supplemented the EAR recommendations as the basis for the amendments.

The City of Key West Comprehensive Plan is comprised of goals, objectives and policies in nine major elements: Future Land Use; Transportation; Housing; Public Facilities; Coastal Management; Conservation; Recreation and Open Space; Intergovernmental Coordination, and; Capital Improvements. In addition to the goals, objectives and policies, the Comprehensive Plan contains the adopted map series (including the Future Land Use Plan Map) and the five year Capital Improvements Schedule.

WATER SUPPLY PLAN

The Florida Legislature enacted bills in the 2002, 2004, and 2005 sessions to address the state's water supply needs to improve coordination between the local land use planning and regional water supply planning. Residents of the City of Key West obtain their water directly from the Florida Keys Aqueduct Authority (FKAA), which is responsible for ensuring that enough capacity is available for existing and future customers.

The purpose of the City of Key West Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within its jurisdiction. The City of Key West Work Plan will address a 13-year planning period and identify projects from the FKAA Work Plan consistent with this planning period.

OTHER PLANNING EFFORTS

In addition to the EAR the City of Key West has been engaged in a number of major planning efforts, including the adoption of the Strategic Plan and the Climate Action Plan. These and other City plans, including the December 2011 Carrying Capacity Traffic Study, were also reviewed and are reflected in the updated Plan. Concurrently with the preparation of the updated plan, the City participated in the Monroe County Hurricane Evacuation Clearance Time Working Group. As a result of these meetings the City signed a Memorandum of Understanding that will provide for an allocation of 91 building permits a year between 2013 and 2023.

PUBLIC PARTICIPATION AND ADOPTION

The EAR and the 2012 amendments both were supported by extensive public participation processes. Over 15 summits, forums, public workshops, and hearings were conducted between 2001 and 2007 as part of the EAR. On March 29, 2012 the City and its Consultants presented the updated data and analysis report to the Key West Planning Board in a public workshop, and received invaluable input. On July 23, 2012, the City conducted a Public Forum on the draft amendments in order to receive comments and input. Through the 2012 amendment process the City continued to meet with interest groups and staff to incorporate additional comments and suggestions into the proposed plan amendments. The proposed amendments were approved on first reading at a public hearing on October 2, 2012 and submitted to the State Department of Economic Opportunity and other agencies for review. In the December 14, 2012 Objections, Recommendations and Comments Letter, the State identified one objection and eight technical comments. The City has addressed the objection and comments and the amendments were adopted on March 5, 2013. The Plan became effective on May 2, 2013 after State review and approval.

CHAPTER 1: FUTURE LAND USE ELEMENT

- OBJECTIVE 1-1.12: - CONSIDER APPLICATION OF INNOVATIVE LAND AND WATER RESOURCE MANAGEMENT, CLIMATE ADAPTATION, AND ENERGY CONSERVATION CONCEPTS.
    - Policy 1-1.1.14: - Prepare for Future Sea Level Rise.
    - Policy 1-1.12.1: - Incorporate Innovative Techniques in the Land Development Regulations.
    - Policy 1-1.12.5: - Increased Height
    - Policy 1-1.4.6: - Increase Resilience of General Landscaping.

CHAPTER 1A: HISTORIC PRESERVATION ELEMENT

- Policy 1A-1.3.1: - Rehabilitation and Adaptive Re-Use.

CHAPTER 2: TRANSPORTATION ELEMENT

- Policy 2-1.3.4: - Climate Change Preparedness

CHAPTER 5: COASTAL MANAGEMENT ELEMENT:

- Policy 5-1.5.3: Adaptation Action Areas
- OBJECTIVE 5-1.13: - PLANNING FOR RESILIENCY AND ADAPTATION IN COASTAL AREAS.

CHAPTER 6: CONSERVATION ELEMENT

- Policy 6-1.12.1: - Review the Impact of Changing Conditions on Conservation Policy.
- OBJECTIVE 6-1.15: - PLANNING FOR RESILIENCY AND ADAPTATION IN NATURAL AREAS.

Ch***APTER 9: CAPITAL IMPROVEMENTS ELEMENT***

- MONITORING AND EVALUATING THE CAPITAL IMPROVEMENTS ELEMENT

COMMUNITY VALUE

This project has enormous Community Value. Overall, we become prepared for increases in extreme weather and large landscape shifts. Specifics on Community Value, Lifelines and Resilience Enhancements are included for each Chapter. Scope and Case studies are defined as "could cover/include" because the steering committee, stakeholders and community will prioritize.

A) Land Use and Reconstruction Standards

- In normal times, we will have agreed upon desired future conditions and changes needed to get there.
- In natural disasters, the Community will be prepared for adopted reconstruction standards and policies.
- Chapter Scope could cover: Future Land Use Maps / Redevelopment Patterns; Peril of Flood; Post Disaster Building / Quality of Reconstruction; Adaptation Action Areas / Recovery Zones; Heat islands, and Energy and Water Conservation measures.
- Chapter Case Studies could include: Adaptation Action Areas, Special Area Plans, Seawalls, Residential building materials, Voluntary Buyouts
- Stakeholders include: Realtors, Insurers, Banks, Developers, Contractors Association, US Green Building Council, Florida Green Building Coalition, Community Rating System Experts, Homeowners Associations, and KeysStrong.
- This Chapter covers 6 FEMA Community Lifelines, all 3 Florida Mitigation Needs, and all 10 of the locally ranked actions of the City Adaptation Team.

B) Power, Water, and Shelter

- In normal times, utility upgrades lead to efficiencies and potential reductions of monthly bills. Community shelters double as community resource centers.
- In natural disasters, a higher resiliency of Water and Power and Shelters lead to shorter down time and quicker bounce back for the whole community.
- Scope could cover: Water (Harvesting, Treatment of Wastewater); Power (alternatives, efficiencies, burying overhead lines); Shelter (Heat and Storm refuges, Power and Water resources)
- Case Studies could include: Potable Treatment of our Wastewater, 100% renewable energy.
- Stakeholders: Keys Energy Services, Florida Keys Aqueduct Authority, Sea Air Land Technologies, College of the Florida Keys - Alternative Energy Department, KeysStrong, Largest employers,
- This Chapter covers 6 Lifelines, 2 Mitigation Needs, and 6 Adaptation Team priorities.

C) Housing Recovery

- In normal times, affordable housing has been a major issue for decades. The oldest, least-resilient homes are the most affordable, often housing low income renters at over capacity levels. These homes are the least efficient and usually least healthy, harboring lead and mold issues. Improving conditions when permits are pulled will slowly help

these situations. Mitigation funding mechanisms can help lower income families elevate before hurricanes.

- In natural disasters, new regulations ensure homes are rebuilt with more resilient materials.
- Scope could cover:Affordable Housing, Density Changes, Severe Repetitive Loss, First Floor Elevations, Temporary Shelter and Transitioning, Rebuilding Materials
- Case Studies could include: Revolving Loan Funding, Residential Building Materials, Redevelopment, Private-Public Partnerships, Retreat/Voluntary Buyouts
- Stakeholders: Realtors, Insurers, Bankers, Developers, Contractors Association, US Green Building Council, Florida Green Building Coalition, Homeowners Associations, Community Foundation Florida Keys (CFFK), KeysStrong, Churches.
- This Chapter covers 4 Lifelines, 1 Mitigation Need, and all 10 Adaptation Team priorities.

D) Economic Development

- In normal times, partnerships forged and understanding gained will help all aspects of the economy flow smoother.
- In natural disasters, not having 50% of your workforce be tourist dependent decreases unemployment and increases stable residents.
- Scope could cover: Private Sector as Emergency Support Function, Diversification, Telecommuting, Property ownership, Workforce Retention
- Case Studies could include:Private Sector ESFs, Robust "Smart City" Internet, Business credentialing for early return, and Business resiliency training/certification.
- Stakeholders: Mom & Pop Business Group, Developers, Monroe County Long Range Recovery Group, CFFK, Safer, Cleaner Ships NGO, Monroe Council of the Arts, Large Employers.
- This Chapter covers 5 Lifelines, all 3 Mitigation Needs, and all 10 City Adaptation Team priorities.

E) Environmental Restoration

- In normal times, restored coral, seagrass, mangroves and dunes support the wildlife our visitors desire. Wetlands and green infrastructure increase nearshore water quality and visibility in our famous blue waters.
- In natural disasters, coral, seagrass, mangroves and dunes protect our built environment by dissipating wave energy. Wetlands and green infrastructure absorb early and residual water post storm.
- Scope could cover: Wetlands storage / Green Infrastructure, Restoration of Coral, Seagrass, Mangrove and Dunes, and Endocrine Disruptors.
- Case Studies could include: Pervious Fees, Living Shorelines, Restoration Zones, Retreat/Voluntary Buyouts and Tree Canopy Restoration.
- Stakeholders: Florida Fish and Wildlife Conservation Commission, The Nature Conservancy, Army Corps, USFWS, South Florida Water Management District, Real Estate, Bankers, Insurers, Developers, US Naval Academy-Coastal Engineering, Reef Relief.
- This Chapter covers all 7 Lifelines, all 3 Mitigation Needs, and all 10 Adaptation Team priorities.

F) Historic and Cultural Preservation

- In normal times, our historic district is part of what makes people fall in love with Key West. Our cultural identity provides our sense of place and is a large part of the quality of life we enjoy. Key West hosts the largest Historic District in the State of Florida and is one of the Nation's largest Historic Districts with frame vernacular architecture.
- In natural disasters, we cannot replace history. A building may be replicated, but the story that links the past with our present is lost. Cemeteries can wash away making historic interments and archaeological material vulnerable.
- Scope could cover: Historical Preservation Element updates, Guidance on Hardening, Elevation and Materials, Archeological Impacts, Working Waterfront preservation.
- Case Studies could include: Garrison Bight / Charter Boat Row, Truman Waterfront Maritime Museum, Cable Huts, the African Cemetery at Higgs Beach, Communities below BFE and Preservation Grants/Loans.
- Stakeholders: Historical Architectural Review Commission, Monroe County Historic Preservation Commission, Key West Art and Historical Society, Historic Florida Keys Foundation, Old Island Restoration Foundation, Maritime Historical Society of the Florida Keys, Monroe Council of the Arts, Key West Cultural Preservation Society, Commercial Fisherman's Association, Bahama Village Elders.
- This Chapter covers 2 Lifelines, 2 Mitigation Needs, and 8 Adaptation Team priorities.

G) Health and Equity

- In normal times, good health is always important when half the community (49.9%) is an ALICE household: "Asset-Limited, Income-Restrained, Employed".
- In natural disasters, hazardous situations abound, and healthcare is strained. Decentralized access and pre-hazard education decrease dangerous situations.
- Scope could cover: Environmental Exposures (lead, mold, disrepair), Health and Human Services (Telehealth, behavioral, childcare), Social (Cohesion, communications, housing, green space, noise), Healthy Eating (access, gardens, clean water), and Physical activity (multimodality, safety).
- Case Studies could include: Revolving Loan Fund, Kots Shelter Intake, Douglass Band Room Telehealth, Home inspections and repairs (WAP), Community Gardens, Tree Canopy Restoration, Renewable Energy (meds, fresh food)
- Stakeholders: Department of Health, Rural Health Clinic, United Way, Monroe County Long Term Recovery Team, CFFK, Take Stock in Children, Florida Keys Outreach Coalition, Wesley House Family Services, American Legion, Churches, Womens March.
- This Chapter covers all 7 Lifelines, 0 Mitigation Needs, and all 10 Adaptation Team priorities.

The City will start with the Historic and Cultural Chapter for a number of reasons. Primarily, some of the Chapters will be better informed by the data gained from Monroe County's "Florida Keys Regional Resilience Plan", which will not be available until February of 2022. Our Historic and Cultural Chapter doesn't need half inch resolution for well informed choices. Our last historic survey was in 2011 and needs updating. Lastly, our Historic Preservation department is

at “historic” staffing levels, with a Historic Architectural Review Commission (HARC) Inspector, a HARC Assistant Planner, and last but not least, our Historic Preservation Planner, who is set to retire in a few years.

The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

PUBLIC NOTICE

Public Notice for this plan was listed on the City of Key West website (https://www.cityofkeywest-fl.gov/topic/index.php?topicid=251&structureid=10) for a 14 day period from Friday, July 17 through Friday, July 31 and no public comment was received. Please note, the plan titles referred to on the website is “Key West Adaptation and Resiliency Plan” but was later modified to “Key West Comprehensive Adaptation and Resilience Implementation Plan”.

Moving forward, Public Noticing for all Chapters and Final Plan will include coverage on radio, newspapers, social media, websites, direct invitations, and outreach at partner events.

COMMUNITY INVOLVEMENT

Community Involvement will be mostly managed through webinars, as a result of Covid-19. We are excited for this, as the City has experienced far more participation than usual now that our Commission meets virtually, as the community can attend and communicate from anywhere. Webinars also allow us to record sessions for on demand viewing, and polling options can be easily attached to electronic media.

Through online polls and surveys, focus groups, surveys, question hotlines, story maps and more, the City intends to widely integrate technology to help us converse with our community. We recognize that there might still be access issues for low income participants, and plan to counteract that with extensive outreach to our partners that support them.

All drafts, surveys, announcements, Chapters and Final plan will be posted to the City Website: https://www.cityofkeywest-fl.gov/department/division.php?structureid=71

CAPACITY PLAN

STRATEGIC PLAN OVERVIEW

The overarching goal of the Key West Comprehensive Adaptation and Resilience Implementation Plan is to involve all of our departments, stakeholders and citizens in a chronological, Chapter by Chapter study of what options we have as a community to make ourselves resilient and make informed decisions on which actions to take over the minimum of the next 10 years.

SPECIFIC GOALS

- Integrate plans, departments, leaders and neighbors into long-term adaptation and resilience planning and implementation.
- Identify cost effective, no regrets options as well as difficult, but well-justified options for our community and leaders to explore, rank and adopt.
- Incorporate less explored areas of Adaptation and Resilience, including economic development, historical preservation and equity.
- Collaborate regionally with critical facilities stakeholders, to advance together in understanding and implementation planning.

STAKEHOLDERS

Stakeholders across the whole process are on our Regional Steering Committee:

1. Monroe County (Planning & Regional Commissioner)
2. Key West Chamber of Commerce / Key West Business Guild
3. Florida Keys National Marine Sanctuary
4. NOAA - National Weather Service
5. College of the Florida Keys
6. Monroe County School District
7. Naval Air Station - Key West
8. Last Stand NGO
9. Fair Insurance Rates in Monroe NGO
10. Rotary Club(s) NGO

An additional 46 Stakeholders that are inherent to individual chapters are listed under the Community Value section. Major communications will also be shared with South Florida Regional Planning Council, FDOT and DEO and South Florida Water Management District.

The Steering Committee, Chapter Stakeholders and Public Workshop attendees will be involved with conversations centered on: background information, critical risks, steps that can be taken, how proposed strategies will impact the community, which strategies the community prefers, and steps residents can take to assist. This educational conversational path will add great value to the community critical thinking needed for case study selection and prioritization of focus areas.

WORK PLAN

In General: Repeat 7 times (per Chapter), then produce as Final Plan:

Task	Description	Deliverable
1	**Vendor Procurement:** • Chapter Scope determined by Steering Committee • RFP released, Bids received and Consultant team chosen	Request for Proposals Final Contract with Vendor

2	**Exposure and Parameters:**
	• Kick off Meeting: Consultant with City Adaptation Team and Steering Committee
	• Stakeholder Meeting Focus Group
	• Community Input Round 1 (2mo)
	  ○ Exposure Analysis / Parameter setting:
	  ▪ Review United Projections from Compact.
	  ▪ Discuss local effects over next 100 years
	  ▪ Use basic visualizers that the public can access
	  ▪ Collect comments and conduct polls
	  ○ Sensitivity Inquiries:
	  ▪ Identify community needs
	  ▪ Collect community ideas
	  ▪ Collect comments and conduct polls
		Video and documents presented.
		
		List of attendees
		
		Notes from meeting/public comment period

3	**Data Gathering:** • Incorporate workshop inputs • Find gap data • Interviews / Focus Groups • Identify and quantify sensitivities	List of information requested and produced

4	**Sensitivities and Focus Areas:**
	• Stakeholder Meetings
	• Community Input Round
	  ○ Sensitivity Analysis: Present findings
	  ○ Focus Areas Inquiries:
	  ▪ Identify Adaptation Strategies (Protection, Accommodation, Retreat, Avoidance)
		Video and documents presented.
		
		List of attendees
		
		Notes from meeting/public comment period

	▪ Use Strengths, Weaknesses, Opportunities, Threats (SWOT) ▪ Collect comments and conduct polls.	
5	**Adaptation Strategies:** • Adaptation Strawman o Capacity: Regulatory, Planning, Administrative, Technical, Fiscal, Physical o List Community Needs o List of Adaptation Strategies • Stakeholder Meeting / Community Input Round 2 o Adaptation Inquiry via STAPLEE: ▪ Prioritize Community Needs ▪ Prioritize Adaptation Strategies	Video and documents presented. List of attendees Notes from meeting/public comment period
6	**Final Chapter:** • Schedule of Activities, Actions and Actors that includes Timelines, Budgets and Funding Sources. o Present to City Commission for Acceptance	Final Chapter Video and documents presented. Notes from meeting/public comment period
Task 7	• Integrate into Existing Plans • Comprehensive Plan o Adaptation Action Areas o Special Area Management Plan • Capital Improvement Plan • Stormwater Management Plan • Strategic Plan • Climate Action Plan • Local Mitigation Strategy • Key West Comprehensive Adaptation and Resilience Implementation Plan, previous Chapters.	Summary and Evidence of Plans Submitted

RESOURCES

Current resources include an Adaptation Planning Team staff, and a $200,000 allocation by the City for this project.

The City's Adaptation Planning Team will be responsible for writing the plan, grant administration, and shepherding the entire process. The Team includes representatives from

Planning, Engineering, Transportation, Community Services, Community Safety, Utilities (stormwater and sewer).

TEAM

The Teams core consists of the following 6 members:

- Alison Higgins is the City Sustainability Coordinator, Adaptation Team Chair and Lead for this Plan. She has worked from within the Planning and Engineering Departments for the City for the last 8 years and holds an M.A. in Environment and Community from Antioch University. Previous experience includes 7 years serving as Executive Director of Green Living Energy Education (GLEE), a Keys-focused nonprofit, and 14 years as a Land Conservation Program Manager for The Nature Conservancy in the Florida Keys.
- Kelly Crowe is the City Engineer. Kelly has 23 years of civil engineering experience and has worked in both the private and public sectors. As a civil engineer in private land development firms he focused on grading and drainage design. Kelly graduated from California Polytechnic University, San Luis Obispo with a bachelor's degree in Civil Engineering. He is a licensed professional engineer in California and Florida.
- Katie P. Halloran is the City Planner and was born and raised in Key West. She worked on water and climate change policy as a planner in Miami-Dade County and participates in the Southeast Florida Regional Climate Change Compact. She holds a MS in Community and Regional Planning from the University of Texas at Austin, focusing on water issues and participatory development; she is bilingual in Spanish.
- John Paul Castro is the City Utilities Director and manages Stormwater, Sewer and Solid Waste. He has nearly a decade of experience at the City from operations and construction at the city marinas to managing wastewater, stormwater, and solid waste departments. John Paul is a graduate of the University of Tampa.
- Enid Torregrosa Silva has served as the City Historic Preservation Planner for 12 years. She holds a Bachelor Degree in Environmental Design from the School of Architecture at the University of Puerto Rico and a Master's degree in Science in Historic Preservation from the School of Architecture and Planning at Ball State University.
- Carolyn Sheldon is the Senior Grants Administrator for the City of Key West. Her 11 years with the City have honed her excellent skills in grant compliance, financial reporting and other grant processes and practices, handling over $25 Million in federal, state and local grants. Carolyn is a graduate of Nova Southeastern University with a Master's degree in Business Administration.

MONITORING/QUALITY CONTROLS

Annually the City Adaptation Team will assign and implement Plan actions. This includes budgeting, grant research, goal setting and oversight for each item. Also each year, the Adaptation Team will use the data gathered throughout the Plan as well as insight gained along the way to add potential projects to the Plan's 10 Year timeline and beyond. Progress on the Key West Comprehensive Adaptation and Resilience Implementation Plan will be reported to the City Commission every 6 months. Following the biannual reporting, the Adaptation Team will solicit public comment whereby individuals may express new concerns or developments

about the selected adaptation projects. The City Commission will also participate in the Plan during the annual budgeting process.

The Monitoring and Evaluation timeline is roughly:

Quarter	Months	Monitoring and Evaluation
Qtr 1	Oct, Nov, Dec	New Fiscal Year begins - Projects Start
Qtr 2	Jan, Mar, Apr	Annual Adaptation Report: Progress and Next Years Priorities Public Workshop with Sustainability Advisory Board with 30 day Comment Period.
Qtr 3	May, Jun, Jul	Budget Hearings (internal and public)
Qtr 4	Aug, Sep, Oct	Adaptation Report - 6 month update Public Comment Period (30 days) Annual King Tide Photo Contest

UPDATES

After Plan completion, the City will update 2 Chapters annually to ensure a rolling 10 Year Implementation Plan that incorporates new information and lessons learned. The City intends to fund updates from its own coffers as long as our finances are “normal” and not under undue stress from a major hurricane or pandemic.

Chapter	Completed	Update
1 - Stormwater Master Plan*	2021	2026
2 - Infrastructure & Transportation**	2023	2029
3 - Historic and Cultural	2022	2029
4 - TBD	2023	2030
5 - TBD	2024	2030

6 - TBD	2025	2031
7 - TBD	2026	2031
8 - TBD	2027	2032
9 - TBD	2028	2032

* Chapter 1 provided by City of Key West Utilities Department

** Chapter 2 provided by Monroe County Regional Resilience Plan and Neighborhood Livability Outreach and Planning.

LEVERAGED DOLLARS

The City of Key West is currently very cash strapped due to Covid-19, as our two largest sources of revenue are tourism dependent. We offer the following items as 44% leverage towards the entire cost of the Key West Comprehensive Adaptation and Resilience Implementation Plan.

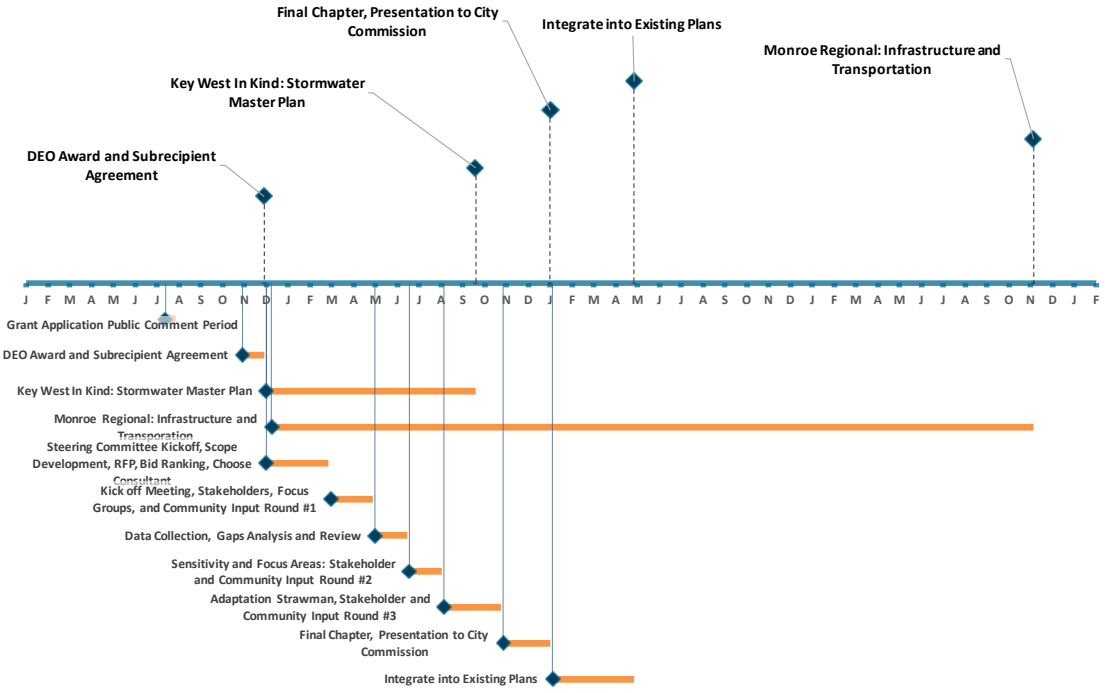
Stormwater Master Plan: **$200,000**

Staff Time: $194,438

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
07/17	07/31		14	Grant Application Public Comment Period
11/03	12/04		31	DEO Award and Subrecipient Agreement
12/07	09/30		297	Key West In Kind: Stormwater Master Plan
12/14	12/01		1082	Monroe Regional: Infrastructure and Transporation
12/07	03/05		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
03/08	05/07		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
05/10	06/25		46	Data Collection, Gaps Analysis and Review
06/28	08/13		46	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
08/16	11/05		81	Adaptation Strawman, Stakeholder and Community Input Round #3
11/08	01/14		67	Final Chapter, Presentation to City Commission
01/17	05/13		116	Integrate into Existing Plans

Milestones

Date	Label
12/4/20	DEO Award and Subrecipient Agreement
9/30/21	Key West In Kind: Stormwater Master Plan
12/1/23	Monroe Regional: Infrastructure and Transp
1/14/22	Final Chapter, Presentation to City Commiss
5/13/22	Integrate into Existing Plans
Insert new rows above this one	

Notes

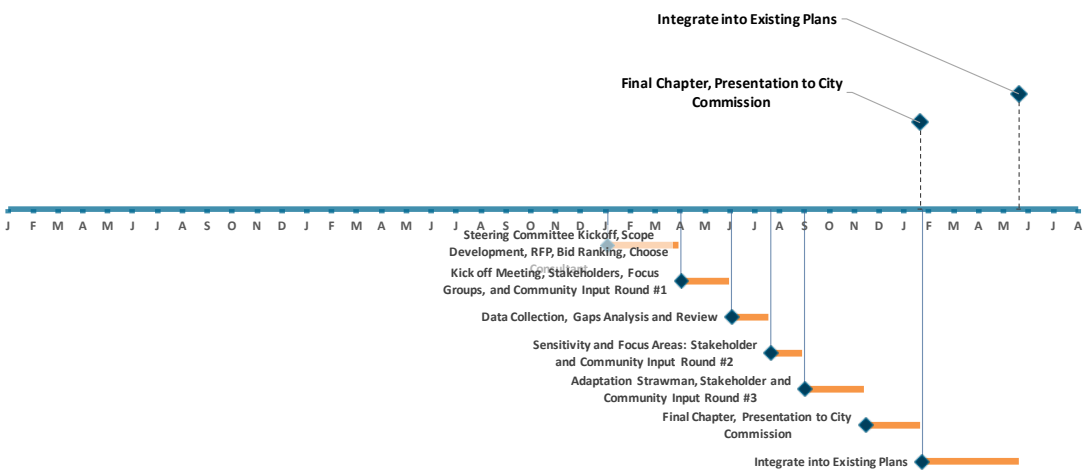
Record project notes below

Preliminary tasks/Chapters and Chapter 3 - Tasks. Please note The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
01/17	04/15		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
04/18	06/17		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
06/20	08/05		46	Data Collection, Gaps Analysis and Review
08/08	09/16		39	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
09/19	12/02		74	Adaptation Strawman, Stakeholder and Community Input Round #3
12/05	02/10		67	Final Chapter, Presentation to City Commission
02/13	06/13		120	Integrate into Existing Plans

Milestones

Date	Label
2/10/23	Final Chapter, Presentation to City Commiss
6/13/23	Integrate into Existing Plans
	Insert new rows above this one

Notes

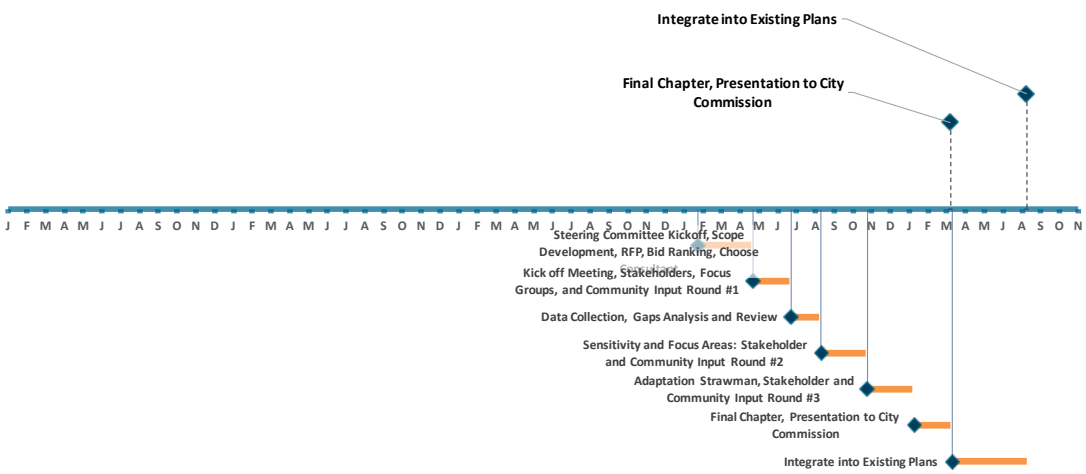
Record project notes below

Chapter 4 Tasks. Please note The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
02/13	05/12		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
05/15	07/14		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
07/17	09/01		46	Data Collection, Gaps Analysis and Review
09/04	11/17		74	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
11/20	02/02		74	Adaptation Strawman, Stakeholder and Community Input Round #3
02/05	04/05		60	Final Chapter, Presentation to City Commission
04/08	08/09		123	Integrate into Existing Plans

Milestones

Date	Label
4/5/24	Final Chapter, Presentation to City Commiss
8/9/24	Integrate into Existing Plans
	Insert new rows above this one

Notes

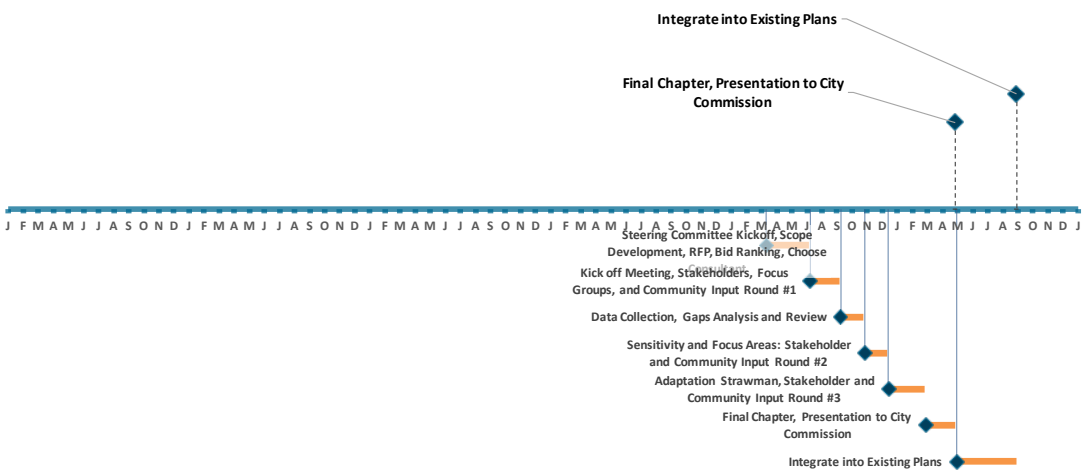
Record project notes below

Chapter 5 Tasks. Please note The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
04/08	07/05		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
07/08	09/06		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
09/09	10/25		46	Data Collection, Gaps Analysis and Review
10/28	12/13		46	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
12/15	02/28		75	Adaptation Strawman, Stakeholder and Community Input Round #3
03/03	05/02		60	Final Chapter, Presentation to City Commission
05/05	09/05		123	Integrate into Existing Plans

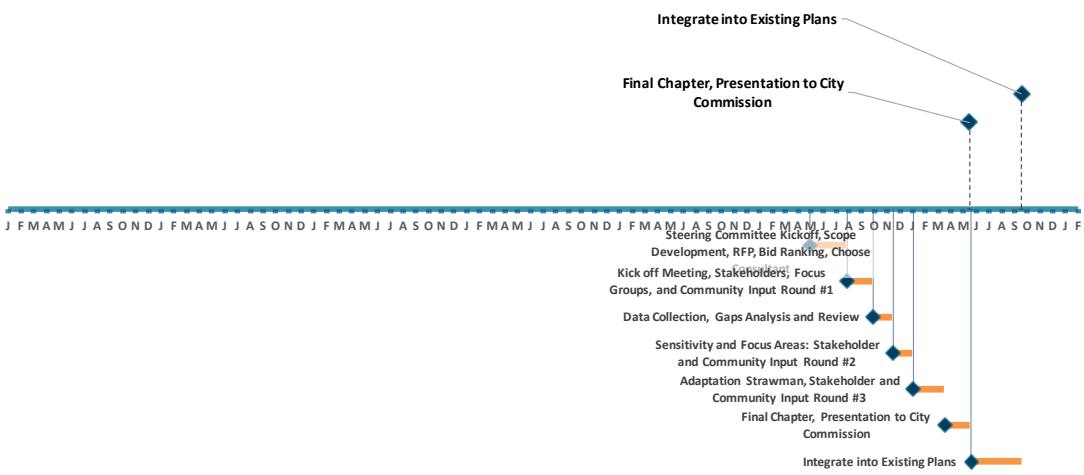
Milestones

Date	Label
5/2/25	Final Chapter, Presentation to City Commiss
9/5/25	Integrate into Existing Plans

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
05/05	08/01		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
08/04	10/03		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
10/06	11/21		46	Data Collection, Gaps Analysis and Review
11/24	01/09		46	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
01/12	03/27		74	Adaptation Strawman, Stakeholder and Community Input Round #3
03/30	05/29		60	Final Chapter, Presentation to City Commission
06/01	10/02		123	Integrate into Existing Plans

Milestones

Date	Label
5/29/26	Final Chapter, Presentation to City Commiss
10/2/26	Integrate into Existing Plans

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Notes

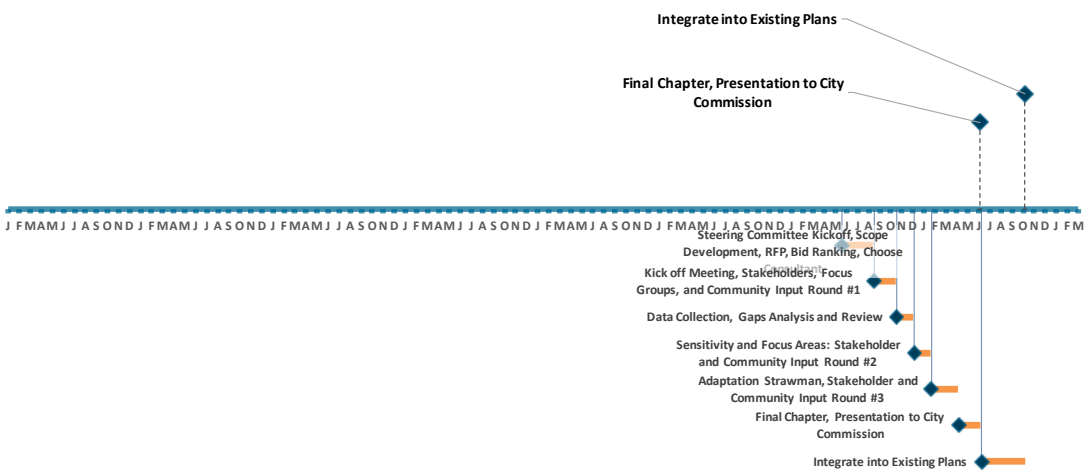
Record project notes below

Chapter 7 Tasks. Please note The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline



Tasks

Start	End		Duration	Label
06/01	08/28		88	Steering Committee Kickoff, Scope Development, RFP, Bid Ranking, Choose Consultant
08/31	10/30		60	Kick off Meeting, Stakeholders, Focus Groups, and Community Input Round #1
11/02	12/18		46	Data Collection, Gaps Analysis and Review
12/21	02/05		46	Sensitivity and Focus Areas: Stakeholder and Community Input Round #2
02/08	04/23		74	Adaptation Strawman, Stakeholder and Community Input Round #3
04/26	06/25		60	Final Chapter, Presentation to City Commission
06/28	10/29		123	Integrate into Existing Plans

Milestones

Date	Label
6/25/27	Final Chapter, Presentation to City Commiss
10/29/27	Integrate into Existing Plans

Insert new rows above this one

Notes

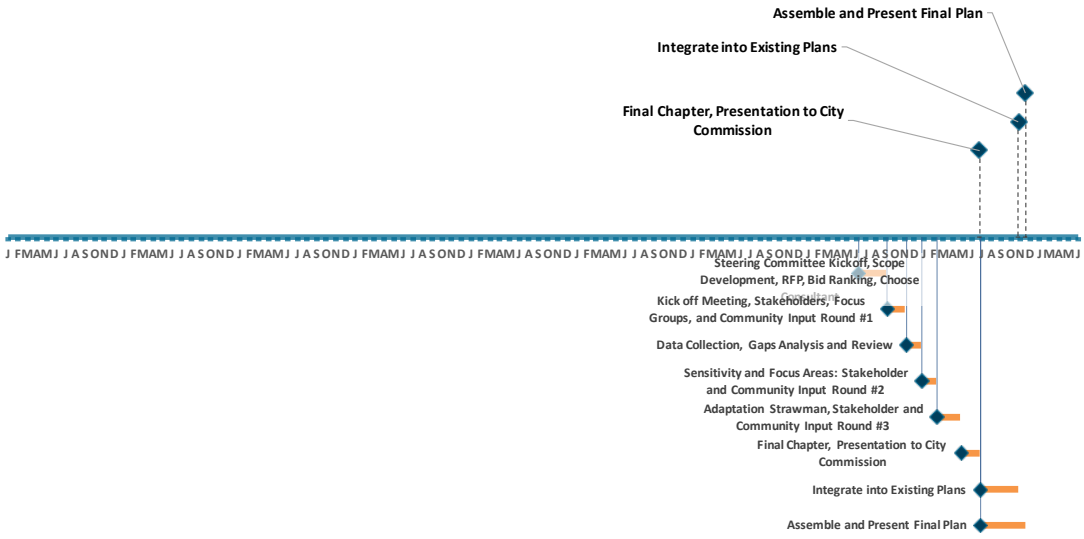
Record project notes below

Chapter 8 Tasks. Please note The Adaptation Team decided not to dictate Chapter order. While some Chapters may greatly help to follow another, the effect of Covid-19 on our health and economy may take the greatest precedence for Chapter 2. Therefore, the Stakeholder Team will decide near the sunset of each Chapter, which subject shall take precedence to become the next Chapter.

Key West Comprehensive Adaptation and Resilience Implementation Plan
City of Key West
Alison Higgins, 305-809-3726

Date
Friday, July 31, 2020

General Planning Support Implementation Plan Timeline


Assemble and Present Final Plan
Integrate into Existing Plans
Final Chapter, Presentation to City Commission
J FMAMJ J ASOND J FMAMJ J ASOND J FMAMJ J ASOND

FL CDBG Mitigation

General Planning Support Program Project Budget (Template)

Project Name:	Key West Comprehensive Adaptation and Resilience Implementation Plan	Primary Contact Name and Phone Number:	Alison Higgins 305-809-3726	Official Applicant Entity Name:	City of Key West, FL

Project	Budget	Notes

Description	CDBG-MIT Amount	Other non CDBG-MIT Funds	Source of Funds*	Total Funds (CDBG-MIT and Other)	
1. Mitigation Plans					
Modernization and Resiliency Plans	$ 500,000	$ 200,000 $ 169,438	Key West	$869,438	Stormwater Master Plan Staff in Kind (minus administration)
2. Mitigation Activities					
Administration		$25,000		$25,000	%5 of Plan costs, subtracted from overall Key West staff in-kind ($194,438 - $25,000 = $169,438)
Planning					
Totals:	$500,000	$394,438		$894,438	

*** 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. Stormwater Master Plan	$ 200,000
2. Staff in Kind (minus administration)	$ 169,438
3. Staff in Kind Administration	$ 25,000
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

The City of Key West, Florida

TRANSLATE

HUD Planning Grants

You are here: Home•Departments•Engineering Department•**HUD Planning Grants**

PUBLIC COMMENT PERIOD

Planning Grant Applications

Florida Rebuild MIT General Planning Support Grant

The City of Key West seeks comments from their citizens pertaining to plans to submit 2 grant applications to the State of Florida, Department of Economic Opportunity in pursuit of U.S. HUD funding.

Public comments and/or requests for copies of the grant applications must be submitted to Alison Higgins, Sustainability Coordinator, at ahiggins@cityofkeywest-fl.gov or

305-809-3726 by Friday, July 31, 2020.

Project Name:	Key West Adaptation and Resiliency Plan
Type of CDBG-MIT project:	General Planning Support
What will Grant $ be used for?	Evaluate risks and opportunities related to climate change adaptation and resiliency and provide analysis of recommended options and a ten-year implementation budget for the entire City of Key West.
Location in our Community:	The City of Key West
Source of Funding:	U.S. Department of Housing and Urban Development through the State of Florida, Department of Economic Opportunities.
Total Cost of Project:	$500,000.00

Project Name:	Duval Street Corridor Resiliency Plan
Type of CDBG-MIT project:	General Planning Support
What will Grant $ be used for?	Multi-phase study of the Duval Street Economic Corridor to examine current and expected community hazards and present solutions for the treatment of those hazards, especially related to sea level rise and storm impacts.
Location in our Community:	Duval St. Corridor in Key West
Source of Funding:	U.S. Department of Housing and Urban Development through the State of Florida, Department of Economic Opportunities.
Total Cost of Project:	$500,000.00

Contact Us

Alison Higgins,
Sustainability Coordinator

In this Department

- Adaptation Planning Work Group
- Sustainability
- LRA / Truman Waterfront
- Monroe County Local Hazard Mitigation Strategy Plan Working Group
- ROW Map 2018
- Sea Turtle Nesting Season Awareness
- Sidewalk Repair
- **Department Home**

Topics of Interest

Projects Documentation Links

Projects Summaries

Roadway Projects

ROW Permits

Bayview Park Survey

Report A Street Light Outage

Public Comment Period: 8 Projects for Grant Funding

Public Comment Period for City applications

City of Key West, Florida
1300 White St. Key West FL 33040
Phone: (305) 809-3700

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Instead, contact the city office by phone or in writing.

Please be further advised that any writing received by the City is also a public record under Florida law and is subject to being released pursuant to a public records request.