



PRIORITY 2: ADAPTATION/SEA LEVEL RISE

MITIGATE SHORT-TERM FLOODING AND ESTABLISH A LONG-TERM ADAPTATION PLAN

| GOAL 1: CAPACITY AND RESOURCE MOBILIZATION | | | |
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| <i>Increase staffing to the level required in order to develop and implement short-term actions.</i> | | | |
| Actions | Time Frame | Person(s)/Departments Responsible | Funding Notes |
| 1. Build a Resiliency Team: Hire employees to for necessary positions to support the City’s efforts on resiliency. | Determine by Fall of 2023 Energy Assistant by Winter 2021 | City Manager, Sustainability Coordinator, Director of Engineering | Salaries would depend on the positions |
| 2. Adaptation Fund and Funding: a) Create Adaptation Fund with the purpose of annual budgeting. b) Identify and task appropriate lobbyists to navigate Federal Funding and liaise with the County to explore and advocate for funding streams. Examples include a sales sax, county-wide resilience fees, and municipal service benefit units. | Begin Fall 2021, ongoing | City Manager, Sustainability Coordinator | \$24K per year for a consultant for funding (20 hrs. per month @ \$100 per hour) |
| 3. Communication and Transparency: Increase communications to and with residents and the business community through more website presence and through the City’s communication channels (See <i>Key West Forward’s</i> External Communication Plan) | Begin Fall of 2021, ongoing | Strategic Planning Consultant, PIO Sustainability Coordinator | No funding required |



GOAL 2: SHORT TERM CRITICAL PROJECTS AND PLANS

Implement critical projects to mitigate storm and tidal flooding.

| Actions | Time Frame | Person(s)/Departments Responsible | Funding Notes |
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| <p>1. Critical Infrastructure Projects: Identify and complete 3 -10 years of the most urgent projects on the island as they relate to:</p> <ul style="list-style-type: none"> a) sea level rise b) stormwater c) floodproofing of structures d) wind hardening of structures | <p>Varies, see separate list for all projects</p> | <ul style="list-style-type: none"> a) Adaptation Planning Team b) Utilities c) Engineering d) Engineering | <p>See agenda updates</p> |
| <p>2. Protect Water Supply: Prevent an increase in salinity and keep water costs low by:</p> <ul style="list-style-type: none"> a) Continuing to support FCAA legislatively in legal battles with Turkey Point remediation plans and consent orders. b) Implementing the Water Supply Plan to reduce water consumption; c) Increase the number of cisterns in new building initiatives d) Conduct a cost-benefit analysis of utilizing reclaimed water | <p>Current, ongoing</p> | <p>Adaptation Planning Team</p> | <p>Lobbyist time</p> |
| <p>3. Non-Infrastructure Measures: Identify other low-cost, low maintenance temporary measures for flood mitigation, such as: Geo-tubing; sandbags; grants for wet floodproofing and dry floodproofing homes and structures; aqua dams; water-inflated flood barriers, demountable flood barriers, etc.</p> | <p>Begin in Fall 2023</p> | <p>Sustainability Coordinator, the Adaptation Planning Team, SAB</p> | <p>Funding is contingent on decisions</p> |



GOAL 3: LONG TERM ADAPTATION PLAN

Establish a long-range plan that is monitored and adjusted on a continuous basis to promote the longevity of the island and its inhabitants.

| Actions | Time Frame | Person(s)/Departments Responsible | Funding Notes |
|---|---|--|---|
| <p>1. Vulnerability Assessment: Utilize existing models from NOAA, the Florida Department of Environmental Protection and the Florida Coastal Management Program to measure the impact of sea level rise, identify the people, infrastructure and land uses that may be affected. Include utilization of LiDAR data.</p> | <p>Begin Winter 2022</p> | <p>Engineering, Planning, Adaptation Planning Team</p> | <p>\$150K (\$130K for assessment, and \$20K for LiDAR) grant pending</p> |
| <p>2. Long Term Adaptation Strategy and Implementation Plan:¹ Using information from the vulnerability assessment, engage in a “deeper dive” into key issues that are impacted by climate change. Focus on a singular issue or “chapter” per year with a 10-year budget and scope for each one. (E.g., Infrastructure & Roads; Historic and Cultural Preservation; Power & Water; Housing; Economic Development, Environmental Restoration and Health & Equity). Strategies include: protect, accommodate, avoid, and retreat.</p> <p>Chapter 1: Infrastructure & Roads (Includes LiDAR Data of Roads) Chapter 2: Historic and Cultural Preservation</p> | <p>Begin Chapter 2 - Fall 2021</p> <p>Chapter - Fall 2022</p> | <p>Engineering, Adaptation Planning Team, Planning, HARC</p> | <p>Chapter 1: \$70K unfunded (seeking a grant)</p> <p>Chapter 2: \$75K fully funded</p> |

¹ The NOAA Model/Florida Adaptation Planning Guidebook describes a comprehensive, integrative, long-term adaptation strategy and implementation plan in which all issues (infrastructure, roads, power & water, housing, Etc.) are symbiotic. The plan described was designed to accommodate the capacity constraints within the City of Key West, (E.g., a lack of staffing dedicated to adaptation and SLR.) If the Commission were willing to increase capacity with additional staff, it would be feasible to manage a comprehensive plan, see it through, and direct major funding opportunities. This would be a more effective and impactful approach.



GOAL 4: PARTNERSHIPS AND LINKAGES TO OTHER PLANS

Integrate SLR into all relevant long-term plans within the city, and coordinate with other coastal cities in and beyond Florida.

| Actions | Time Frame | Person(s)/Departments Responsible | Funding Notes |
|--|--------------------|--|--|
| 1. Implementation Plan for Post Disaster Recovery and Reconstruction (PDRRP): Begin execution of the plan in the 9 goal areas | Fall, 2021 | Sustainability Coordinator | As per the plan |
| 2. Integrate SLR into long range plans: Including the 10-year Stormwater Master Plan, Transportation Plan, Water Supply Plan, Pavement Management Plan and Energy Plan. | Fall 2021, ongoing | Sustainability Coordinator works with relevant departments to ensure integration | No funding required |
| 3. Monroe County ACOE Coastal Storm Mitigation Project: Estimate and follow up to determine in what ways Key West should proceed, and establish a plan for cost share of ACOE recommended projects: a) Elevation of 2,028 residences b) Floodproofing of 400 commercial buildings c) Floodproofing of 7 critical public facilities | 2024, ongoing | Sustainability Coordinator, Adaptation Planning Team, Monroe County | 35% = a) \$1.003B b) \$145M c) \$5.4M It is expected that some funding for residences and commercial buildings will be raised by property owners |
| 4. Monroe County GreenKeys! Continue to review recommendations and integrate priorities into adaptation planning | Current, Ongoing | Sustainability Coordinator | No funding required |



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| <p>5. Key West Representation on Local and Regional Boards: Ensure that at least one individual from the City staff and/or a commissioner or committee member is included on the following boards:</p> <ul style="list-style-type: none"> a) Monroe County Regional Adaptation Coordination Team b) Monroe County Climate Change Advisory Committee (CCAC) c) Southeast Florida Regional Climate Compact Board d) FCAA Climate Change Group e) Cities for Climate Protection Campaign (ICLEI) | <p>Begin Fall 2022, ongoing</p> | <p>Sustainability Coordinator assigns individuals with input from the City Manager</p> | <p>No funding required</p> |
| <p>6. Military Plans (Navy, Coast Guard and JIATF): Convene with military institutions that have a presence in Key West to share information, understand their long range adaptation strategies and plans, and coordinate to the extent possible with the long-term plan.</p> | <p>By Summer 2022</p> | <p>Sustainability Coordinator, Adaptation Planning Team</p> | <p>No funding required</p> |
| <p>7. Explore Best Practices and International Policy and Academic Forums: Conduct educational exchanges, attend international forums, and seek guidance from leading experts on municipal responses to SLR, particularly in coastal communities (E.g., Miami Beach, Charleston, New Orleans, Galveston, Maldives, The Netherlands, Etc.,)</p> | | <p>Adaptation Energy Assistant makes recommendations to Sustainability Coordinator and City Manager for Adaptation Planning Team Members</p> | <p>Travel budget submitted annually</p> |
| <p>8. State Plans (FDOT, FDEP and FDEO): Develop relationships and keep abreast of plans and funding opportunities. Lobby FDOT for stronger SLR policies.</p> | <p>Current, Ongoing</p> | | <p>No funding required</p> |



GOAL 5: REGULATORY MEASURES – LAND USE, PLANNING AND ZONING

Introduce regulatory changes and new measures to support long term resiliency.

| Actions | Time Frame | Person(s)/Departments Responsible | Funding Notes |
|--|----------------------|--|---|
| <p>1. Comprehensive Plan Updates: Hire a consultant to create the Evaluation and Appraisal Report (EAR) with strikethrough underline to capture state requirements, new plans and staff recommendations for changes to Comprehensive Plan as they relate to resiliency and adaptation.</p> | <p>Begin 2022</p> | <p>Consultant as assigned by the Planning Director</p> | <p>\$150K (unfunded) (\$50K grant ask)</p> |
| <p>2. Regulatory Plans for Adaptation: Update ordinances and Land Development Regulations on: 1) Zoning and overlay zoning; 2) building codes & resilient designs; 3) setbacks/buffers; 4) conditional development and exactions; 5) rebuilding restrictions; 6) conservation easements; Etc.</p> | <p>Begin in 2023</p> | <p>Consultant as assigned by the Planning Director</p> | <p>Consultant to make recommendations Approximately \$20K</p> |