

# Sustainability Report

## September 2023

### Strategic Plan

#### **PRIORITY 2: ADAPTATION/SEA LEVEL RISE**

#### **GOAL 1: Build Municipal Capacity and Establish Long-Range Plans**

##### **1. Build an Adaptation Team:**

- ✓ **FY22:** A&E position created. Interviewing now.
- a. **FY23;** In order of importance:
  - ✓ HARC Building Inspector moved back to Planning: Started!
  - ✓ Job Description of Sustainability Coordinator
  - ✓ Grant reporting/tracking help for all departments
  - ✓ Oversight of Energy & Adaptation Coordinator
  - ✓ Hire experienced Floodplain Manager in Building
  - ✓ Professional Engineer with Adaptation Experience in Utilities
    - i. Hiring of new A&E: Proactive Advertising approved 5/3
    - ii. City Engineer & Engineering Director with Adaptation Experience in Engineering.
- b. **FY24:**
  - i. ~~Ports Adaptation and Water Quality~~
- c. **Adaptation Planning Team:**
  - 1) Next meeting: Aug/Sept: PDRRP, Code Plus, upcoming grants.
  - 2) Last Meeting Recap: May 17: Resiliency Forum, MIRR, Home Elevation Policies, Grants

##### **FY23: Increase Communication/Transparency:**

- Websites this year: Adaptation (Oct) and Energy (TBA)
- ✓ Presentations this Quarter: CC 1/18: Solar United
- ✓ Publications this Quarter: Solar United Flyer

#### **GOAL 2: Short-Term Critical Projects and Plans**

##### **1. Short Term List of Critical Infrastructure Projects:**

- New List: Updated 10/3/22 = Top FY23 Adaptation Projects
  - ✓ New Asset Mgmt Software Chosen.
    - i. Projects postponed til FY24 due to capacity: Glass Reuse and Water Reuse Feasibility;
    - ii. Projects postponed til FY25 due to capacity: Stormwater Phase 3 - Green Infrastructure;
- FY23: Regional Storm Drain Projects (Utilities)
- FY23: Plans for Major Evacuation Routes (Eng/Utilities)
- FY23: PR Effort for SLR Major Initiatives (SC)

##### **2. Protect Water Supply:**

- Water Supply Plan: Passed 2<sup>nd</sup> reading on 4/4 and uploaded to Florida Building Code 5/4. Will go into effect 9/1 after monthlong education campaign.
- Turkey Point Updates: Year 4 Remedial Action Annual Status Report in process.
- Increase Cisterns:
- Water ReUse Plan: FY24: Applying for Reuse Feasibility Study Grant in August 2023

##### **3. Non-Infrastructure Measures:** Still in Information Gathering Phase. Begin Fall 2023.

#### 4. Home Elevation Project / Residential Adaptation:

(Also serves Aff. Housing Goal 3: Preserve Existing)

- ✓ [Residential Adaptation Resources](#) list added to City Adaptation Page.
- ✓ Miami Beach's [Private Property Adaptation Program](#) funds up to \$20K per home.
- **FMA Grants: FY24 due Sept 30. FY23: FEMA chose 57 homes (44 elevation and 13 reconstruction) to move forward in process. Reconstruction is now \$220 + 30K.**
- Elevation Variances: Public Workshop held. New language pending.
- Nine Keys homes are in RFI stage for Tier 3 Disaster funds.
- See ACOE below.

#### GOAL 3: Long Term Adaptation Plan

##### 1. Vulnerability Assessment: (TBD)

##### 2. Long Term Adaptation Strategy and Implementation Plan:

- LiDAR: KW: Control Survey: Sept? KW: Mobile LiDAR Collection: Sept?
- Consultant: **Contract signed!**

#### GOAL 4: Partnerships and Linkages to Other Plans

##### 1. Implementation Plan for Post Disaster Recovery and Reconstruction (PDRRP):

- ✓ Completed [PDRRP FY23 Annual Plan](#) and [FY24 Annual Plan](#) (for budget planning)

##### 2. Integrate SLR into long range plans:

- ✓ Each Chapter of Adaptation Plan will integrate its recommendations into any necessary Plans.

##### 3. Coordination with NASKW MIRR

- ✓ See #6: Military Plans

##### 4. Monroe County [ACOE Coastal Storm Mitigation Project](#): [Summary Document Link Here](#). Study Signed and Passed by Congress allocating \$1.5B on 12/24/22. Non Federal Share is 35%, which can be state, local govt, County, grants, individuals. First \$ needed: FY23 for Design for Critical Infrastructure Floodproofing, then Construction Funds and everything else FY24 forward. Map of all residences and commercial buildings identified by report is published on [ACOE Report website](#).

- ✓ Critical Facilities list – [received from County](#) & shared with LMS.
  - i. 3 Buildings belong to City.
- ✓ Non-Structural list – [downloaded map](#) and [implementation schedule](#).
  - i. 30 Floodproofing Buildings belong to City. Briefed Greg M. Asking for map.

##### 4. Monroe County GreenKeys!

- See Regional Adaptation Coordination Team below.

#### 5. Key West Representation on Local and Regional Boards:

- ✓ Local Mitigation Strategy (LMS) Team:
  - i. Scored Hurricane Ian project, submitted 8/29.
  - ii. BCA Training: June 21 & 22
- ✓ SE FL Regional Climate Compact:
- ✓ [Regional Adaptation Coordination Team](#):
  - i. County did not get FDEP Resilience Planning monies for Roads Vulnerability for region.
  - ii. Monroe is helping muni's with Regional EV Charger grant, due June 16.
- ✓ ICLEI: Will help us with Energy Plan and Green Infrastructure
- ✓ Sustainability Directors Network: Bi-Monthly Statewide Call.
- ✓ South FL Regional Planning Council: See 6. Military Plans.

- ✓ FKAA: Board turned down funding of FKAA Vulnerability Assessment on 5/24/22.
- ✓ Private Sector: See PPP Grants.
- ✓ University Cooperation/UF FIBER Partnership: No Updates.

#### **6. Military Plans (Navy, Coast Guard and JIATF):**

- ✓ FDEO Defense Funding: Applied for BV Resilience Hub
- ✓ NASKW Liaison – Co-hosting Regional Resiliency Forum in late June.
- ✓ DCIP funding: Applying for BV Resilience Hub and Fire Station 3
- ✓ Military Installation Resilience Readiness (MIRR): Includes NAS-KW & 3 others in partnership with South Florida Regional Planning Council & Jacobs. Kicked off 5/24. Site visits Aug 22. 2 meetings Dec& Jan. Comments sent Aug 2023.
  - i. Awarded WTE MIRR grant - Submitted 6<sup>th</sup> draft to OLDCC liaison via grant portal 8/11.
- ✓ See *Upcoming Grants*

#### **7. Explore Best Practices and International Policy and Academic Forums: FY23**

- ✓ Attended: State Association of Floodplain Managers (virtual), July 18-21 (Bridget, Raj), Florida Association of Floodplain Managers (April, Alison), Floodplain Manager Certification Dec (Alison, Zoe, Kim), Climate Summit Dec (Karen) Southeast & Caribbean Disaster Recovery Partnership 1/24-25 (Raj), FEMA Flood Insurance 1/10-11 (Alison, Bridget, Kim).
- ✓ Upcoming: May 7-11: Summer Environmental Permitting School (KellyC), July 10-13: DOD Climate Resilience Workshop (Alison), Aug: Certified Floodplain Mgmt (Zoe): Sept 11-14: Retrofitting Floodprone Buildings (KarenW)

#### **8. State (and Federal) Plans:**

- ✓ FDEP Quarterly Mtg: May 3: Featured our Consultant Tetra Tech!
- ✓ FDEP Annual Coastal: Not posted
- ✓ FDEM Quarterly Meeting: ~June 14
- ✓ FDOT received Monroe County Transportation Master Plan
- ✓ FDEO: [Draft Enhanced State Hazard Mitigation Plan released 5/30](#)
- ✓ FEMA Flood Maps: No updates.
- ✓ Biden Infrastructure Package
- ✓ [IRA \(Inflation Reduction Act\)](#)

### **GOAL 5: Regulatory Measures – Land Use, Planning and Zoning.**

1. **Comprehensive Plan Updates:** Part of Adaptation Chapters.
2. **Regulatory Plans for Adaptation:** Part of Adaptation Chapters. See Home Elevations (P2.G2.4)

## **PRIORITY 4: ENVIRONMENTAL PROTECTION**

### **GOAL 1: Energy Efficiency and Resilience**

*1/31: Keys Energy updated as to progress on all goals.*

1. **Energy Plan:** All Chapters Drafted. Marked up, needs EV and alt power blended in. Started finalizing Goals 6/1. Presents to Commission TBD
2. **Energy Use Map:** TBD
5. **Energy/Water Efficiency in City Buildings:**
  - ✓ FY22: Police Building 99% of lights changed out.
  - ✓ FY23 Budget approved for 3 buildings: WWTP, Transit & Palm Fleet. Potentially swept.
  - ✓ FY24 Budget drafted = 11 buildings. Am asking for 5 more buildings to achieve 5%.

## **6. LED Streetlights:**

✓ 100% Complete: 473 bulbs replaced, estimated annual savings of \$12K. (\$80K)

## **7. Adhere to Resolution 19-328 on Solar Energy:** Solar Evaluation Form, V1 is complete and in use.

✓ Denied purchase of 100% Solar Energy from KES from mainland projects in Jan FY24.

## **8. Waste To Energy:** Kelly Crowe. FY24. Securing Feasibility/Resiliency Study from MIRR.

## **9. Vehicle Electrification Readiness:** See below:

## **10. Electric Charging Stations:**

✓ See Regional Adaptation Partnership –Regional EV Grant

## **GOAL 2: Recycling and Composting**

*New Solid Waste Coordinator hired 5/1 and training with outgoing until 5/23.*

✓ **Wastewater Sludge Composting:** Workshop on 8/11. Not Feasible. Now working on WTE.

**2. FY23: Mandatory and Incentivized Recycling for Businesses:** Pilot Classes April 26, May 3 and 8.

**3. FY23: Enforce Ban on Single Use Plastics:** Reef Relief has begun Plastic Free 305.

**4. FY23: Composting**

**5. FY23: Requirement of Plans for Recycling in all Development and Redevelopment Initiatives:**

**6. FY22: Multi-Family Housing:**

**7. FY22: “Love Your Island” Targeted PR Campaign for Schools/Youth:**

**8. FY22: Recycling Materials in City Infrastructure:**

✓ **Glassphalt and Glasscrete Workshop as LEED Forum?** Kim had researched glass crushers.

**9. FY22: LEED Certification:** LEED Green Associates Training Aug/12/22 and tests for 5 staff. No tests have been taken as of yet.

**10. FY22: Green Procurement:** Winter 2023

## **GOAL 3: Near Shore Waters**

**1. FY23: Wastewater Treatment Plant**

**2. FY22/23: Sediment Separators on Outfalls:** See Upcoming Grants.

**3. FY22/23: Water Quality Posting at City Beaches and City’s Website:** Solid Waste Coordinator

**4. FY22/23: Evaluate Wastewater and Sewer Systems for Repair:** Kelly Crowe

**5. FY22/23: Provide financial support to the College of the Florida Keys. (SC)**

**6. FY22: Neighborhood Watch/Key West Connect:** Solid Waste Coordinator

**7. FY22: Bags and Trash Pick Up for Liveboards:** Solid Waste Coordinator

**8. FY22: Dive for Debris:** Solid Waste Coordinator

**9. FY22: Education for City Tenants and Liveboard Owners:** Solid Waste Coordinator

## **GOAL 4: Water Efficiency and Resilience**

✓ **FY23: Asset Management System (Property Manager)**

**1. FY22/23: Education/Support Water Supply Plan:** See P2.G2.2

**2. FY23: Watershed Plan**

**3. FY23: Water Reuse for Greenspace (Util)**

**4. FY22: Water Reuse Plan:** See P2.G2.2

**5. FY22: Protect Water Supply:** See P2.G2.2

**6. FY22: Update City Buildings:** Budgeted for FY23 and proposed for FY24.

## **FY22: GOAL 5: Build Municipal Capacity, Accountability and Partnerships**

**1. Increase Street Cleaning Capacity:** Solid Waste Coordinator

**2. Keep Key West Beautiful/Adopt a Spot:** Solid Waste Coordinator

**3. Increase Littering Fines:** Solid Waste Coordinator

**4. Department Checklists:** Solid Waste Coordinator

**5. Training and Resources for Landscapers, Electricians, Contractors and Plumbers:** Solid Waste Coordinator

## 6. Lease Agreements:

7. **Clean Marinas:** Establish Plan w McAlearney = FY24 WQ Position. Look for Funding.

## 8. Enforcement and Accountability Partnerships:

9. **Workshop on Green Businesses:** TBD. Private sector reusable bag idea: Green light on TDC Green List.

## 10. Water Quality Protection Program:

- ✓ College of the Florida Keys Partnership: Underway.
- ✓ Mote Marine Coral Restoration Partnership: Paid for FY23.
- Consulted with experts to create draft Key West Water Quality Improvement Plan. Will present to Commission in Sept.

## Non-Strategic Plan, Water Quality:

- Pursuing Fertilizer ordinance: Sponsors Johnston and Weekley. SAB 1/13. Tree Commission TBA. Planning Board TBA. City Commission TBA. State Rulemaking has usurped local rule.
- Research FDEP Brownfields opportunities. Met 7/13. Dropped for now.
- **Florida Keys National Marine Sanctuary:** Many funding opportunities in the Environmental Protection realm. Revised Blueprint presented to SAC 7/12. SAB submitted recommendations.
- **Sunscreen:** Samples were taken over the summer of 2021 in local waters. Oxybenzone added to CFK sampling for Phase 2 EPA grant.
- **Shallow Wells:** City of Marathon has settled a lawsuit from FOLKS about discharges from their shallow injection well. We will follow this closely. Presentation at WQPP TBA.

## Non-Strategic, Environmental

- **Florida Keys Green Business Certification:** Somewhat included in Strategic Plan. Working into Energy Plan. Map with TDC being pursued again.
- **GM Mosquitos:** [Pilot D](#) started beginning of July, examining single-point releases of Oxitec male mosquitos in the middle keys. Pilot B was in May in same area. [keysmosquitoproject.com/resources](https://keysmosquitoproject.com/resources).
- **Green Building:** BPAS year 10 is completing.

## PRIORITY 6: TRAFFIC & PEDESTRIAN FRIENDLINESS

### GOAL 1: Complete Streets: Ensure Safer and More Accessible Bike and Pedestrian Routes in accordance with Bike/Ped Master Plan.

*See Multimodal Report*

1. FY22/23: **Wicker Bike Trail:** See Awarded Grants.
2. FY22/23: **“Share Street” Pilot in Old Town:** Lazy Way & South Street.
3. FY22/23: **Impact Analysis of Micro Mobility Devices**
4. FY22/23: **Crosstown Greenway Phase II:** Budgeted FY23 & FY24. Staples overhaul.
- ✓ 5. FY22/23: **Additional Bike Racks:**
6. FY22/23: **Sidewalk Repair:** Annual
7. FY22/23: **Pedestrian Crossing and Intersection Enhancements:** Annual
10. FY22/23: **Wayfinding:** FY23 for bikes. FY24 for all pending.
8. FY22: **Gap Closures on Trails:** Applied for Feasibility for Salt Ponds Paths on 2/27.
6. FY22: **Investigate Alternative Parking Layouts:** Fort and Thomas, TBA
8. FY22: **Sidewalk Circulation Plans:** 2024 Grant Cycle?
11. FY22: **Street Canopy:**
13. FY22: **Added Create a Plan for Vision Zero – Grant awarded!**

### GOAL 2: Improve Public Transit

- ✓ 1. FY22/23: **On Demand Transit Pilot:** Soft launched 11/28. Still running both lines.

2. FY22/23: **Lower Keys Shuttle:** Need more drivers before hourly can occur.
- ✓ FY22/23: **Gain & Retain Bus Drivers** (CDLS and Cutaway Drivers):
4. FY22: **Maps at Bus Stops:** Most included in Final Mile FDOT Grant. Remaining budgeted for FY23.
5. FY22: **County Micromobility Grant:** Plans to launch in spring. Goes from 4am til midnight.
6. FY22: **WiFi:** RFP for advertising was scored 5/3
7. FY22: **Increase Park N Ride Mobility Hubs and EV Infrastructure for Electric Buses.**
8. FY22: **Pilot EcoPass:** Gardenview, Wreckers Cay, Bethel and BV Senior Center.

### **GOAL 3: Parking Improvements**

1. FY23: **KWIC:** See #3
2. FY23: **Traffic & Parking Plans for New Housing:**
- ✓ FY22/23: **Pay By Phone:** Done
3. FY22/23: **Investigate Alternative & Additional Parking:**
  - KWIC is undergoing feasibility study, due in August.
  - Rooftops design will be able to do all sites in FY23 for less!
  - The Park N Ride overhaul is applying for RAISE grant funding.
5. FY22: **Parking Garage App for Availability:** FY24.
6. FY22: **Parking Policy Reform** (See Policy & Code Changes below)
7. FY24: **Parking Video Cameras:** To fold into upgraded Park N Ride, KWIC and roofdecks.

### **GOAL 4: Reduce the Islands Carbon Footprint**

1. FY23: **Electric Charging Stations:** Applying for Corridor Grant. Due 6/16
2. FY22/23: **Public Information Efforts to Encourage Green Methods of Transportation:**
3. FY22/23: **Raise Parking Rates:** Complete. Researching Surge pricing.
4. FY22: **Mobility Study:** See Multimodal
5. FY22: **Explore additional E-vehicles for City Transportation:** See P4.G1.8
6. FY22: **Electric Buses:** See P4.G1.8
7. FY22: **Electric Charging Stations:** See P4.G1.8
8. FY22: **Policy and Code Changes:** Have ranked 10 priorities and met with Stantec to create task order/pricing. Should be able to start soon.

### **Related SAB Goals:**

1. Less Cars on the Road (Also See Multimodal Report)
  - a) Free & Frequent Buses: See *Strategic Plan P6.G2.1*
  - b) Create Revenue Source for Transit FY23
    - Infotainment & WiFi are ready. Waiting for Advertisement RFQ for implementation.
  - c) Continue to Implement Bike Ped Master Plan.
- **TCT/TAF:** Next mtg: June: Special Events Permit, Wayfinding.
  - May = Budget Cuts
  - April: Stantec, Regional EV, Budgets
  - Aug: Revenue
  - Sept
- **Florida Keys Transportation Coordination Committee:**
  - Next Meeting: TBA
- **FDOT TAP Grant:**
  - FY21: Final Mile: Approved at higher cost.
  - FY22: Wickers: Grant will be moved forward for FY24.
  - FY23: Salt Ponds Pathways: Might be dropping in order to move faster.

## Grants:

### Upcoming:

- **PROTECT Grant:** Due 8/18
- **HMGP Ian:** 4 Projects. Due 8/31.
- **Land and Water Conservation Fund**
- **Save America's Treasures.**
- **RAISE Grant:** Park N Ride
- **ARRPA Covid Funds:** Need to determine how to spend remaining Covid funds (if any remains)
- **FDEP 319(h) Grant.** Due Fall. Green Stormwater Infrastructure (GSI) construction, monitoring and education to reduce nonpoint source pollution from land use activities.
- **FDEP Water Quality Assistance Grant.** Due ???. Fund GSI construction with the goal to reduce nonpoint source pollution from land use activities.
- **EPA [Source Reduction Assistance Grant 7/22/22](#)**
- **FDEP Coastal Resilience Implementation Grants:** Due Sept 1. Not available until VA done.

### Applied For:

- ✓ **DOD [Defense Community Infrastructure Program \(DCIP\)](#):** BV Resiliency Hub & Fire Station 3.
- ✓ **FDEO CPTA:** Climate Action Plan 2.0 Due 6/16
- ✓ **Regional EV Project.** 2 EV chargers in Key West. Due 6/15
- ✓ **FDHR:** Historic Preservation at Mallory Square. Applied 6/1.
- ✓ **FDEO Defense Infrastructure.** Due 4/13. BV Resiliency Hub
- ✓ **OLDCC:** Due May 1. Waste To Energy.
- ✓ **FDOT Transportation Alternative Program:** Salt Ponds Feasibility. Ranked #2 for Monroe.
- ✓ **Covid HMGP:** White Street & Petronia Street Gravity Injection Well (~\$771K). Applied 12/21  
Monroe County LMS only allocated \$601K.

### Active Grants:

- **FDEM Watershed Master Plan:** Extension awarded!
- **EPA South Florida:** Awarded! Partnered with CFK on Water Quality Monitoring.
- **FHA Safe Streets and Roads for All:** Awarded!
- **FDEO Small Cities CV:** KOTS: Applied 11/1. Awarded!
- **FDEP Florida Resilient Coastlines Grant (\$905K)**
- **FDEO General Planning.**
  - **Key West Comprehensive Adaptation and Resiliency Implementation Plan (CARIP):** \$500k
  - **Duval Street Economic Corridor Resiliency Plan:** \$500k.
- **FDEO MIT General Infrastructure:** (\$150M/year for 3 years) 8 projects worth \$40,186,681

Fund	Score	Rank	Project Name (Lead)
402	38.0	4	RFI - Harris & 10th Streets: Stormwater Improvements
402	30.4	10	Tide Valves and Outfall Improvements
402	22.8	35	Fogarty & 3rd Streets: Pump Assist Well and Drainage Collection System/Outfall

- **Irma CDBG-DR Grant – Round 1:** (\$1.78M) Force Main (Match for Irma HMGP)
- **Irma CDBG-DR Grant – Round 2 (\$34M/\$100M):** Submitted 8 applications 6/30: FDEO awarded Harris/10<sup>th</sup> and the Force Main 1/22. Grant awards now closed.

LMS	Original HMGP Grant	Project Title	Fed Ask
8	Irma	Force Main Relocation Project (Infrastructure Hardening)	\$ 3,563,054

30	Irma	Harris Ave / 10th Expanded Neighborhood (Drainage)	\$ 1,376,269
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- **IRMA HMGP:** 10 projects: \$13.5M. Applied Aug 2018.

LM S	FEM A#	Status	Title
8	501-R	Needs Extension	Force Main Relocation Project
20	396-R	Complete	Dennis Street and Venetia Street Outfall
30	386-R	Expanding Scope / Extension.	Harris Ave / 10th Expanded Neighborhood (Kim) – Waiting on Modification #2.
16	441-R	Expanding Scope.	Wind-Retrofit(s) of First Responder Facilities (KarenW) - Awaiting Mod for time extension
13	451-R	Expanding Scope	Wind-Retrofit(s) of Public Service Facilities (KarenW): WWTP, Xfer Station, Palm Ave Public Works
25	493-R	Withdrawn	<del>Patricia Ashby Pump Station Well</del>
14	415-R	Withdrawn	<del>Fire Station 3 – FEMA 361 Upgrades</del>
9	231-R	Reallocating	<del>Tide Valves and Outfall Improvements</del>
15	492-R	<del>Cancelled, Reallocated</del>	<del>Generators for Critical Facilities Withdrawal request sent to FEMA.</del>

- **Michael HMGP Tier 3:** \$17M across 4 applications turned in 5/1.

Michael HMGP	Cost	Lead
Fire Station 3 - FEMA 361 Upgrades	\$ 9,907,473	Karen W.
Fleming / Grinnell Gravity Injection Well (Drainage)	\$ 630,015	Elizabeth Ignaffo
Fogarty Avenue and 3rd St Pump Assist (Drainage)	\$ 6,740,054	Elizabeth Ignaffo
White Street & Petronia Street Gravity Injection Well	\$ 630,015	Elizabeth Ignaffo

### Grants Planning

- **DOD Readiness and Environmental Protection Integration (REPI):** Preproposals due late Nov. Full proposals due in March.
- **FDEO Small Cities CDBG. July.** Project areas include Neighborhood Revitalization, Housing Rehabilitation and Commercial Revitalization. Separate, later funding for Economic Development.
- **PPP Grants:** Requested short list of funding opportunities for Private Public Partnership grants to prepare to proactively engage landlords and prospective new tenants of major shopping centers who have lost or are losing their anchor stores.
- **Urban Forestry Grant:** Fall 2022.
- **Safe Routes to School.** Postponed to next cycle. When?

### Sustainability Board

- **Next meeting:** June: Priority letter, EV letter & Salt Ponds letter.
  - May: Priorities, Sargassum
  - April: Priorities, KW Water Quality Improvement Plan Draft
- **Mt Trashmore** –Still needs heavy metal and H2S sampling. Awarded EPA grant for monitoring partnership with CoFK. New allegations of nearby benzopyrene need to be researched.