City of Key West Water Quality Improvement Plan

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The Strategic Plan for the City of Key West 2021-2024





The residents spoke: Water Quality is Important



Karen Bohnsack



Dr Nick Parr



Shelly Krueger



KEY WEST

Michelle Robinson



Brittany Burtner



• 5 Entities

- 8 Meetings
- 8 Programs
- 3 Plans



Completed WQPP Strategies To Date:

- ✓ Central Wastewater Treatment in 1989
- ✓ Upgraded to AWT standards 1999
- ✓ Outfall closed in 2000; Added Class I deep injection
- ✓ Eliminated septic tanks and cesspits
- ✓ UV treatment added in 2007
- ✓ WWTP accepts non municipal sources (marine sanitation devices)
- ✓ Ordinances prohibit dumping of leaves, fish scraps, etc into canals, marinas and nearshore waters
- ✓ Upload*ing* historical WQPP-generated monitoring data to WIN

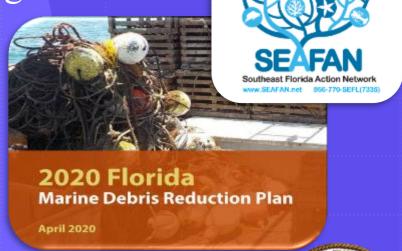


Draft Goals:

- 1) Increase Partnerships to address Marine Debris and Derelict Vessels
- 2) Ensure Adequate Staffing and Support to Effectively Manage/Advance the WQIP
- 3) Data Management
- 4) Maintain Adherence to Best Management Practices/Technology for Stormwater Mgmt
- 5) Evaluate Existing Water Quality Improvement Program
- 6) Incorporate Contaminants of Emerging Concern (CEC) into Monitoring Programs
- 7) Strengthen Regulations to Reduce Marine and Boater Pollution
- 8) Advocate for Upstream Water Quality Improvements
- 9) Determine WQ Risks and Mitigation Actions Derived from Climate Change
- 10) Participate in Targeted, Shared Educational Campaigns
- 11) Maintain Adherence to Best Management Practices/Technology for Wastewater Mgmt

1) Increase Partnerships to address Marine Debris / Derelict Vessels.

- a. Expand mooring fields
- b. Cross deputize City staff to report derelict vessels
- c. Promote SEAFAN.net for public reporting of derelict vessels/etc.
- d. Promote "Vessel Turn In" Opportunities
- e. Host partner workshop to find other potential synergies
- f. Increase monofilament receptacles at fishing areas
- g. Research other effective marine debris programs



2) Ensure Adequate City Staffing/Support to Effectively Manage/Advance the KW WQ Improvement Plan.

- a. Enact KW WQ Improvement Plan
- b. Participate in WQPP & annual operating planning
- c. Strengthen coordination with other local governments

3) Data Management

- a. Upload all qualifying data from marinas and landfill to public database
- b. Ensure all new data can be utilized in public database





4) Stormwater Best Management Practices/Technology

- a. Continue to modernize, elevate and harden equipment and infrastructure
- b. Update Stormwater Master Plan every 5 years
- c. Complete Green Infrastructure portion of Climate Adaptation Plan.
- d. Explore stormwater treatment opportunities for road elevation and other adaptation infrastructure
- e. Explore Canal Keepers program
- f. Educate public on annual project and expenditures









5) Evaluate Existing Water Quality Improvement Program

- a. Host Evaluation Workshop every 5 years to recommend changes to KW WQIP
- b. Ensure that corrective actions have effective monitoring programs
 - i. EPA Grant w CFK monitors H2S, ammonia & sucralose hotspot
 - ii. Key West Harbor Monitoring



6) Incorporate Contaminants of Emerging Concern into Monitoring

- a. EPA Grant with CFK monitors oxybenzone
- b. Test at KWWWTP to ID main CECs
- c. Test at KW Resort Utilities (& Big Coppitt?) to ID main CECs
- d. Annually review emerging research

7) Strengthen Regulations to Reduce Marine and Boater Pollution

- a. Enforce Clean Marina, Clean Boatyard Certifications
- b. Ensure adequate marine pumpout services
- c. Collaborate on shared language for pumpout regulations with other local governments

8) Advocate for Upstream Water Quality Improvements

- a. Support FKAA Research Efforts at Turkey Point
- b. Advocate for WQ Projects in the Everglades
- c. Advocate for improvements to mainland wastewater infrastructure
- d. Advocate for improvements to watershed mgmt practices affecting GOM
- e. Stay abreast of FK and SFL Ecosystem Connectivity Team rec's

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9) Determine WQ Risks & Mitigation Actions Derived from Climate Change

a. Complete Environmental Chapter of Adaptation Plan (habitat loss, long term SLR, acidification, Harmful Algal Blooms)

10) Participate in Targeted, Shared Educational Campaigns

- a. Serve on WQPP Outreach Sub-Committee, Advise on Communications Strategy
- b. Advocate for Priority Messaging (fertilizer, sunscreen, dumping, canals, climate change)

DRAFT (Water Quality Improvement Plan (1997)

11) Wastewater Management Best Management Practices/Technology

- a. Continue to modernize, elevate and harden equipment and infrastructure
 - i. Fleming Key Bridge Force main
 - ii. DOD Resiliency Grant, includes biogas energy.
- b. To the extent possible, consider treatment for EPCs
- c. Educate public on annual project and expenditures





FY24 Budget:

- \$ 100,000 Coral Reef Restoration
- \$ 40,000 CFK WQ Monitoring Partnership
- \$ 2,500 Educational Materials
- \$ 1,000 Monofilament Receptacles FWC
- \$ 500 Partner Workshop for Marine Debris

FY25 Budget:

\$50,000 WQIP Coordination

*Above budgets do not include the vast and important work done by Stormwater and Wastewater Utilities

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Questions?

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