

# Initial Framework to Guide a Florida Keys Water Quality Monitoring Program Evaluation

## Guiding Management Questions

The Management Committee suggests the following management questions be considered by the TAC as they undergo an evaluation of the Florida Keys water quality monitoring programs. These are based on the original requirements of the Florida Keys National Marine Sanctuary and Protection Act.

1. What sources of pollution are causing or contributing to existing or anticipated pollution problems in the Sanctuary?
2. How effective have management efforts been in reducing or eliminating sources of pollution?
3. What is our progress toward achieving and maintaining water quality standards, and toward protecting and restoring corals reefs and other living marine resources of the sanctuary?
4. Are current water quality standards sufficient for the protection and restoration of water quality, coral reefs, and other living marine resources of the sanctuary? If no:
  - Which water quality standards and/or targets are inadequate? Why? What data support these conclusions?
  - What water quality standards would be more appropriate for protecting coral reefs and other living marine resources in the sanctuary? Are sufficient data available or is more needed to inform such standards?

## Water Quality Monitoring Programs

The Management Committee recommends the following monitoring programs for inclusion in the evaluation.

- WQPP Water Quality Monitoring Program
- Florida Keys Reasonable Assurance Document Compliance Monitoring
- Residential Canal and Nearshore Water Quality Monitoring

## Evaluation Participants

Participants involved in the Florida Keys Water Quality Monitoring Program Evaluation may include:

- The Water Quality Protection Program Technical Advisory Committee (WQPP TAC)
- Additional subject matter experts as identified by the Steering Committee and/or Management Committee.

## Conflict of Interest

The Management Committee has identified the following opportunities to reduce conflict of interest in the evaluation process:

- TAC members who seek funding for these water quality monitoring programs or intend to bid on RFPs should disclose that information and recuse themselves from specific discussion on that project.

- Conflict of interest disclosures will be provided to the Steering Committee, along with the recommendations that are produced from the evaluation.

### Proposed Evaluation Process

- Review the objectives, approach, and results from the existing water quality monitoring programs.
- Review the management questions and evaluate which of those the water quality monitoring programs are able to answer currently (individually or combined).
- Where these monitoring programs are deemed insufficient to answer the management questions, identify why. What other information may be need to answer these questions? Consider parameters, temporal and spatial scale, etc.
- Identify whether other monitoring data exist that, when considered collectively with data from these monitoring programs, can help inform key management questions.
- Recommend potential changes to those programs to fill data gaps and improve their ability to inform key management questions.
- Consider whether these programs (or any potential changes to them) are consistent with regulatory requirements and able to provide data to support regulatory decision making. What actionable changes could be made based on these data?
- Identify if other products or tools that could be incorporated into these monitoring programs to improve data collection and support regulatory decision-making.

### Additional Information to Support the Evaluation

- Approximate budget breakdown for each water quality monitoring program included in the evaluation (salary, travel, boats, equipment, etc.).
- Current water quality standards that apply within the Florida Keys.
- Summary information on complimentary efforts or data sources (within EPA, DEP, SFWMD, FWC, etc.) related to evaluating water quality standards, or which otherwise may support this evaluation (e.g., sewage spill reports, HABs, seagrass, fish counts, etc.).
- USEPA and FDEP quality assurance requirements for sampling procedures and analytical methods: <https://floridadep.gov/dear/quality-assurance>.