

**BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

Meeting Date: November 14, 2007 Division: Engineering

Bulk Item: Yes No Department: Wastewater

Staff Contact Person: Elizabeth Wood

AGENDA ITEM WORDING: Discussion of Impaired Waters Rule, requirements, and possible approval of resolution authorizing the County Administrator to sign the Stakeholder Agreement committing Monroe County to complete those projects specified in the Middle (Duck Key); Boca Chica (Big Coppitt, Lower Sugarloaf, Sugarloaf-Cudjoe-Summerland, and Big Pine Key); and Lower Keys (Stock Island) Florida Keys Reasonable Assurance Documentation.

ITEM BACKGROUND: Under the Impaired Waters Rule, Total Maximum Daily Loads (TMDL) must be set for parameters causing the impairment unless the State Government can provide Reasonable Assurance that completion of projects in existing Master Plans and Capital Improvement Plans will result in required improvements in water quality. Approval to execute the resolution and execution of the Stakeholder Agreement provides Monroe County the opportunity to obtain compliance with water quality standards by completing presently planned projects. Alternatively, water quality compliance will become a regulatory activity, subject to federal permitting.

PREVIOUS RELEVANT BOCC ACTION: At the June BOCC meeting, the FKRAD Stakeholder Agreement was presented for initial review.

CONTRACT/AGREEMENT CHANGES:

STAFF RECOMMENDATIONS: Approval to execute resolution following approval by County Attorney.

TOTAL COST: \$0 **BUDGETED:** Yes NA No

COST TO COUNTY: \$0 **SOURCE OF FUNDS:** _____

REVENUE PRODUCING: Yes No **AMOUNT PER MONTH** _____ **Year** _____

APPROVED BY: County Atty OMB/Purchasing Risk Management

DOCUMENTATION: Included Not Required

DISPOSITION: _____ **AGENDA ITEM #** _____



Engineering Division MEMORANDUM

To: Dave Koppel, County Engineer

From: Elizabeth Wood, Sr. Administrator – Sewer Projects

Date: 11/8/2007

Re: County Participation in Florida Keys Reasonable Assurance Documentation

AGENDA ITEM WORDING: Discussion of Impaired Waters Rule, requirements, and possible approval of resolution authorizing the County Administrator to sign the Stakeholder Agreement committing Monroe County to complete those projects specified in the Middle (Duck Key); Boca Chica (Big Coppitt, Lower Sugarloaf, Sugarloaf-Cudjoe-Summerland, and Big Pine Key); and Lower Keys (Stock Island) Florida Keys Reasonable Assurance Documentation (RAD).

Chapter 99-395 requires Advanced Wastewater Treatment (AWT) in the Florida Keys by July 2010.

Submittal of RAD committing Monroe County to the projects required for compliance with 99-395 Laws of Florida may be sufficient to provide EPA assurance that the water quality standards necessary to improve water quality in the Florida Keys will occur without development of an additional Total Maximum Daily Load for nitrogen and phosphorus.

At a minimum, it is recommended that Monroe County commit to completing the Big Coppitt and Duck Key Regional AWT projects and BAT projects in the remaining Lower Keys project areas.

Alternatively, EPA will develop a TMDL for nitrogen and phosphorus that may require additional infrastructure to obtain compliance with a new federal standard.

RESOLUTION #2007-

A RESOLUTION OF MONROE COUNTY, FLORIDA, PERTAINING TO THE DEVELOPMENT AND IMPLEMENTATION OF THE FLORIDA KEYS REASONABLE ASSURANCE DOCUMENTATION; AUTHORIZING THE COUNTY MANAGER TO SIGN THE FKRAD STAKEHOLDER'S AGREEMENT; SUPPORTING CONTINUATION OF STAFF PARTICIPATION; PROVIDING FOR AN EFFECTIVE DATE

Whereas, the County recognizes that the Florida Keys are a unique and irreplaceable natural system that constitutes a local, State and National treasure; and

Whereas, the County recognizes that the Florida Keys are a linear collection of small watersheds which are hydrologically connected at the local level by the nearshore waters of the Keys; and

Whereas, the County recognizes that the Florida Keys are continuously impacted by nutrient concentrations in offshore waters associated with a wide range of natural sources and phenomena including global warming, deep ocean upwelling, micro-nutrients and viruses in African dust storms that reach the Keys; and

Whereas, the County recognizes that water quality in the nearshore waters of the Florida Keys are continuously influenced by their interactions with offshore waters that have elevated nutrient concentrations attributable to a wide range of anthropogenic activities far outside of the Florida Keys; and

Whereas, the County does not control or influence the major sources of nutrient loading into the offshore and nearshore waters surrounding the Florida Keys; and

Whereas, the County recognizes that a portion of the nutrients in the nearshore waters of the Florida Keys originate from anthropogenic activities occurring within the Florida Keys which are within the purview and scope of authority of federal, state and regional agencies and the local Keys governments; and

Whereas, the County recognizes that the major portions of the nutrients in the nearshore waters of the Florida Keys originate from anthropogenic activities outside of the Florida Keys and are not within the purview and scope of authority of the local Keys governments and agencies; and

Whereas, the County wishes, nevertheless, to control the nutrient loading derived from its own local wastewater, stormwater, and land development discharges; and

Whereas, the County recognizes that elevated nutrient concentrations have contributed to the degradation of water quality in the Florida Keys; and

Whereas, the County is interested in managing the water quality in the Florida Keys to preserve and improve the aquatic environment and living resources now existing in the Florida Keys; and

Whereas, the County recognizes that a comprehensive watershed approach is needed to reduce nutrients and address water quality issues within the Florida Keys; and

Whereas, a multitude of regulatory, technical assistance, research, and education programs has been developed and are well coordinated but must be used in combination with incentives and other non-regulatory tools to form a comprehensive approach to address the full scope of water quality issues within the Florida Keys; and

Whereas, a substantial level of federal, state, regional, local and private resources are being sought and committed to and a new coordinated approach must recognize and build upon effort and progress from the work of all of these programs; and

Whereas, the resource management actions referenced in Table 1 (included herein and made part of this agreement) of the Florida Keys Reasonable Assurance Documentation (FKRAD), which includes both projects that have been completed by the County since 2000 and projects that will be completed by 2015) are deemed effective in improving water quality within the County; and

Whereas, a Stakeholder's Agreement has been prepared confirming the management actions to which the County is committed to completed as part of this program.

Now therefore, in consideration of the foregoing premises, which are made part of this Agreement, the County hereby agrees to the following:

1. Monroe County understands that the Florida Keys Reasonable Assurance Documentation was developed through a collaborative effort between the Florida Department of Environmental Protection (DEP), local governments in the Florida Keys, other local, state, and regional agencies, and private and public interests to identify cost-effective actions that can be undertaken to achieve reasonable assurance for the nutrient discharge to nearshore waters in the Florida Keys;
2. The County Board of County Commissioners acknowledges that representatives from the County have participated in the development of the FKRAD and the management actions contained within it; and
3. On _____, 2007, the County Board of County Commissioners received a briefing on the contents of the FKRAD to date, and understands that, although there will be some revisions to the plan before it is adopted by order of the DEP Secretary, the revisions are not expected to significantly change any fiscal or policy impacts to the County.

Therefore, be it resolved on this, the ___ of July, 2007, that the Monroe County:

Section 1: Supports the continued development and finalization of the Florida Keys Reasonable Assurance Documentation, with the participation of representatives of the Monroe County.

Section 2: Commits to the implementation of the management actions identified in Table _____ of the Florida Keys Reasonable Assurance Documentation pertinent to the County, and for project identified for future implementation, will seek the necessary

approvals and funding to carry out the management actions for which the Monroe County has responsibility.

Section 3: Will give careful and fair consideration to future modifications of the FKRAD after its approval by state and federal agencies.

Section 4: Supports staff participation in the coordinated tracking of FKRAD implementation; in follow-up meetings with DEP and other stakeholders; and revising the FKRAD as necessary to ensure the management actions are being implemented.

Section 5: Endorses the continuation of a coordinated and comprehensive management approach to address and achieve the goals of the FKRAD for the portion of the FKRAD within the County.

Section 6: Authorizes the County Manager to represent the County in reviewing and signing the final Stakeholder's Agreement, prior to its adoption by DEP. However, if staff determines that revisions to the FKRAD after the date of this resolution significantly change any fiscal or policy commitments herein made by Monroe County, staff will brief the County Manager and County Board of County Commissioners and request further direction before agreeing to the plan.

DONE AND RESOLVED, this ____ day of ____ 2007, in regular session of the Monroe County Board of County Commissioners.

Mayor

Attest:

County Clerk

APPROVED AS TO FORM:

County Attorney

Florida Keys Watersheds Management Plan Stakeholders Agreement

Initial Concept Draft ❖ April ____, 2007

Background

Whereas, the Parties to this Agreement recognize that the Florida Keys are a unique and irreplaceable natural system that constitutes a local, State and National treasure; and

Whereas, the Parties to this Agreement recognize that the Florida Keys are a linear collection of small watersheds which are hydrologically connected at the local level by the nearshore waters of the Keys; and

Whereas, the Parties to this Agreement recognize that the Florida Keys are continuously impacted by nutrient concentrations in offshore waters associated with a wide range of natural sources and phenomena including deep ocean upwelling, micro-nutrient and viruses in African dust storms that reach the Keys; and

Whereas, the Parties to this Agreement recognize that water quality in the nearshore waters of the Florida Keys are continuously influenced by their interactions with offshore waters and loop currents that have elevated nutrient concentrations attributable to a wide range of anthropogenic activities far outside of the Florida Keys; and

Whereas, the Parties to this Agreement do not control the major sources of nutrient loading into the offshore and nearshore waters surrounding the Florida Keys; and

Whereas, the Parties to this Agreement wish, nevertheless, to control the nutrient loading derived from local wastewater, stormwater, and land development discharges to the degree possible; and

Whereas, the Parties to this Agreement recognize that elevated nutrient concentrations have contributed to the degradation of water quality in the Florida Keys; and

Whereas, the Parties to this Agreement recognize that a minor portion of the nutrients in the nearshore waters of the Florida Keys originate from anthropogenic activities occurring within the Florida Keys which are within the purview and scope of authority of the local Keys governments and agencies; and

Whereas, the Parties to this Agreement recognize that the major portions of the nutrients in the nearshore waters of the Florida Keys originate from anthropogenic activities outside of the Florida Keys and are not within the purview and scope of authority of the local Keys governments and agencies; and

Whereas, the Parties to this Agreement are interested in managing the water quality in the Florida Keys to preserve and improve the aquatic environment and living resources now existing in the Florida Keys; and

Whereas, the Parties to this Agreement recognize that a comprehensive watershed approach is needed to reduce nutrients and address water quality issues within the Florida Keys; and

Whereas, a multitude of regulatory, technical assistance, research, and education programs has been developed and are well coordinated but must be used in combination with incentives and other non-regulatory tools to form a comprehensive approach to address the full scope of water quality issues within the Florida Keys; and

Whereas, a substantial level of federal, state, regional, local and private resources are being sought and committed to and a new coordinated approach must recognize and build upon effort and progress from the work of all of these programs; and

Whereas, the resource management actions referenced in Table ____ (included herein and made part of this agreement) of the Florida Keys Reasonable Assurance Document are deemed effective in improving water quality within the Florida Keys watersheds.

Now therefore, in consideration of the foregoing premises, which are made part of this Agreement, the Parties hereby agree to the following.

I. Mission

The common mission of the signatories is to reduce the annual discharge of nutrients to the Florida Keys halo zone waters (WBIDs 6006A, 6006B, 6006C, 6009, 6010, 6011A, 6011B, 6011C, 6012A, 6012B, 6012D, 6012E, 6013A, 6013B, 6013C, 6013D, 6014A, 6014B, 6014C, 6016, 6017, 6018 AND 6019) in order to protect and enhance the unique marine environment of the nearshore waters of the Florida Keys. To this end the signatory stakeholders agree to:

1. Work together to assess and control anthropogenic sources of total nitrogen and total phosphorus being discharged to the halo zone waters;
2. Work individually to optimize reductions of locally generated nutrient concentrations in the local halo zones;
3. Work collaboratively to minimize discharges to waters of these watersheds emphasizing voluntary, incentive-based programs for protecting the environment and public health; and,
4. Coordinate and collaborate with federal, state, regional agencies/programs, local governments and interested parties to improve the coordination, use and benefits provided by existing regulatory, technical assistance, research, and education programs.

II. Guiding Principles

The signatory stakeholders agree to adopt the following guiding principles in achieving the mission:

1. Use a comprehensive, regionally integrated management approach to address Class III marine water quality standards for halo zone waters and encourage timely implementation of proposed and planned management actions within the Florida Keys watersheds.
2. Focus on management approaches which are technically feasible, economically practicable, and protective of the environment and public health.
3. Implement wastewater management actions – including wastewater collection, treatment and disposal practices – as required by Chapter 99-395 as a primary management practice for reducing nutrient discharges to the halo zone waters.
4. Implement stormwater management actions – including regulations, design standards and criteria, education programs, collection systems and treatment facilities, and O&M activities – to the maximum extent practicable throughout their watersheds to achieve Class III water standards in the halo zone waters.
5. Maximize the efficient coordination of federal, state, and regional agency resources and programs, and local resources and avoid unnecessary duplication of efforts
6. Where appropriate, pursue opportunities for joint projects that provide more cost effective solutions and may make better use of consolidated and coordinated funding of projects.

7. Seek reasonable, incentive based solutions that can be embraced by leaders and stakeholders in the Keys communities and at all levels of government.
8. Develop consensus measures of success that include monitoring of the progress of management actions.
9. Achieve results that satisfy regulatory requirements.
10. Employ water quality monitoring to measure the effectiveness of implemented water quality improvement measures.
11. Continue to make good faith efforts in funding incentive-based programs.
12. Participate in annual reporting activities that demonstrate successful reduction of nutrient discharges.

III. Organization

The signatories, through their own individual efforts, combined with interlocal cooperation and the integrated efforts of numerous federal, state and local programs, have created a fabric of regulatory, operational, capital construction and educational programs that function collectively as an integrated management plan for the multiple watersheds in the Florida Keys.

While no designated leader or management committee exists for this informal watershed plan, there are a number of oversight entities that provide guidance and leadership including:

- DCA (by virtue of the Keys' designation as a Area of Critical State Concern)
- Florida Keys National Marine Sanctuary Steering Committee
- Sanctuary Advisory Committee

Primary planning activities have been accomplished by the individual stakeholder governments for their jurisdictional areas. These planning activities have received a defacto integration effort through a number of studies, regulations and overlay planning including:

- Monroe County Sanitary Wastewater Master Plan;
- Monroe County Stormwater Master Plan;
- Florida Keys Carrying Capacity Plan;
- FDEP's wastewater and stormwater management regulations;
- Chapter 9J-5, Comprehensive Growth Management (monitored by DCA); and
- Chapter 99-395, Florida Statutes.

The combination of wastewater and stormwater regulatory programs, supplemented by the multiple leadership entities, will continue to address the specific impairments to water quality recognized at the time of signature.

IV. Education, Outreach and Implementation

For the signatory stakeholders to accomplish their mission, education on the issues and solutions, including effective transfer of knowledge and technology, are essential components of implementation of the efforts of the Technical Working Groups.

V. Stakeholder Involvement and Commitments

For the signatory stakeholders to be successful, the involvement of stakeholders is critical. As part of this framework agreement, a process for stakeholder involvement is developed and will be implemented by the signatories.

Specific commitments of the signatory stakeholders are referenced in Table ____ of the Florida Keys Reasonable Assurance Document by individual stakeholder.

VI. Measures of Success

Water quality issues in the Florida Keys watersheds have developed from various inputs over an extended period of time. Successfully addressing these issues will require sufficient time to implement management changes and evaluate their effect.

The signatories will make a good faith effort in implementing the projects and management activities referenced in the FKRAD to restore and maintain water quality conditions to the levels set forth in the FK Reasonable Assurance Documentation.

This commitment is based on mutual cooperation, shared objectives, fairness, and support and participation from the Parties to this Agreement.

We the undersigned Stakeholders agree, on August XX, 2007 to the foregoing Florida Keys Watersheds Stakeholder Agreement:

City of Key Colony Beach
Name, Title

County of Marathon
Name, Title

City of Key West
Name, Title

Florida Parks Service
Name, Title

City of Layton
Name, Title

Islamorada, Village of the Islands
Name, Title

City of Marathon
Name, Title

United States Navy
Name, Title

Florida Keys Aqueduct Authority
Name, Title

Key Largo Wastewater Treatment District
Name, Title

**We the undersigned Agencies and Programs agree, on August XX, 2007
to support the foregoing Florida Keys Watersheds Stakeholder Agreement:**

Florida Department of Environmental Protection
Director, South District
Jon Inglehart

United States Environmental Protection Agency,
Region IV
Name, Title

Florida Department of Community Affairs
Name, Title

United States Army Corps of Engineers
Jacksonville District
Name, Title

Florida Department of Health
Bureau of Onsite Sewage Programs
Gerald Briggs, Title

South Florida Water Management District
Carol Whele, Executive Director

Agency or Program
Name, Title

Agency or Program
Name, Title

Agency or Program
Name, Title

Agency or Program
Name, Title

Agency or Program
Name, Title

Interested Party
Name, Title

Potential Candidates for Inclusion:

- Everglades & Dry Tortugas National Parks *
- Florida Keys Environmental Fund *
- Florida Keys National Marine Sanctuary *
- Florida Keys National Wildlife Refuges – USF&WS *
- Florida Freshwater Fish and Game Conservation Commission
- National Marine Sanctuaries Program - NOAA *
- Sanctuary Advisory Council - FKNMS *

We the undersigned Interested Parties agree, on August XX, 2007 to endorse the foregoing Florida Keys Watersheds Stakeholder Agreement:

Audubon of Florida
Name, Title

Sierra Club
Name, Title

Conservancy of South Florida
Name, Title

Florida International University
South Florida Ecosystem Restoration Task Force
Name, Title

Earth Justice
Name, Title

The Nature Conservancy
South Florida/Florida Keys Program
Name, Title

Florida Keys Visitors and Convention Bureau
Name, Title

Thousand Friends of Florida
Name, Title

Monroe County Commercial Fishermen
Name, Title

Interested Party
Name, Title

Reef Relief
Name, Title

Interested Party
Name, Title

Table MC - 2
Monroe County Wastewater Program
Project Status as of January 2007

Service Area (District)	Sewer Area	Status	% Connected	EDUs Connected	EDUs EDUs	EDUs Remaining	Status
Stock Island	South Stock Island	Connection Completed	65%	697	1,072	375	Design of upgrade to AWT and code enforcement underway
Bay Point	Bay Point	Connection Completed	85%	359	429	70	Connection coordinated by FKAA
Big Coppitt	Shark Key, Big Coppitt, Geiger Key, Rockland Ocean and Rockland Gulf; may	Design & Construction			1,700 - 2,100		Force main under construction, design of treatment facility being finalized for bid in June 2008
Cudjoe Summerland	Upper Sugarloaf, Cudjoe Key and Summerland Key	Design & Construction			1,860		Collection system and treatment system design in progress
Lower Sugarloaf	Lower Sugarloaf	Planning			600		Scheduled for design in 2008
Big Pine Key	Ramrod Key, Little Torch Key, and Big Pine Key	Planning			3,850		Scheduled for design in 2007
Little Venice	Little Venice	Connection Completed	92%	865	939	74	Connection coordinated by FKAA
Duck Key	Duck Key	Design & Construction			850		Collection system design ready for bid, Treatment system in evaluation
Conch Key	Conch Key	Connection Completed	72%	107	150	43	Connection coordinated by FKAA