

RESOLUTION NO. 08-07-07

**A RESOLUTION OF THE BOARD OF COMMISSIONERS FOR
THE WATER QUALITY PROGRAM FOR THE FLORIDA KEYS
NATIONAL MARINE SANCTUARY**

WHEREAS, Congress recognizing the degradation of the Florida Keys ecosystem due to direct physical impacts and indirect impacts passed The Florida Keys National Marine Sanctuary and Protection Act of 1990, Public Law 101-605, and

WHEREAS, A key aspect of the Water Quality Protection Program in the act is “to restore and maintain the chemical, physical, and biological integrity of the Sanctuary”, and

WHEREAS, The National Marine Sanctuary Program Act of 1992, H.R. 5617 required that the EPA and the State of Florida implement the Water Quality Protection Program in coordination with NOAA; and

WHEREAS, Studies show the ebb and flow of the daily tidal cycle creates the force that drives the rapid exchange between ground water and surface waters; and

WHEREAS, Studies show the lack of nutrient removal from domestic wastewater has resulted in the addition of nutrients-rich wastewaters degrading confined waters and adjacent near shore waters, and

WHEREAS, The Florida Area Protections Act FLA. Stat (2000) 380.0552 (3) designated the Keys as an “area of critical State concern”, and

WHEREAS, In Executive Order 98-303, Florida’s Governor established that “to enhance water quality in the Keys all wastewater discharge shall be treated to Advanced Wastewater Treatment of Best Available Technology”, and

WHEREAS, Florida’s Governor charged relevant State and Local Agencies and Governmental entities to coordinate with Monroe County to execute the year 2010 comprehensive plan, and

WHEREAS, the survival of the existing Florida Marine Ecosystem is dependent upon clear, low-nutrient waters, and

WHEREAS, Great efforts are being made by Federal, State, and Local Governments along with all the residents of the Florida Keys to restore degraded near shore waters by installing Sanitary Sewer Systems and Advanced Wastewater Treatment plants throughout the Keys,

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF
THE KEY LARGO WASTEWATER TREATMENT DISTRICT;**

Section 1. The relevant Local Agencies and the Florida Keys community are dedicated to completing the work of providing sewer and stormwater infrastructure and Advanced Wastewater Treatment or Best Available Technology treatment in order to restore our near shore environment.

Section 2. These agencies and the community seek to build funding partnerships with the Federal government and the State of Florida so that this partnership can be carried on in as expeditious a fashion as possible. This includes continued funding support from the State of Florida and increased FY 08 Energy and Water Development Federal Funding for the Florida Keys Water Quality Improvement Program.

Section 3. These agencies and the community urge the US Army Corps of Engineers and the President of the United States due to the large water quality restoration component of the project to begin budgeting for the Florida Keys Water Quality Improvement Project beginning with the FY 09 budget cycle in order to make a meaningful contribution to completing the necessary water quality restoration work as soon as possible.

Section 4. APPLICABILITY AND EFFECTIVE DATE.

This resolution shall take effect upon adoption by the Board of Commissioners.

RESOLVED AND ADOPTED THIS 19th DAY OF June 2007

The foregoing RESOLUTION was offered by Commissioner Tobin, who moved its approval. The motion was seconded by Commissioner Bullock, and being put to a vote the result was as follows:

	AYE	NAY
Chairman Claude Bullock	<u> X </u>	_____
Commissioner Gary Bauman	<u> X </u>	_____
Commissioner Susan Hammaker	<u> X </u>	_____
Commissioner Andrew Tobin	<u> X </u>	_____
Commissioner Norman Higgins	<u> X </u>	_____

The Chairman thereupon declared Resolution No. 08-07-07 duly passed and adopted the 19th day of June, 2007.


KEY LARGO WASTEWATER TREATMENT DISTRICT

BY: 
Chairman Gary Bauman

ATTEST:


Carol Walker, Clerk

Approved to as to form and legal sufficiency


District Counsel, Thomas M. Dillon



RESOLUTION NO. 08-07-07
A RESOLUTION OF THE BOARD OF COMMISSIONERS FOR
THE WATER QUALITY PROGRAM FOR THE FLORIDA KEYS
NATIONAL MARINE SANCTUARY

WHEREAS, the Florida Keys National Marine Sanctuary (Sanctuary) is an ecosystem of statewide and national significance, including mainland America's only living barrier coral reef and the largest documented semi-continuous seagrass bed on earth; and

WHEREAS, the health of the Florida Keys coral reef ecosystem is dependent upon clear, low-nutrient waters, and

WHEREAS, the Sanctuary is the nation's most visited national marine sanctuary and its boundaries encompass John Pennekamp Coral Reef State Park, Florida's most visited state park; and

WHEREAS, the federal government and the State of Florida are directed by Public Law 101-605, the Florida Keys National Marine Sanctuary and Protection Act of 1990, to develop a comprehensive Water Quality Protection Program for the Sanctuary to "restore and maintain" the water quality, coral reefs, and other living marine resources of the Florida Keys environment; and

WHEREAS, the National Marine Sanctuaries Program Amendments Act of 1992, H.R. 5617, require that the U.S. Environmental Protection Agency (EPA) and the State of Florida implement the Water Quality Protection Program in coordination with the National Oceanic and Atmospheric Administration; and

WHEREAS, technical studies have shown that the existing wastewater management facilities in the Florida Keys, including cesspits, conventional septic systems and package plants, are inadequate and have resulted in degradation of the semi-confined and adjacent near shore waters; and

WHEREAS, scientific studies demonstrate that the ebb and flow of the daily tidal cycle results in a tidal pumping phenomenon that drives the relatively rapid exchange between ground and surface waters; and

WHEREAS, federal, state, local government, businesses and community organizations are working to restore water quality in the Florida Keys, which has a favorable effect on the environment and economy of Monroe County; and

WHEREAS, the Steering Committee for the Water Quality Protection Program of the Sanctuary seeks to coordinate federal, state and local wastewater and storm water management initiatives; and

WHEREAS, the Monroe County Year 2010 Comprehensive Plan (1997) mandated nutrient loading levels be reduced in Monroe County by the year 2010; and

WHEREAS, in 1998, the Florida Governor issued Executive Order 98-309 that directed

local and state agencies to coordinate with Monroe County to implement the Year 2010 Comprehensive Plan and eliminate cesspits, failing septic systems, and other substandard on-site sewage systems; and

WHEREAS, Section 6, Chapter 99-395, Laws of Florida, sets statutory effluent and disposal standards and associated compliance schedules for existing and new wastewater treatment systems in Monroe County. These standards address treatment for several water quality constituents and require best available technology (BAT) standards for onsite sewage treatment and disposal systems and sewage treatment facilities with flows less than 100,000 gallons per day (gpd), and advanced wastewater treatment (AWT) standards for sewage treatment facilities with design flows greater than or equal to 100,000 gpd. All existing wastewater treatment facilities and onsite systems must be upgraded to either BAT or AWT effluent standards by July 1, 2010, while new or expanded sewage treatment facilities must meet the requirements at the time of permitting; and

WHEREAS, under authority of Public Law 106-554, the Florida Keys Water Quality Improvements Program, dated December 21, 2001, the Army Corps of Engineers is authorized to provide up to \$100,000,000 in technical and financial assistance to carry out projects for the planning, design and construction of treatment works to improve water quality in the Sanctuary. This Act requires a 35% local government funding match to improve poorly functional or non-existent wastewater and storm water infrastructure; and

WHEREAS, the City of Layton has completed its \$5.7 million wastewater management system, which includes Long Key State Park, and connections are nearly complete. This project was funded with a \$3.35 million grant from the State Legislature and local match; and

WHEREAS, the Village of Islamorada has completed the North Plantation wastewater treatment plant utilizing State grants totaling \$10.3 million, a Clean Water State Revolving Fund (CWSRF) loan of \$4.6 million, and a Federal Emergency Management agency (FEMA) grant of \$1.8 million. This plant is in operation and the Village is considering various options for expanding the service area; and

WHEREAS, the Key Largo Wastewater Treatment District (KLWTD) has completed the Key Largo Trailer Village/Key Largo Park wastewater management system utilizing State grants totaling \$3.7 million, a CWSRF loan of \$0.9 million, and a FEMA grant of \$5.2 million. This plant is in operation and the KLWTD is currently expanding this system to serve the northern half of Key Largo utilizing a State grant of \$6.038 million, \$20 million from Monroe County, and local match. The total cost for this expansion is estimated to be \$54.5 million; and

WHEREAS, the City of Marathon has completed the Little Venice wastewater management system utilizing an EPA grant of \$4.328 million, State grants totaling \$3.4 million and local match. Marathon is also currently constructing the wastewater management system for the Sombrero Beach area using State grants totaling \$8.1 million and a CWSRF loan currently at \$8.7 million. The total cost for this system is estimated to be \$25.7 million. Marathon has advertised for bids for the design and construction of a wastewater management

system for the Coco Plum area and the total cost for this system is estimated to be \$11.5 million; and

WHEREAS, Monroe County has completed the Bay Point wastewater management system utilizing a FEMA grant of \$3.0 million. This plant is in operation and the County is considering the service area to include Saddlebunch Key. Monroe County has also begun construction of the Big Coppitt wastewater management system utilizing a \$10.962 million State grant and local match. The total cost for this system is estimated to be \$32.5 million; and

WHEREAS, the United States Congress has only appropriated a total of \$7,158,000 for the Florida Keys Water Quality Improvements Program that was authorized for \$100 million.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE KEY LARGO WASTEWATER TREATMENT DISTRICT:

Section 1. Hereby requests that the President of the United States and U.S. Army Corps of Engineers include in the FY 2009 Budget significant and meaningful funds that were authorized by Congress in the Florida Keys Water Quality Improvements Program, Public Law 106-554.

Section 2. Hereby urges the Congress of the United States to appropriate significant and meaningful funds that were authorized in the Florida Keys Water Quality Improvements Program, Public Law 106-554.

Section 3. Hereby urges the Florida Legislature to appropriate to the Florida Keys significant and meaningful funds for required wastewater and necessary storm water infrastructure upgrades.

Section 4. APPLICABILITY AND EFFECTIVE DATE

This resolution shall take effect upon adoption by the Board of Commissioners.

RESOLVED AND ADOPTED THIS 10th DAY OF July 2007

The foregoing RESOLUTION was offered by Commissioner _____, who moved its approval.
The motion was seconded by Commissioner _____, and being put to a vote the result was as follows:


	AYE	NAY
Chairman Gary Bauman	<input checked="" type="checkbox"/>	_____
Commissioner Claude Bullock	<input checked="" type="checkbox"/>	_____
Commissioner Susan Hammaker	<input checked="" type="checkbox"/>	_____
Commissioner Andrew Tobin	<input checked="" type="checkbox"/>	_____
Commissioner Norman Higgins	<input checked="" type="checkbox"/>	_____

The Chairman thereupon declared Resolution No. 08-07-07 duly passed and adopted the 10th day of July, 2007.

KEY LARGO WASTEWATER TREATMENT DISTRICT

BY: 
Chairman Gary Bauman

ATTEST:


Carol Walker, Clerk

Approved to as to form and legal sufficiency

District Counsel, Thomas M. Dillon



**WATER QUALITY PROTECTION PROGRAM
FLORIDA KEYS NATIONAL MARINE SANCTUARY**

Proposed FY 2008 Budget – 5/03/07

●	Water Quality Monitoring -	EPA	\$450,000
●	Coral Reef Monitoring -	EPA NOAA/CRCP	\$200,000 \$180,000?
●	Seagrass Monitoring -	EPA NOAA/COP	\$130,000 \$105,000?
●	Data Management -	EPA	\$ 60,000
●	Florida Keys Office -	EPA	\$ 5,000
●	Public Education/Outreach -	EPA NOAA	\$ 20,000 \$?
●	SEAKEYS Project -	EPA NOAA	\$ 50,000 \$?
●	Little Venice Canal Monitoring -	FDEP	\$100,000?
●	Special Studies/Demo Projects -	EPA	\$100,000
●	Evaluation of Science Program* -	EPA	\$ 15,000
●	Environmental Finance Outreach -	EPA	\$ 40,000
●	State of Knowledge Document -	EPA	<u>\$ 25,000</u>
			Total \$1,480,000?

*Total estimated cost for this effort is \$125,000; EPA provided \$110,000 of FY 2006 funds.

EPA Total - \$1,095,000 – 74.0%
 NOAA Total - \$285,000? – 19.2%
 SFWMD Total - \$0? - 0%
 FDEP Total - \$100,000? – 6.8%
 Monroe County Total - 0%

EPA South Florida Geographic Initiative Funds

FY 2007 Funds Available - \$1,565,000

WQPP –70.0%

WATER QUALITY

Water quality continues to be a major concern in the Florida Keys National Marine Sanctuary (FKNMS). The Water Quality Protection Program (WQPP), mandated by Congress and developed jointly by EPA, NOAA, the State of Florida, and Monroe County, has been an evolving and effective approach for identifying water-quality problems and management solutions. The Steering Committee for the WQPP has been very active in coordinating and implementing wastewater and storm water master plans.

Innovative Financing of Wastewater and Storm Water Upgrades

In 2006, the Steering Committee established a Subcommittee on Innovative Financing of Wastewater and Storm Water Upgrades to develop recommendations on alternative sources of funding for projects. Based upon the recommendations of that Subcommittee, the EPA provided \$40,000 to the University of North Carolina Environmental Finance Center (EFC) for targeted financial assistance to communities in the Florida Keys. The EFC will work with interested entities to identify, secure, and manage funds for wastewater and storm water infrastructure improvements.

Water Quality Communications Plan and Water Quality Awareness Month

The Steering Committee recognized the importance of keeping the public informed on water quality issues and recommended the development of a public education plan. A working group consisting of members of the Steering Committee, WQPP Management Committee, and other partners and stakeholders prepared a "Water Quality Communications Plan". The goal of the plan is to build an understanding of the importance of restoring and maintaining good water quality in the Florida Keys ecosystem, including the role of individual, local, and regional impacts. February 2007 was designated as "Water Quality Awareness Month" which included numerous public service announcements and press releases on the importance of maintaining or improving water quality. The Water Quality Awareness Month was timed to reach the maximum number of Keys residents and tourists.

Long-term Monitoring and Special Studies Program

The WQPP has been productive in providing the extensive monitoring and research data needed to implement science-based management of the Sanctuary. The twelfth consecutive year of long-term status and trends monitoring for seagrass, coral reef, and water quality has been completed at a cumulative cost of approximately \$12 million. Three special studies were selected for funding in 2006 based upon recommendations of an external peer review panel and the FKNMS Technical Advisory Committee. The studies include investigations on movement of nitrogen in Sanctuary waters, the ecological function of upper Keys patch reefs, and the diversity of pathogenic viruses in Keys waters. Results of the monitoring projects are presented in the Research and Monitoring section.

One Special Study was completed in 2006, "Endocrine Disruptors and Pharmaceutical Metabolites in Nearshore Waters of the FKNMS." Unfortunately, the results of this study may not be indicative of actual concentrations because of analytical problems that resulted in poor detection limits compared to other studies. Of fifteen compounds analyzed, only acetaminophen was detected in canal waters.

Total Maximum Daily Load Program

The FDEP completed a water quality monitoring program in Monroe County as part of the Phase 2 assessment of the Total Maximum Daily Load (TMDL) Program. Those data will be used as a baseline

KEY WEST
&
KEY LARGO

to evaluate future water quality improvements anticipated from ongoing wastewater and storm water projects identified in the WQPP and Monroe County Sanitary Wastewater and Storm Water Master Plans. In light of the anticipated improvements, FDEP is pursuing preparation of a Reasonable Assurance Document in lieu of development of TMDLs in the Keys. A technical committee has been guiding the development of the document for the past year. If approved, the document would preclude calculating and achieving load reductions mandated by a TMDL modeling study. However, the Reasonable Assurance Document requires commitments by the County and municipalities to continue activities defined in the document to achieve desired water quality goals. *A*

No Discharge Zone

A No Discharge Zone (NDZ) was implemented in State waters within the FKNMS in 2002 and has been successful in reducing water pollution. An education and outreach initiative that began in the spring of 2003 is continuing. "Pump It, Don't Dump It" fliers have been distributed in all marinas in the Keys and public service announcements are regularly aired on local radio and television broadcasts. At present there are approximately XX pumpout facilities available throughout the Keys. Mobile pumpout vessels are now operating in Key West, Marathon, and Key Largo. A \$250K grant from FDEP to Monroe County has assisted local governments in the management of boat wastewater, including collection and transportation of solid wastes.

Key West has implemented a comprehensive Mooring Field Plan that addresses anchoring, mooring, and disposal of vessel-generated wastewater. The Key West Dockmaster reports that approximately XXXXX gallons of wastewater has been pumped out from vessels and properly disposed since the Mooring Field Plan went into effect in 2002. Marathon has also implemented a comprehensive mooring, anchoring and disposal plan in Boot Key Harbor. Approximately 114,300 gallons of wastewater was collected and properly disposed from vessels from October 2005 through September 30, 2006. This is an increase of 19,000 gallons over the amount of vessel generated wastewater reported pumped out last year. Three pump-out vessels are now operating in Boot Key Harbor and have facilitated the ease of pumping out. Because of these actions, there has been a significant reduction in the amount of vessel-generated nutrients and human pathogens entering nearshore waters.

STATUS OF WASTEWATER PROJECTS *95%*

Key Largo Wastewater Treatment District

Wastewater collected by the District will be treated at a centrally located regional advanced wastewater treatment (AWT) facility with deep well injection and a design capacity of 2.3 MGD. The collection system will be designed and constructed as eleven collection basins, which when completed will serve approximately 14,000 equivalent dwelling units (EDUs) at an estimated cost of \$145 million, excluding now complete Key Largo Trailer Village/Key Largo Park project. The design of the regional wastewater treatment plant is 65% complete. Construction bids are scheduled for October 2007 and completion and start up is anticipated in 2009.

B-30%
C-NEB
At Key Largo Park and Key Largo Trailer Village approximately 560 out of 684 homes (82%) have been connected to an interim treatment facility. The Key Largo Park project was funded in part by a \$1.8 million grant from a 2002-2003 legislative appropriation. Key Largo Trailer Village was funded in part by a \$5.2 million grant from FEMA and a \$1.9 million grant from DCA.

TRANS LINE TO SOUTH