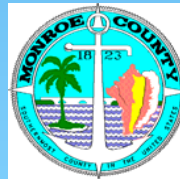


Status of Wastewater Implementation

September 26, 2012



Elizabeth Wood
Monroe County, Sr. Administrator – Sewer Projects

Compliance Mandate

- * Chapter 99-395 was replaced by Chapter 2010-205 and amended Florida Statute 381.0065 (4) (I) and 403.086 (10) requiring the following by December 31, 2015:
 - * Effluent from Wastewater Treatment facilities having design capacities greater than or equal to 100,000 gallons must not exceed the following concentrations:
 - * 5 mg/l Biological Oxygen Demand,
 - * 5 mg/l Suspended Solids,
 - * 3 mg/l Total Nitrogen, and
 - * 1 mg/l Total Phosphorus.

 - * Effluent from Onsite Sewage Treatment and Disposal Systems (OSTDSs) with capacities less than 100,000 gallons must not exceed the following concentrations:
 - * 10 mg/l Biological Oxygen Demand,
 - * 10 mg/l Suspended Solids,
 - * 10 mg/l Total Nitrogen, and
 - * 1 mg/l Total Phosphorus.

Compliance Mandate

- * Chapter 2010-205 requires Monroe County, each municipality, and those special districts responsible for wastewater treatment to complete the projects detailed in the Wastewater Master Plan (2000).
- * The adoption of mandatory connection ordinances by local governments provides legal requirement to connect.

Management Entities and Service Area



Significant Development

- * The FY2013 State Budget included \$50 M for Keys Wastewater projects.
- * This is the first appropriation of the \$200 million grant authorized as a result of the Keys-wide collaborative effort to document status in 2007 (Keys Wastewater Plan).
- * Appropriation requires contracts for construction by September 2012 and March 2013 for Islamorada and Cudjoe Regional, respectively.

Ocean Reef

North Key Largo Utility Corporation

- * Upgrade and expansion of 0.66 Million Gallons per Day Facility complete.
- * All properties are connected.
- * Upgrade and expansion project engineering and construction costs of approximately \$15 million paid entirely by users.

Key Largo

Key Largo Wastewater Treatment District

- * Dedication of 1.96 Million Gallon per Day Regional Wastewater Treatment Facility held on 10-19-10.
- * 30 day notices have been sent to all properties within the KLWTD service area (excludes unique properties).
- * Of the 15,025 EDUs in Key Largo, 73% or 11,000 EDUs are connected.
- * Over 50 FDEP permitted package plants have been abandoned.

Florida Keys Aqueduct Authority

- * The Florida Keys Aqueduct Authority (FKAA) is responsible for the construction, operation and maintenance of the Layton, Duck Key/Conch Key, Cudjoe, Baypoint, and Big Coppitt facilities.



Big Coppitt Florida Keys Aqueduct Authority

- * Dedication of the 322,000 gallon per day treatment facility held on July 14, 2009.
- * FKAA has sent second reminder notices to unconnected properties.
- * Construction Cost: \$36.5 million (does not include onsite plumbing or abandonment)
- * Funding
 - State - \$11 million
 - Local grants (sales tax) - \$18 million
 - System development Fees - app. 7.5 million

Duck Key

Florida Keys Aqueduct Authority

- * The Florida Keys Aqueduct Authority became owner and took over operations of the Duck Key Wastewater Treatment Plant (WWTP) in May 2006. The WWTP underwent extensive redesign in 2011 and was upgraded to Advanced Wastewater Treat (AWT) Standards. In addition, the WWTP now has the capacity to treat 250,000 gallons of wastewater per day.
- * The Duck Key WWTP utilizes 4-stage Bardenpho process with cloth media filters followed by chlorination disinfection process before the disposal of ground water injection or reuse land application (irrigation).

Duck Key

Florida Keys Aqueduct Authority

- * The wastewater collection system serving Conch Key and Hawk's Cay Resort is completed and contributing flows to the WWTP. The collection system serving residential Duck Key is currently being constructed as part of an overall utilities upgrade project.
- * The utilities upgrade project located on Duck Key is divided into seven (7) phases. Construction of phases 1, 2 and 3 is complete and residents have been invited to connect. Currently, construction activities for phases 4, 5 and 6 have commenced and are expected to be completed in April 2013. Bids are being accepted for phase 7 until July 12, 2012.

CENTRAL WASTEWATER COLLECTION PHASING SCHEDULE DUCK KEY



Cudjoe Regional Florida Keys Aqueduct Authority

- * Includes more densely populated areas of Big Pine Key through Lower Sugarloaf in centralized facility and less dense areas in decentralized system.
- * Proposals due back for Design Build of Outer Island Collection System later this year.
- * Bids due back for construction of Inner Island collection system and WWTP later this year. Anticipated to begin in early 2013 with service available in some areas as early as the end of 2014.
- * Construction estimated to cost \$150 million.

Implementation Status

* July 2011

Service Available	Construction	Design
64%	15%	21%

* September 2012

Service Available	Construction	Design
73%	6%	21%

Connection Report

Service Area	EDUs	Connected	Percent Connected
Ocean Reef (NKLUC)	1,884	1,884	100%
Key Largo (KLWTD)	15,025	11,000	73%
Islamorada	8,468	979	12%
Layton	351	351	100%
Duck Key/Conch Key	1,454	1,051	72%
Key Colony Beach	1,502	1,502	100%
City of Marathon	8,298	4,467	54%
Cudjoe	8,600		
Big Coppitt	1,713	1,358	79%
Stock Island***	2,750	2,650	96%
Key West	24,075	24,075	100%
Total	74,120	49,317	67%

	Design
	Compliant
	Project Funded and under Construction

Potential Subsidy

- * Continued discussion about referendum to extend discretionary sales tax which sunsets in 2018.
- * This approach splits the cost between visitors and residents.
- * Continued Keyswide effort for future State and Federal appropriations is necessary to deliver projects with affordable rates.