

Status of Wastewater Implementation

February 20, 2013



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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



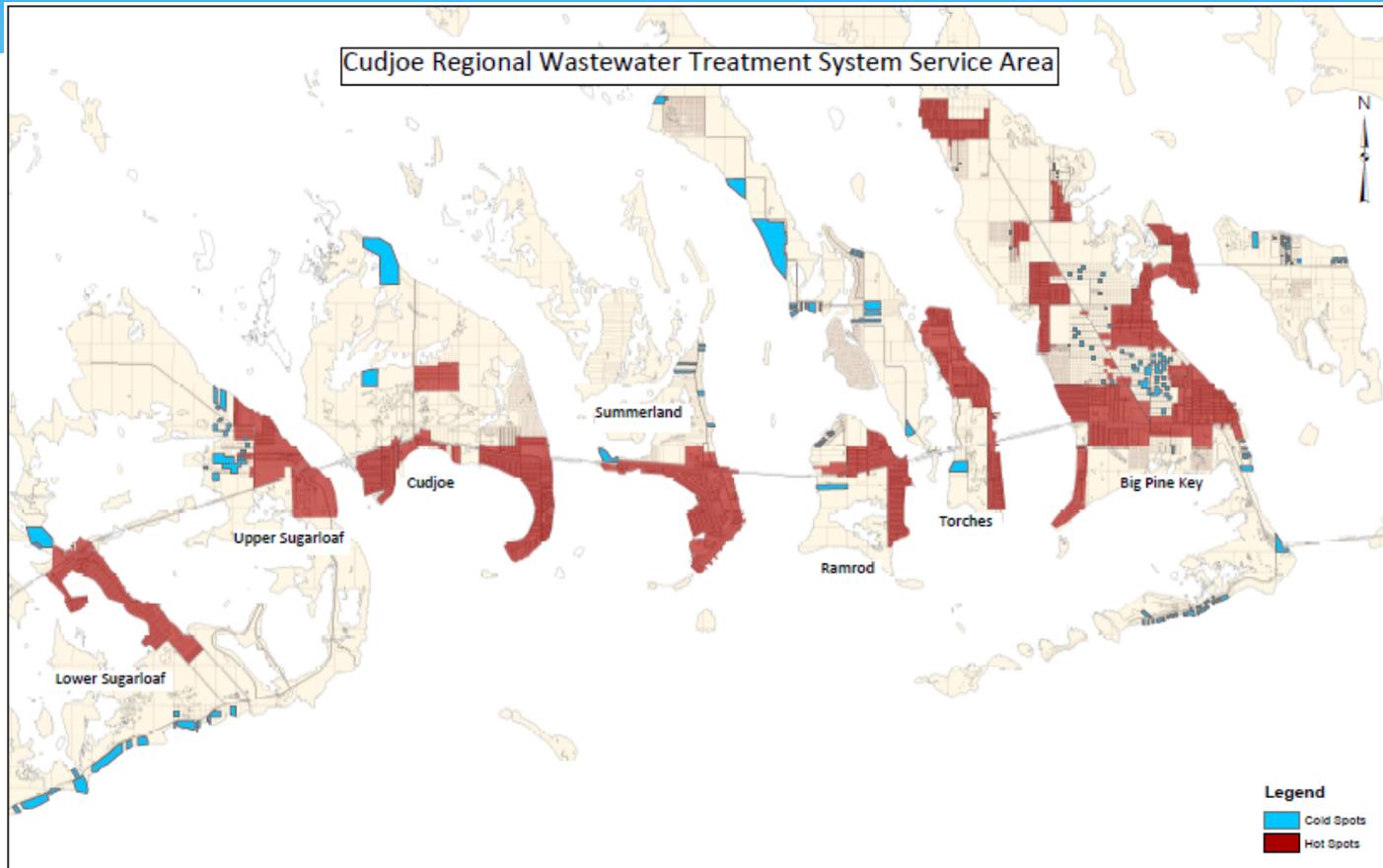
Further Significant Development

- * 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 Keyswide collaborative effort to document status in 2007 (Keys Wastewater Plan)].
- * Sales Tax Referendum approved by voters (just under 70% precinct wide).

Cudjoe Regional

- * Contracts are in place for the construction of the Cudjoe Regional Centralized Treatment Facility as required by March 2013 deadline for State Assistance Grant.
- * Projects are broken into 3 contracts: Treatment Plant, Inner Island (Upper Sugarloaf, Cudjoe and Summerland), and Outer Island (Low Sugarloaf and Ramrod north to Big Pine Key).

Cudjoe Regional



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 15,300 EDUs in Key Largo, 76% or 11,624 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.

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.

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)	15,300	11,525	75%
Islamorada	8,483	976	12%
Layton (FKAA)	351	351	100%
Duck Key/Conch Key (FKAA)	1,454	1,051	72%
Key Colony Beach	1,502	1,502	100%
City of Marathon (Parcels)	5,812	3,627	62%
Cudjoe (FKAA)	8,600		
Big Coppitt (FKAA)	1,720	1,359	79%
Baypoint (FKAA)	437	421	96%
Stock Island (KWRU)	2,750	2,650	96%
Key West	24,075	24,075	100%
Total	72,368	49,421	68%