

CUDJOE REGIONAL WASTEWATER PROGRAM

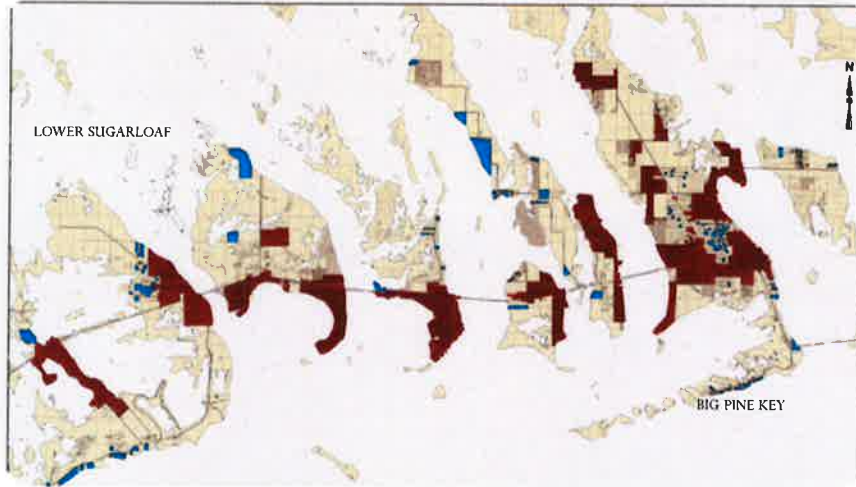


September 2012

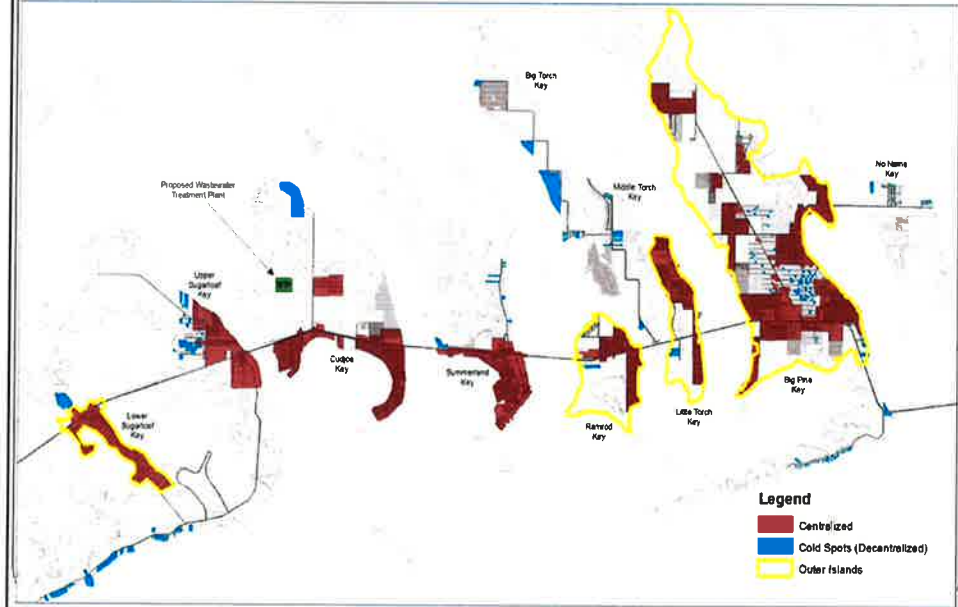
Cudjoe Regional Service Area



CUDJOE REGIONAL SERVICE AREA



CUDJOE REGIONAL PROGRAM AREAS



CUDJOE REGIONAL WASTEWATER PROGRAM

The Program includes four main projects

- An Advanced Wastewater Treatment Plant
 - The Inner Islands' Collection Systems
 - The Outer Islands' Collection Systems
 - The Decentral On-site Systems
- *(Anticipate adding water mains in certain areas with older pipes) -*

CUDJOE REGIONAL WASTEWATER PROGRAM

Wastewater Treatment Plant (WWTP)

- 950,000 gallons per day advanced treatment system
- Site preparation work, access roadway

Hard bid to Prequalified Contractors

- **Advertise for Bids – Sept. 20, 2012**
- **Open Bids – October 26, 2012**



CUDJOE REGIONAL WASTEWATER PROGRAM

Inner Islands Collection System

- Gravity and Low Pressure Collection Systems
 - Approximately 3,500 Residential and Commercial EDU *
- Transmission Pipeline along US1

Hard bid to Qualified Contractors

- **Advertise for Bids – August 31, 2012**
- **Open Bids – October 30, 2012**

**EDU – Equivalent Dwelling Unit*

CUDJOE REGIONAL WASTEWATER PROGRAM

Outer Islands' Collection Systems

- Collection and Transmission Pipes
- 5,300 EDUs

Design / Build Procurement

- | | |
|-----------------------------------|--------------------|
| • Request for Qualifications | May 25, 2012 |
| • Submittals Due | July 20, 2012 |
| • Shortlist D/B Firms | August 28, 2012 |
| • Issue RFP* to Shortlisted Firms | September 10, 2012 |
| • Receive D/B Prices | November 16, 2012 |
| • Board Approval of D-B Contract | December 19, 2012 |

* Request for Proposals

CUDJOE REGIONAL WASTEWATER PROGRAM

The Central Area Collection Systems on the Islands are a combination:

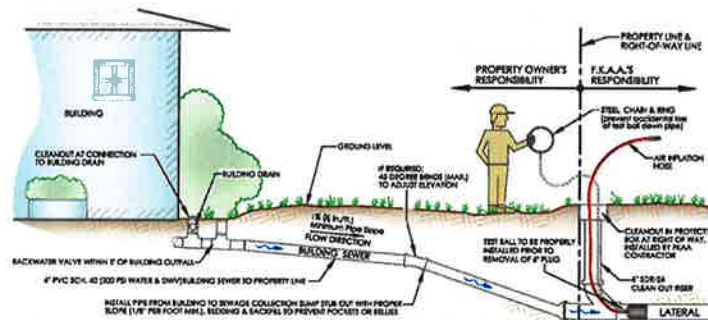
- Gravity Sewers – in the more densely populated areas
- Low Pressure Sewers – in the less densely populated areas

This basis of this hybrid system is Life Cycle Costing (LCC)

CUDJOE REGIONAL WASTEWATER PROGRAM

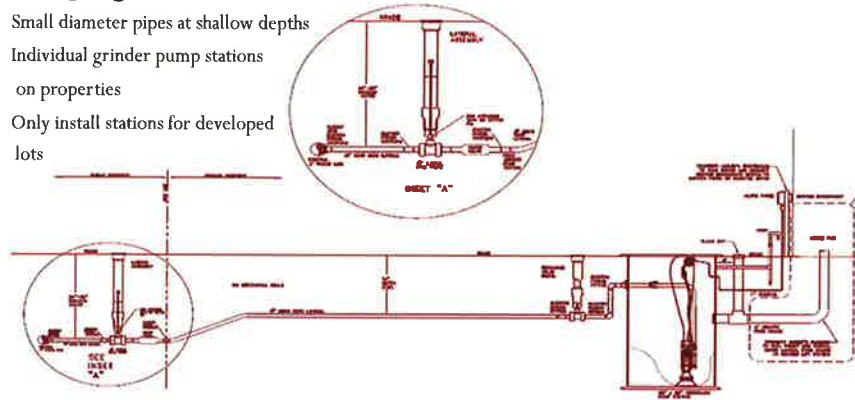
Gravity Sewers

- Neighborhood pump stations
- Gravity pipelines with manholes in road Rights-of-Way
- Lateral connection at property line
 - Customer responsible for lateral pipe installation on their property
 - Connections only for developed lots



CUDJOE REGIONAL WASTEWATER PROGRAM

- The service area has considerable low density population
- To economize – LPS is planned for about 600 properties
- LPS program includes:
 - Small diameter pipes at shallow depths
 - Individual grinder pump stations on properties
 - Only install stations for developed lots



Low Pressure System

Low pressure
= *low profile, low maintenance*

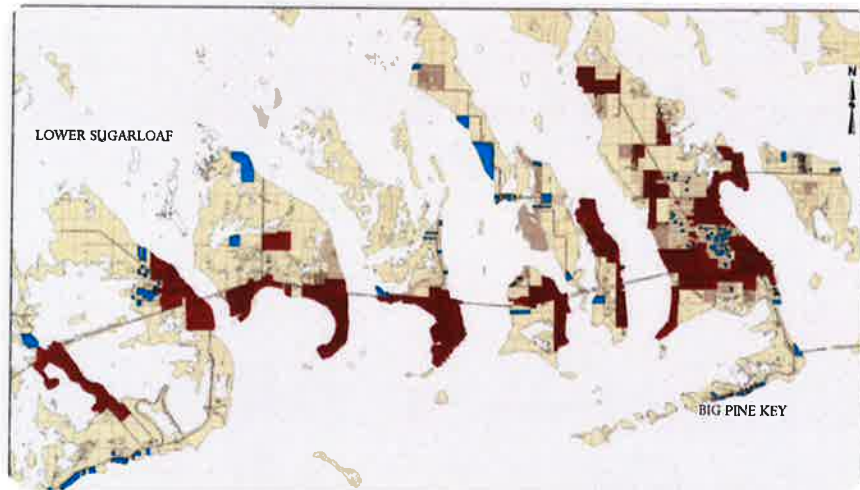


Low Pressure System

FCAA to install system on resident properties

- FCAA will need easement for construction and maintenance.
 - To install grinder pump station and discharge pipe to ROW
 - To operate and maintain grinder station
- Customer will need to provide electrical and plumbing connections for grinder station
- Customer will need to pay for power to run the grinder pump

CUDJOE REGIONAL SERVICE AREA



CUDJOE REGIONAL WASTEWATER PROGRAM

Decentral On-site Systems

- 270 Decentral Properties
- Require Nutrient Removal
- Opt In / Opt Out FCAA Program

EPA Grant-funded project to allow for similar \$4,500 assessments

Joint project with FDOH for system design standards



CUDJOE REGIONAL WASTEWATER PROGRAM

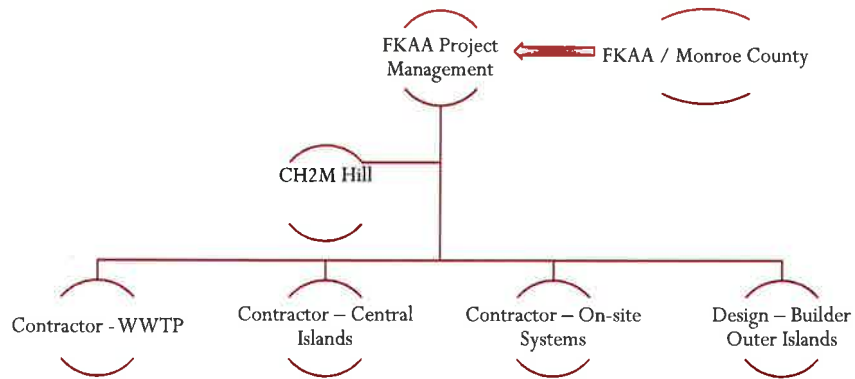
- | | |
|---------------------------------------|------------------|
| • Advanced Wastewater Treatment Plant | \$ 20 Million |
| • Central Area Collection Systems | 40 Million |
| • Outer Area Collection Systems | 90 Million |
| • Decentralized On-Site Systems | <u>6 Million</u> |

Total Estimated Project Cost \$ 156 Million

Cudjoe Regional Implementation Plan – Central System



CUDJOE REGIONAL WASTEWATER PROGRAM



CUDJOE REGIONAL WASTEWATER PROGRAM

Estimated Costs for Central System

- Treatment Plant \$ 20 million
- Inner Islands Collection system \$ 40 million
- Outer Islands collection system \$ 90 million
- Total* \$150 million

• From Where?

- State Grant \$ 30 million
- Assessments \$ 40 million
- Funds on hand \$ 20 million
- Infrastructure Sales Tax \$ 60 million
- Total* \$150 million

CUDJOE REGIONAL WASTEWATER PROGRAM

Costs for Users

- System Development Fee \$4,500/EDU (one time)
- Costs for connection (laterals) \$3-6,000 per house (varies widely based on lot size) (one time)
- Monthly bill (recurring) based on FKAA rates
- **Residential**
 - Currently includes: base charge \$26.72/month
 - Plus flow charge \$10.11/1,000gal/month (maximum of 10,000gals)
 - Typical 4,000gal/month house = \$67.16
- **Commercial**
 - Currently includes base charge (varies with meter size)
 - Plus flow charge \$10.11/1,000gals (no maximum)

CUDJOE REGIONAL WASTEWATER PROGRAM

System Development Fees

- How to Paid ?
 - One time payment of \$4,500/EDU
- or
- On tax bill
 - 20 years @ \$401 (inner islands) starting in NOV 2012
 - 20 years @ \$402 (outer islands) starting in NOV 2013

What's Next ?

- Award Contracts Before End of the Year
- Begin Construction Work in January 2013
- Obtain Easements for on-site systems and LPS systems
- System Payments

QUESTIONS?

