Commissioner George Neugent

Partners
FKAA, WQPP Steering Committee
EPA, FDEP, Sanctuary, County, Cities
Florida Keys National Marine Sanctuary

and Protection Act 1990

- Uniqueness of the Florida Keys
- Threats: water pollution, oil drilling, ship groundings
- Economy directly tied to quality of the environment
- Create a Water Quality Protection Program
- "recommend priority corrective actions ... restore and maintain ... integrity of the sanctuary."
- Steering Committee- Semi-annual meetings since 1990
Assessment of Water Quality Problem

-Nutrients from Wastewater - 80% nitrogen, 55% phosphorus Storm water, Far-Fields Sources
-Public Health
-Canal Geometry
-3,000 cesspits, 25,000 poorly functional septic systems, 250 package plants (no nutrient removal)

Milestones
1996 Water Quality Protection Program Document – 93 action items to improve water quality, including improve wastewater treatment

1999 F. S. 99-395 AWT Mandate

2000 Monroe County Sanitary Wastewater Master Plan

2004 Little Venice Demonstration Project - Other wastewater projects completed and ongoing (Key West, Key Largo, Layton, Marathon)

2012 End in Sight!
Success - Little Venice Demonstration Project

2001-2003 Pre remediation monitoring of canal water quality and seagrass
2004 Plant operational - AWT Plant
2005-2007 Post remediation monitoring of canal water quality and seagrass

Findings

Water Quality - significantly fewer violations of dissolved oxygen and fecal coliform standard; significantly less concentrations of intestinal bacteria (Enterococcus)

Sea grass increased water clarity, fewer phytoplankton blooms, and reduced epiphyte load on sea grass leaves
Kirk Zuelch, Executive Director
Florida Keys Aqueduct Authority

Shovels in the ground/System Operation

Approx 75% of Water Quality Protection Program action items complete or underway

Last two major wastewater projects
TWO PROJECTS:
Cudjoe Regional ($150 million) 8,800 EDU’s
Islamorada ($110 million) 9,900 EDU’s

EDU = Equivalent Dwelling Unit (equivalent to a single family home’s wastewater flow)
Islamorada, Village of Islands Implementation Plan

System Program (est. $110 million)
- Collection and Local Transmission System
- Transmission System to Key Largo WWTP for Treatment and Disposal

Contract Schedule
- Inter-Local Agreement with Key Largo Wastewater Treatment District (District) approved by both the Village and the District on May 1, 2012
- Contract with design-build-operate firm expected June 2012
- Construction Completed December 2015
FKAA/Monroe County
Cudjoe Regional System
Implementation Plan

System Program (est. $150 million)

- Collection and Transmission Pipes
- Treatment Plant
  - Prequalification of Contractors – May 15, 2012
  - Advertise for Bids – September 10, 2012
  - Open Bids – December 3, 2012
  - Contract to Board in December 2012
  - Project Completion – December 2015
Roman Gastesi, Monroe County Administrator

- Economics

- Leverage State $50 million ($4.8 million line item) to start $260 million in construction projects

- Jobs creation:
  - 1,100 construction over 3 years
  - 60 permanent
Roman Gastesi, Monroe County Administrator

- Environmental benefits
- Eliminates 28,000 cesspit/septic systems
- Creates 12 central systems
- Improves water quality in an economy based on water

THE ENVIRONMENT IS THE ECONOMY

Thank You
10 systems well underway or completed
-76% of EDUs total cost $440 million

2 remaining systems 24% of EDUs costs $260 million

EDU = Equivalent Dwelling Unit (equivalent to a single family home’s wastewater flow)