

# IMPROVEMENTS TO DUCK KEY UTILITY SYSTEMS



November 2010

# Program Needs

- Need to install central wastewater collection
- Need to replace drinking water lines
- Plan to install reclaimed water lines



# WATSEWATER COLLECTION SYSTEM

- Monroe County Interlocal Agreement (ILA) in place – total of \$ 8.8 million
  - \$ 5 million available FY 2011
  - Remaining dollars available FY 2012
- Project includes
  - 48,000 feet of pipe
  - 12 pump stations



# Water Distribution System

- Current CIP calls for replacement of small, old pipes throughout Duck Key
  - Approximately 41,000 ft of 4”- 8” pipe
  - Plan call to upsize pipes to current standards
    - Improve flow and pressure
    - Reduce leaks
  - Plan budget is \$ 3.05 million in FY 2011/2012 for water system project

# Reclaimed Water System

## Current Conditions

- Hawk's Cay Village and Resort have agreement with FKAA for reclaimed water
- FKAA installed reuse pipes on the Center Island

Plan budget is \$ 3 million

– \$ 1.5 million in FY 2011

– \$ 1.5 million in FY 2012

Survey respondents show keen increase in reuse



# Reuse Survey -2010



Reclaimed Water  
Owners Showing Interest

Duck Key - 2007

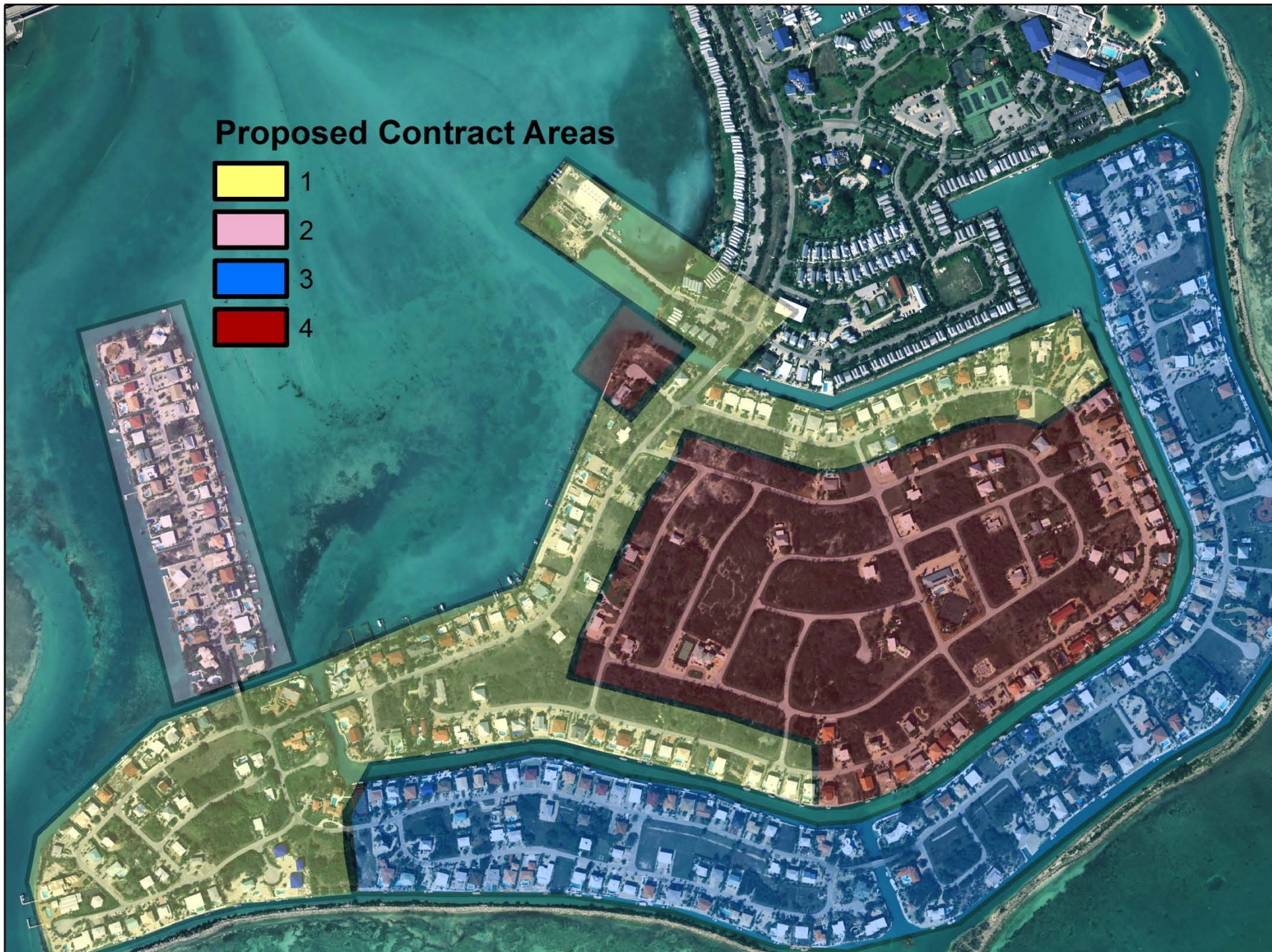


# Construction Programming

- Plan to build over 2-3 year period
- Plan to have 3 or 4 separate contracts
  - Work in sequence
  - Work to include
    - Drinking Water lines and service connections
    - Reclaimed Water lines and services
    - Wastewater collection lines and pump stations

# Proposed Contract Areas

- 1
- 2
- 3
- 4



# Wastewater Connections

FKAA to install service connection to property line

Homeowner will need to:

- Have plumber install lateral from house to property line connection point
- Abandon septic tank

# Program Forecast

Contract	Construction Schedule
1	Jan 2011 – Feb 2012
2	Feb 2011- Dec 2011
3	Sept 2011- Dec 2012
4	May 2012- June 2013
Final Paving	June 2013 – Aug 2013

# What's Next ?

## Contract 1

- Begin Construction Work in January 2011
- Complete in February 2012

## Contract 2

- Start Work in February 2011
- Finish Work in December 2011

## Center Island

- Complete design and obtain easements



# Low Pressure Systems

For

Portion of Center Island

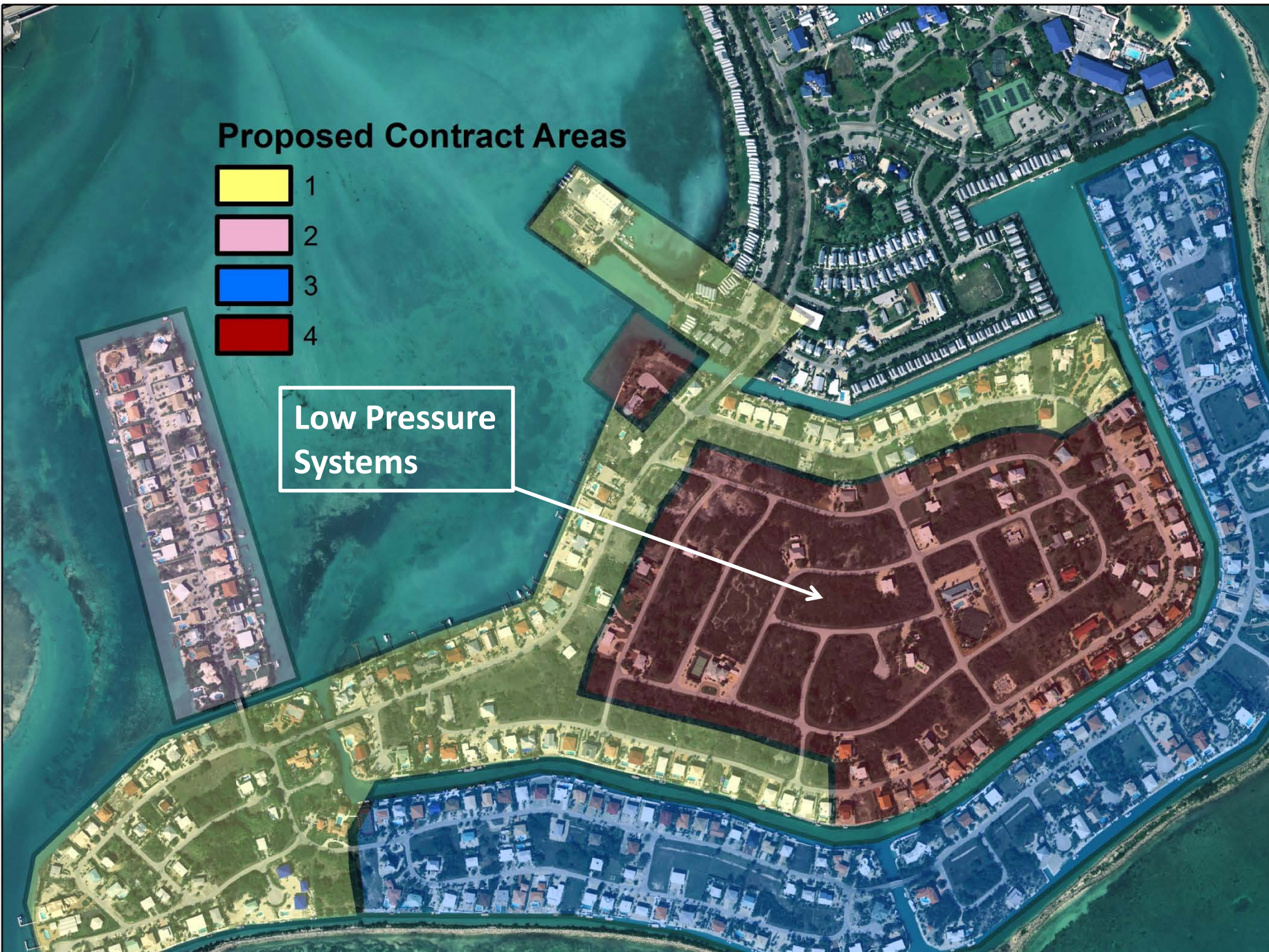
# Low Pressure System

- Center Island has low density population
- To economize – low pressure sewer in planned
  - Small diameter pipes at shallow depths
  - Individual grinder pump stations on properties
  - Only install stations for developed lots
- Plan calls for this work to be completed in final pipeline contract

# Proposed Contract Areas

- 1
- 2
- 3
- 4

Low Pressure Systems



# Low Pressure System

FKAA to install system on resident properties

- Resident can “opt-in or opt-out” of program

If resident opts-in: FKAA will need easement for construction and maintenance.

If resident opts-out: they will need system installed and operated at their expense

# Low Pressure System

Low pressure  
= *low profile, low maintenance*

