

GCFWSD #6 Bond Request

November 2013 Election

Justification for Bond Proposal

- The purpose of this Bond request is to provide the Water District the ability to upgrade and maintain its aging and deteriorating Sewer and Potable Water systems to meet the needs of Tiki Island today and in the future.
- Bond proposal is divided into four categories:
 - Sanitary Sewer Collection System
 - Sewage Treatment Plant
 - Potable Water System
 - Support system projects

Sanitary Sewer Collection System

- Rehabilitation of Sewer Lines
 - Lines installed in 1960, life expectancy is 50yrs,
 - Plan is video/clean all lines to get a data base for replacement priorities
 - Includes replacement of manholes that are collapsing
 - Worst lines are Coconut, Bora Bora(North), Isles End, Commander, Bamaku Bend
- Lift Station Control Panels Replacement
 - Control panels were below flood plain elevation during Ike and were damaged
 - FEMA paid to raise the control panels but not for replacement. Panels initially installed in 1988.

Sewage Treatment Plant

- Treatment Plant Coating
 - Replace Clarifier inner mechanisms - rusting and corroding
 - Install an epoxy coating on galvanized components
- Post Aeration
 - Discharge permit req'mts of 4ppm O₂ is being met with a temporary pump system
 - Install new SS pumps
- Non potable water wash Down System Upgrade
 - System not efficient for cleaning plant structure
 - New system will include a large pump for washing
 - This new system will also help reduce odor

Potable Water System

- Chlorine System Upgrade
 - Raise cylinders above flood plain.
 - FEMA paid repairs after IKE but not for elevating facility
- Water Plant Valve Replacement
 - Valves leading up to water tanks installed 1987
 - Valves will not close and provide tank isolation
- Water Distribution Sys Valve replacement
 - ~150 water supply valves and tee's (2", 4", 6", 8", & 10") throughout Tiki streets. Valves installed 1968
 - Valves failing and corroding
 - New valves will be epoxy coated and corrosion control

Potable Water System – con't

- Fire Hydrant Installation
 - Adding additional hydrants to meet insurance req'mts of not more than 500 ft. from any residence
 - Upgrading and repairing existing hydrants
- Ground Storage Water Tank Valve Replacement
 - Replace valves installed in 1987, valves will not fully close
- Replace Three Ground Storage Tanks
 - 1 installed 1987, 2 installed 2003 (worst condition), galvanized tanks are assembled with bolted panels and painted , leaks are occurring
 - New tanks will be welded with an epoxy coated inner lining.

Potable Water System – con't

- 10-inch Water Line at Bridge Crossing
 - Main water line serving Tiki Island
 - Replace North water line over Tiki bridge - installed 1960, South line has been replaced

Support System Projects

- Odor Control
 - Current system does not sufficiently control odor.
New system will significantly reduce odor
- Sewage Treatment Plant Water Reuse
 - Project would provide tertiary treatment to allow Treatment Plant discharge to be used for irrigation between treatment plant and the front of the Island, thereby reducing overall water requirements for Tiki
 - Potentially could use existing ponds for storage of treated waste water for home irrigation

Support System Projects – Con't

- **New Control System for O2 Control in Digester**
 - Today the Blower System is being controlled manually
 - New System will have automatic controls
- **Water Well Reverse Osmosis (RO) System**
 - RO treats water from new well to meet drinking water quality
 - Well can provide water when Tiki exceeds daily contracted amount and after Hurricanes
 - Disaster Recovery Program has funded ~\$ 1.2 million for the water well and RO System
 - Additional funds are needed to complete the RO system

Priority of Projects

- Listed below is the order in which the first 8 projects will be performed and completed
 1. Reverse Osmosis – complete water well
 2. Lift Station Control Panels
 3. Treatment Plant Coating
 4. Post Aeration
 5. Distribution Sys Valve Replacement
 6. Odor Control
 7. Wash Down System Upgrade
 8. Video sewer lines for replacement priorities

Cost Summary

- Total Bond request is for \$8.5mil
 - Includes Project construction costs, Contingency, Engineering, Attorney, State , Finance Co, Bond fees
- Projects will expand over 10+ years
- Bonds will be issued incrementally (~ \$2 million every 2 yrs) as projects are completed.
- Tax increase of 1.5 cents is needed for each \$1 million of bond issue
- Previous Tiki Bond referendum was approved in 2001 for \$5.8 mil. Funds have been depleted

Final Summary

- The Water District will host another open forum on October 26, at 1pm
- The Water District Team has done a fantastic job over the years maintaining the water and sewer system for the citizens of Tiki Island. Therefore, we hope that everyone understands that these projects are desperately needed in order to continue providing the best water and sewer system for the Village of Tiki Island now and in the future.
- Please vote “yes” for this Bond request