

Charlotte County Utilities Year in Review



Presented to the
Board of County Commissioners
January 27, 2009

Our Products



➤ **Drinking Water**

➤ **Wastewater Treatment**

➤ **Reuse Water**

➤ **Fire Suppression**



Our Services

- 24/7 on-call service
- Maintenance and operation of water, wastewater and reclaimed water systems (transmission and distribution lines; treatment plants, hydrants, valves, lift stations, booster stations, etc.)
- Water sampling, testing and lab operation
- Engineering services: Plan reviews; in-house design; site inspection; and locating services
- Community outreach and education

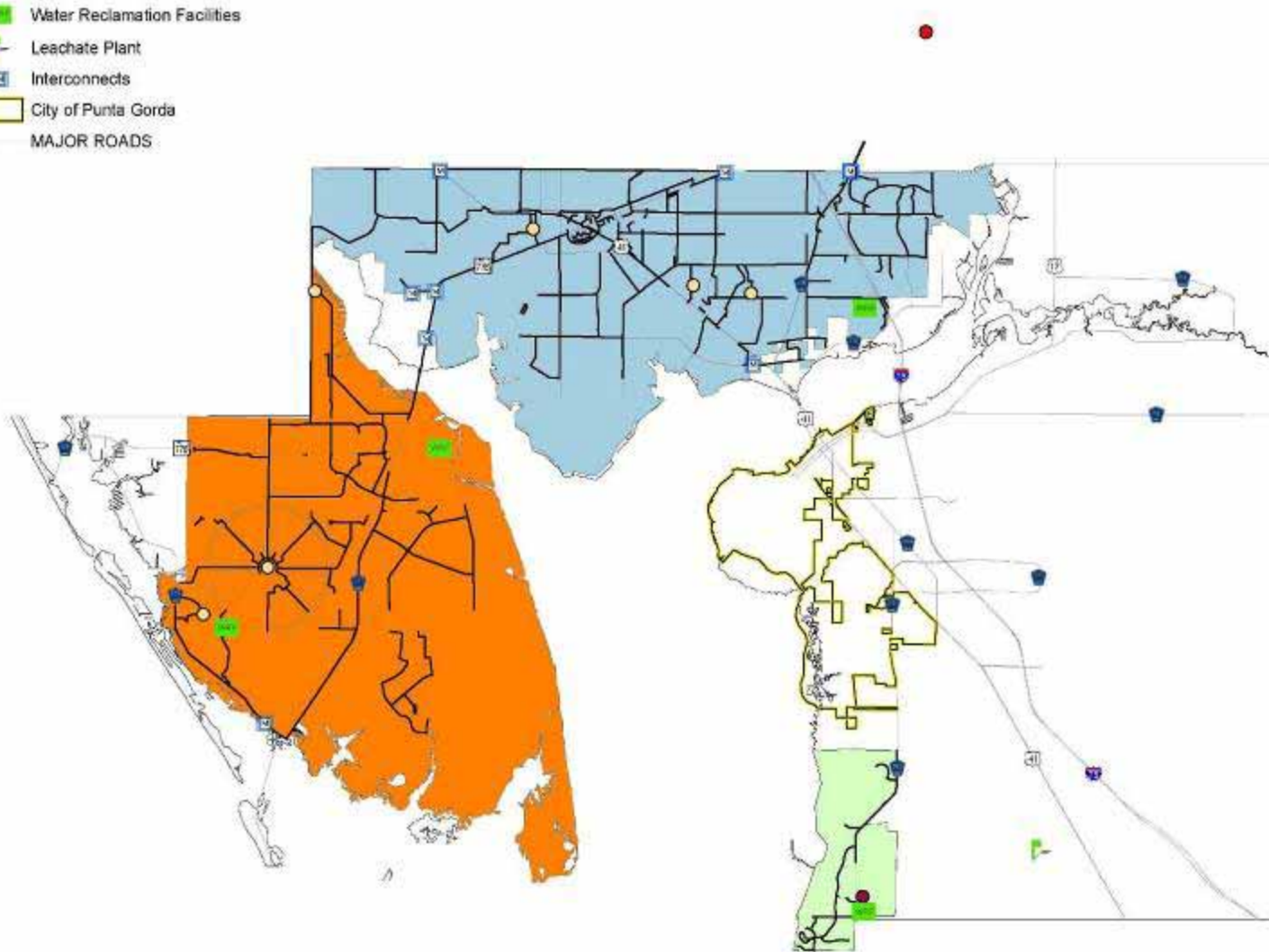
CCU Quick Facts

- 138-square-mile service area
- 5 treatment facilities
- Nearly 1,500 miles of water mains
- 800+ miles of wastewater mains
- 55,500+ water customer connections
- 32,800+ wastewater customer connections
- 252 wastewater lift stations
- 4,300+ fire hydrants
- 9,400+ manholes
- 12,500+ valves

Service Area/Major Infrastructure

Legend

- CENTRAL
 - WEST
 - BURNT STORE
 - Water Reclamation Facilities
 - Leachate Plant
 - Interconnects
 - City of Punta Gorda
 - MAJOR ROADS
- Water Facilities**
- Reverse Osmosis Water Plant
 - Storage Tank and Booster Station
 - Regional Water Treatment Plant
 - Water Transmission Mains



Water Resources

- Approximately 95% of our drinking water is purchased from the Peace River Authority
- This represents 60% of all water supplied by the Authority



- The other 5% is produced at the County's Burnt Store Reverse Osmosis water treatment facility, which serves customers in the Burnt Store area only

Burnt Store RO Expansion

- Current water treatment capacity: 1.127 MGD
- Expansion underway to 3.6 MGD, to be completed in 2009
- Includes enhanced reverse osmosis membranes



Peace River Facility Expansion



New Reservoir Construction – August 2008

Regional Expansion Plan (REP)

- Daily use by Authority members/customers averages 17 million gallons per day (MGD)
- Peace River Facility is being expanded to 32.7 MGD; construction began 3/2007
- New 6 billion gallon storage reservoir; construction began 9/2007; 4 miles around; over 30 feet deep
- Expansion to be fully completed in 2009
- Charlotte County paid 27% of expansion costs; requested over-sizing for enhanced reliability

Water Allocation & Costs

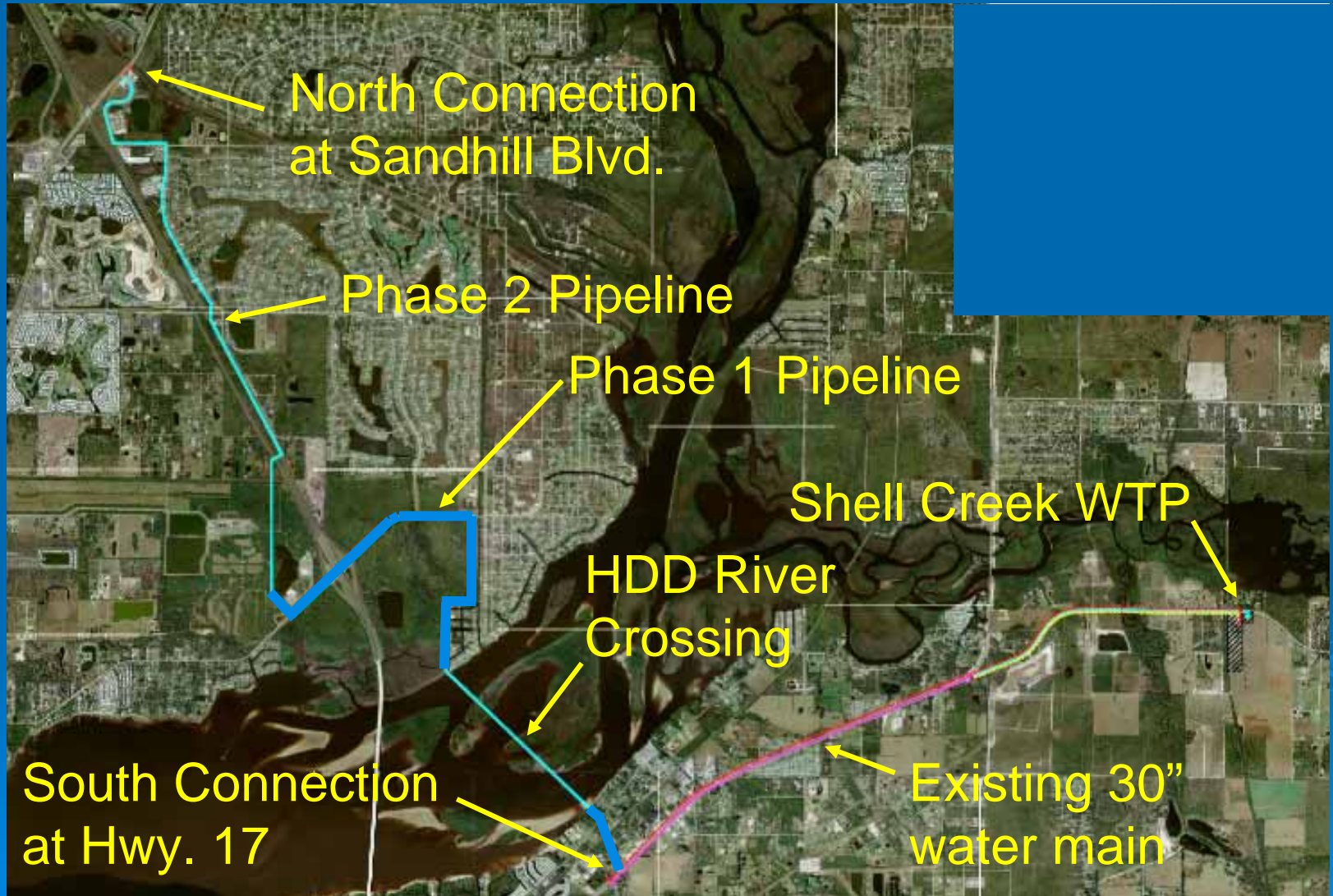
- Our water supply allocation from the Authority was 12.75 MGD in FY-08 and 13.895 MGD for FY-09; when the expansion is complete, allocation will increase to 16.102 MGD
- In 2008, we paid \$2,156,041 for water purchased from the Authority (64 cents per 1,000 gallons)
- The 2008 annual base rate charge was \$7,522,488 (includes fixed O&M costs, reserve and contingency funds and debt service); the 2009 annual base rate charge is \$9,036,412

Authority Cost Comparison

- Nearly 27% increase in water cost since 2005
- Capital costs have increased due to current expansion projects (REP)

Cost of Water from Peace River Authority						
	Fixed Costs					
Budget Year	O&M Costs	Capital Costs	Variable Costs	Total Cost	Percent Increase	Cumulative Increase
2005	0.81	0.58	0.50	1.89	N/A	N/A
2006	0.96	0.55	0.55	2.06	8.99%	8.99%
2007	1.03	0.56	0.62	2.21	7.28%	16.93%
2008	1.06	0.56	0.64	2.26	2.26%	19.58%
2009	1.04	0.74	0.67	2.45	8.41%	26.94%
<i>Based on Authority budgets; all costs based on 1,000 gallons.</i>						

Regional Loop Phase IA Route



Regional Loop: Phase IA

- Regional Integrated Loop System is Authority plan to meet future water supply needs; Phase 1A is an interconnect with City of Punta Gorda
- Regional Pipeline Project Agreement (July 2007) estimates \$19,015,000 total cost for Phase 1A; 42% (\$7,986,300) to be paid by Charlotte County
- Authority anticipates \$5 million in additional grant funding from Water Restoration Action Plan (WRAP); if received, Charlotte County share of costs to be reduced by \$2.1 million

Diversifying Water Sources

- Countywide groundwater/RO
 - Study complete; test sites identified
- Babcock Ranch
 - Proceeding with permitting (13 MGD); projections indicate need for this new source by 2028
- Regional Interconnects
 - City of North Port (existing)
 - Englewood Water District (existing)
 - Gasparilla Island Water Assoc. (existing)
 - Charlotte Harbor Water Association (existing)
 - City of Punta Gorda (to be built/owned by Authority)
 - City of Cape Coral/Lee County (studies completed)

Water Reclamation Facilities

- East Port Water Reclamation Facility (6.0 MGD)
- West Port Water Reclamation Facility (1.2 MGD)
- Rotonda Water Reclamation Facility (1.0 MGD)
- Burnt Store Water Reclamation Facility (.5 MGD)



Rotonda WRF Expansion

- Phase 1: From .625 MGD treatment capacity to 1 MGD, completed October 2008
- Phase 2: 2 MGD, to be completed mid-2009



3 MG Storage Tank Construction

Planned WRF Expansions

- Burnt Store Water Reclamation Facility
 - .5 MGD; expansion to 2.5 MGD in 2012

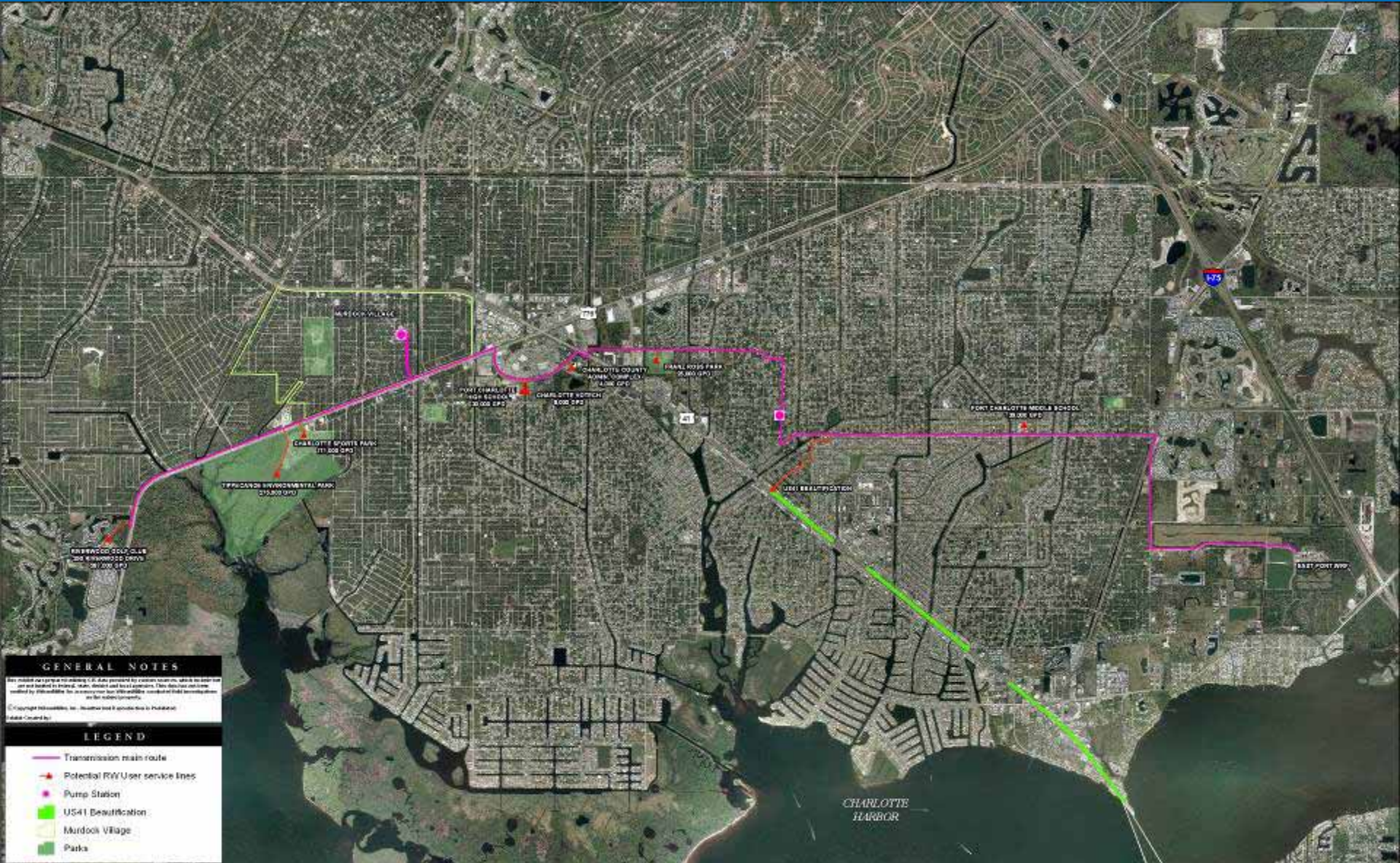


- East Port Water Reclamation Facility
 - 6 MGD; expansion to 9 MGD in 2013

Wastewater Expansion MSBUs

- Pirate Harbor: 383 ERUs, approved 2006; construction completed July 2008
- Charlotte Harbor CRA: 497.8 ERUs, approved 2007; construction completed December 2008
- Rotonda Sands/Rotonda Meadows: 2,533 ERUs/2,697.1 ERUs; approved 2006; construction began 2008; complete early 2009
- Rotonda Villas/Springs: 3,328.8 ERUs, water and wastewater; approved in 2007; final design began in 2008; estimated completion in 2010

Regional Reclaimed Water Main



GENERAL NOTES

This map is not for use in making U.S. data presented by certain agencies, which do not bear any responsibility for the accuracy or completeness of the information. This document was prepared by the author for the use of the user. The user is responsible for the accuracy and completeness of the information presented in this document.

Copyright © 2010, Inc. All rights reserved. It is prohibited to reproduce or distribute this document without the written permission of the author.

LEGEND

- Transmission main route
- > Potential RW User service lines
- Pump Station
- US41 Desalination
- Murdock Village
- Parks

Regional Reclaimed Water Main

- 14-mile transmission main (East Port WRF to Riverwood); direct reclaimed water where most needed; new bulk users
 - Pipeline construction began 8/2007, to be completed in early 2009 (including Sports Park connection)
 - Eagle Street/Walenda pumping/storage stations to be completed in early 2009
 - Future phase would continue line to West Port WRF; interconnect three facilities

Maintenance/Projects – FY-08

- Wastewater pipe lining
 - Reduce inflow/infiltration; increase system capacity; reduce pumping/hauling; delay facility expansions
 - 43,000 LF lined in FY-08; 35,000 planned for FY-09
- Line extensions
 - Repair, replace, loop and/or extend lines to accommodate growth and improve system reliability
 - Seyburn Terrace 24-inch water main completed
- Lift station rehabilitations
 - Increase ability to move flows; system capacity
- Leak-detection equipment purchased
 - Perform in-house water audits; no outside consultants
- U.S. 41 wastewater/reclaimed water
 - Part of Public Works U.S. 41 Revitalization Project

Operations Efficiencies

- In-house projects
 - 2 lift station rehabs (\$150,000 saved)
 - 2 waterway crossings (\$40,000 saved)
 - 3 water main extensions (\$15,000 saved)
 - Burnt Store RO trains replacement (\$160,000 saved)
- Plant Operator Trainee program
 - Occupy vacant operator positions; offsets need for contract operators (\$267,384 per year saved)
- Contract services eliminated
 - Janitorial services at East Port WRF (\$848 per year)
 - Lawn service at Rotonda WRF (\$13,475 per year)
 - In-house sludge hauling and biosolids/composting partnership with EES at County landfill (potential savings of \$337,000 per year)

Operations Goals – FY-09

- Complete Burnt Store Operations Office/
Warehouse & East Port Operations Office/Lab
- Complete major water and wastewater projects;
in-house water line replacements
- Continue maintenance/rehabilitation programs
(pipe lining, lift stations, hydrants; water valves)
- Complete water booster station rehabilitations
- Complete Burnt Store Village wastewater
collection system rehabilitation
- New Deep Creek force main to improve flows
- Replace force main; Harbor Blvd./U.S. 41

Engineering Goals – FY-09

- Complete in-house design/construction management of Rotonda Villas/Springs water/wastewater improvements
- Begin planning 20-year wastewater/water system expansion program
- Evaluate alternative wastewater collection systems to determine most cost-effective method over the long-term
- Continue cooperative efforts with Public Works to integrate our projects, minimize costs and more effectively serve our citizens
- Address water-quality issues affecting Charlotte Harbor and the contributing waterways
- Perform more extensive value engineering on utility improvement projects for enhanced quality/cost control

Overview: 5-Year Rate Study

- Rate Study (through FY-2011) is on track
- Challenges include:
 - Lower than projected growth
 - Decreased water consumption (6.8%)
 - Increased delinquencies (bankruptcies, foreclosures, non-pays)
 - FY-08 rate revenues 5% lower than projected; FY-09 rate revenues 10% lower
 - FY-09 increase in fixed uncontrollable expenses (electric, 15%; health insurance, 25%; self insurance, 38%; Peace River REP)

FY-08 Financial Strategies

- Cost-saving efficiencies
 - Reduced sludge hauling (biosolids/composting)
 - Decrease in wastewater processing by EWD (upon completion of Rotonda WRF in FY-09)
 - Reduction in contract operators (in-house training)
 - Bond refunding savings
 - Use of cash reserves

- Slashed controllable costs
 - Staff reductions, reallocation/reorganization of work
 - Delayed vehicle and computer replacements by recycling assets
 - Deferred Capital Projects and Purchases
 - Travel/education for certification/licenses only

Business Services – FY-08

- New phone system with enhanced automatic call distribution (ACD) features
- With BCS, developed and implemented Utilities inspection prior to Certificate of Occupancy (CO)
- Automated water meter (AMR) installations
- Developed enhanced customer service policies and procedures with online customer forms
 - Temporary service connection for realtor inspections
 - CSR-authorized bill adjustments; first-call resolution
 - New hydrant meter policy; customer submits reads
 - Updated Credit and Collection Policy
- Outreach: Landlords' Association; BCS Liaison

Business Services Goals – FY-09

- Implement new bill format and electronic billing
- Update mailing/sorting methods
- Further automation; allow real-time payment processing and eliminate paper files
- Complete Identity Theft Prevention Program
- Complete Charlotte Alert/IVR implementation
- Mass notification for returned checks, non compliance, and delinquent accounts
- Continue AMR meter installations
- Streamline processes using current technology

Community Relations

- Outreach and Education
 - Speaking engagements, public presentations, customer newsletter, bill inserts, Web site; videos
- Media Relations
 - Press releases, newspaper columns, interviews
- Regulatory Publications
 - Annual Report
 - Consumer Confidence Report
- Internal Communications
 - CCU University, newsletter, all-staff meetings
- Information resource
 - For citizens, media, County staff, BCC



Water Conservation

- Written plans completed
- In-house enforcement of water restrictions (Meter Services)
- Toilet rebate program underway (w/SWFWMD cooperative funding)
- Indoor Water Conservation Kits
- Education/outreach
- Bill inserts
- Water Conservation Month
 - Proclamation, student art contest, press releases, community outreach

2008 Awards & Honors

- 2008 FDEP Plant Operations Excellence Awards
 - Burnt Store RO Water Treatment Facility
 - Medium Community Water Plant, South District
- MarCom Awards (Annual Report)
 - Platinum (highest honor), Overall Report
 - Gold, Writing
 - Gold, Cover Design
- ABC Annual Report Competition
 - Second place, Photography/Illustration
 - Outstanding Achievement, Overall
- LACP Vision Awards (Annual Report)
 - 5th place in Utilities category; Honors level recognition
 - 92 out of 100 judges score

Discussion



Questions

