

Florida Keys Aqueduct Authority



Utility Operations and Treatment



Employee Development Plan



Maximize Energy Efficiency



Proactive Public Relations



Financial Operations



Sustainable Infrastructure

2011 Strategic Plan

Message from the Executive Director

The Florida Keys Aqueduct Authority continuously strives to be a more efficient and effective organization leveraging a talented and well trained team of water service professionals combined with modern technology and infrastructure.

The last several years we have put in place the future water supply of the Florida Keys ensuring our customers and visitors an adequate water supply for at least the next 25 years. We have developed a team of wastewater collection and treatment design and operations professionals that have planned, designed, and constructed five wastewater collection and treatment facilities. Our newest facility meets stringent advanced wastewater treatment standards and provides high quality reclaimed water to neighborhood residences and businesses.

We have completely overhauled and modernized our billing and financial software, and continue installing advanced metering infrastructure (AMI). We have made significant improvements in our telecommunications, computer networking, and operating systems.

In the last several years we have made significant reductions in staff without sacrificing our level of service to customers saving well over one million dollars per year. In 2008 we were recognized by our peers in the industry and were awarded the Gold Award for “Exceptional Utility Performance” by the Association of Metropolitan Water Agencies.

As we look to the future, the FCAA Board of Directors developed this next generation of the strategic plan embracing the “Ten Attributes of Effectively Managed Water Sector Utilities” (developed by six major water and wastewater associations and the U.S. Environmental Protection Agency) as our Guiding Principles. Although these past years we have made significant advances in the development of new facilities and the implementation of new technology, we still face significant challenges presented by an aging infrastructure and workforce, a slow economy, the effects of climate change, and the mandate to complete a major regional wastewater collection and treatment system in the lower keys.

Our Mission is to meet these challenges head-on using this Strategic Plan as our guiding light recognizing the importance of excellent customer service for our community, that we are stewards of the environment, and that our team of employees is our greatest asset.

*James C. Reynolds, P.E., Executive Director
Florida Keys Aqueduct Authority*

Vision

The Florida Keys Aqueduct Authority will be recognized nationally as a leader in the provision of safe, reliable water and wastewater services by seamlessly integrating advanced technology to enhance the customer experience and maximize efficiencies, while leading as well in environmental awareness and resource protection.

Mission

The Florida Keys Aqueduct Authority is a nationally renowned and community oriented publicly owned utility that provides reliable, safe and efficient water and wastewater services in a fiscally and environmentally responsible manner with a highly trained, professional, and dedicated team of employees.

Values

To achieve our mission, the Authority is committed to the following values:

- Customer satisfaction
- Excellent water quality
- Community involvement
- Strong working relationships with municipal, county, state and federal government agencies
- Employee development, communication and career growth
- Well-maintained, reliable, and secure systems
- Financial stability
- Cost effective services
- Protection of environmental resources

Guiding Principles

In providing the highest quality water services to our customers, we embrace the following ten attributes of effectively managed water sector utilities as our guiding principles.

Customer Satisfaction: We provide reliable, responsive, and affordable services in line with our customer expectations. We value their opinions and suggestions.

Product Quality: We produce safe, high quality potable water and treated wastewater effluent in full compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs.

Operational Optimization: We ensure ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of our operation.

Financial Viability: We understand the full life-cycle costs of the utility and maintain an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. We establish predictable rates that are equitable and consistent with community expectations and acceptability, adequate to recover costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs.

Infrastructure Stability: We maintain and enhance the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels, and consistent with anticipated growth and system reliability goals.

Employee and Leadership Development: We recruit and retain a workforce team that is competent, motivated, adaptive, and safe-working. We encourage a participatory, collaborative organization culture dedicated to continual learning and improvement. We emphasize opportunities for professional and leadership development and strive to maintain an integrated and well-coordinated senior leadership team.

Operational Resiliency: We ensure our leadership and staff work together to anticipate and avoid problems. We proactively identify, assess, establish tolerance levels for, and effectively manage a full range of business risks including legal, regulatory, financial, environmental, safety, security, and natural disaster related.

Community Sustainability: Manage operations, infrastructure, and investments to protect, restore, and enhance the natural environment. We efficiently use water and energy resources; promote economic vitality; and engender overall community involvement and improvement.

Water Resource Adequacy: We ensure water availability through long-term water supply and demand analysis, conservation, agency interaction, and public education.

Stakeholder Understanding and Support: We actively involve stakeholders in the decisions that will affect them. We garner understanding and support from community interests for service levels, rate structures, operating budgets, capital improvement programs and risk management decisions.

Strategic Goals, Initiatives, and Implementation Strategies

Our Strategic Goals define what we seek to accomplish to fulfill FCAA's Vision. They reflect the unique challenges that the FCAA faces as a provider of water services for the Florida Keys. These Goals simultaneously address infrastructure needs, opportunities to

enhance customer services, and responsibilities for stewardship of our environmental resources.

- A. Develop a Sustainable Utility and Related Infrastructure
- B. Proactive Public Outreach & Superior Customer Service
- C. Enhance Employee Communication and Development
- D. Financial Optimization
- E. Maximize Energy Efficiency
- F. Optimize Utility Operations and Treatment

Our approach to accomplishing these goals is framed by the institutional and legal position as a Special District of the State of Florida. We have assessed these conditions and developed our strategic plan based on the following strategic initiatives that will allow us to meet our goals. The following outline identifies specific initiatives that have been developed and implemented to ensure that strategic goals are achieved.

A. Develop a Sustainable Utility and Related Infrastructure

1. Well Field Monitoring and Protection
 - a. Monitor and evaluate proposed sources of contamination and provide regulatory input, as needed. (e.g. expansion of FPLs Turkey Point Nuclear Power Plant and associated groundwater demand).
 - b. Work with Miami-Dade's Department of Environmental Resource Management (DERM) to monitor the permitting and development of properties located within the cone of influence of the Florida City well field.
 - c. Work with SFWMD on plans to prevent or mitigate saltwater intrusion.
 - d. Install additional Biscayne Aquifer water quality wells with DERM.
 - e. Install additional offsite saltwater interface monitor wells with USGS.
 - f. Monitor future local demands on the Floridan Aquifer.
2. Ensure financial efficiency of the Capital Improvements Plan (CIP) delivery
 - a. Update Capital Improvement Plan annually
 - (1) Conduct value engineering and/or life cycle costs analyses for large projects
 - (2) Consider alternative procurement/construction methods for Capital Improvement Plan projects

- (3) Pre-qualify contractors for eligibility to bid
 - (4) Purchase owner-furnished equipment
 - b. Staff development and training for the Capital Improvement Plan
 - (1) Develop Enterprise System construction management training module
 - (2) Identify in-house crews for new and replacement pipeline work, emergency repairs and quick action for small to medium sized projects
 - c. Secure land for construction of future Capital Improvement Plan projects
 - d. Update Water Supply Strategic Plan in 2011, and every 5 years thereafter, with attention to changing population, demographic data, and climate change.
3. Develop Climate Adaptation Plan
- a. Identify and develop infrastructure vulnerability
 - b. Determine impact thresholds for sea level rise and needed infrastructure.
 - c. Consider well field contingency plans & long term water supply.
 - d. Work with Monroe County on the Climate Adaptation element of their Comprehensive Plan.
4. Evaluate aging infrastructure
- a. Develop Asset Management Plan in the Enterprise System.
 - b. Develop condition assessment of transmission system.
5. Fund and implement a cost-effective water conservation program
- a. Continue grant and rebate incentive programs for customers.
 - b. Comply with our SFWMD approved conservation program.
6. Develop and perform drills for emergency preparedness plan response strategy
- a. Vulnerability Assessment, Emergency Response Plan and Hurricane Preparedness meetings should include practice drill sessions as part of the regular emergency preparedness activities
 - b. Perform regular assessment of IT network vulnerability

- c. Develop Disaster Recovery Plan including departmental priorities to effectively restore work processes after a disaster
 - d. Continue partnerships with individuals, vendors, agencies, such as FLAWARN, etc. that will facilitate our ability to restore water services after a crisis.
7. Maintain resources to manage external Federal and State political/legislative drivers.

B. PROACTIVE PUBLIC OUTREACH & SUPERIOR CUSTOMER SERVICE

1. Enhance customer service
 - a. Enhance on-line customer self-service and account management
 - b. Complete Advanced Metering Infrastructure (AMI) installation.
 - c. Establish process and database to track and analyze customer communications
 - d. Implement Interactive Voice Response System (IVR)
 - e. Communicate with Customers in their preferred media, social media, etc.
 - f. Provide on-line access to customer's meter readings.
2. Develop customer service awareness and information seeking survey to establish baseline, track trends and implement focused public information programs
3. Develop ongoing customer awareness and education program
 - a. Promote water quality, taste, safety, value, and affordability of drinking water.
 - b. Provide educational tours of facilities.
 - c. Continue education on drought conditions and water supply
 - d. Prepare Frequently Asked Question (FAQ) sheet for all employees and other training so employees are better informed and able to respond to the public regarding the water services FKA provides.
4. Promote community involvement by employees participating in public service organizations.
5. Develop mobile outreach center/event water dispensing trailer.

C. Enhance Employee Communication and Development Plan

1. Develop strategic staff plan
 - a. Develop succession plan to ensure future staffing so training and leadership needs are met
 - b. Revisit re-organization plan for effectiveness and staff needs
2. Staff communication, recognition and compensation
 - a. Enhance employee orientation, networking, and mentoring program.
 - b. Develop and implement internal communications strategy
 - c. Develop meaningful reward and recognition program.
 - d. Continue quarterly employee meetings; increase face time with executive staff.
 - e. Develop an employee developed list for training programs.
 - f. Improve employee performance evaluation system.
 - g. Consider pay-for-performance.
3. Create an employee development, recruiting, and retention program that provides clear path for progression and ensures that qualified employees have opportunities for advancement
 - a. Continue to develop internal, qualified trainers throughout service area to reduce travel time
 - b. Institute employee development course to be offered at regular intervals throughout the company to provide awareness of roles, responsibilities and corporate structure
 - c. Continue implementation of leadership training program for new managers to be delivered at regular intervals
 - d. Provide cross-functional and team training to improve efficiency, provide opportunity and build skill redundancy

- e. Benchmark Fortune 500 “Best Places to Work” companies for possible implementation of selected workplace practices
 - f. Provide internships for local schools
4. Conduct employee survey to identify needs and expectations so that above strategies are effective
 5. Regularly evaluate safety practices to assure a safe working environment, including comprehensive utilization of the FCAA Safety Committee.

D. Financial Optimization

1. Perform cost-benefit analysis on major expenditures.
2. Link strategic plan with budget preparation for prioritization
3. Continue to explore opportunities to group-purchase with other government entities.
4. Evaluate utilization of staff vs. outsourcing.
5. Periodically review rate structures, fees, and charges.
6. Complete the development and implementation of the Enterprise System and Asset Management program.
7. Continually evaluate debt position for restructuring for long term optimization and security.
8. Explore enterprise opportunities to create value, income and community recognition.
 - a. Continue to read service meters and bill for other utilities.
 - b. Evaluate bottled water production capability, including product give-away and/or sales plan.
 - c. Evaluate dedicated 24/7 call center services.
 - d. Evaluate service line repair service/protection plan.
 - e. Operate other wastewater utility systems.

E. Maximize Energy Efficiency

1. Improve management of energy expenses
2. Develop sustainable strategies
 - a. Evaluate LEED™ standards for all FCAA facilities to reduce environmental footprint and meet expected State standards to the extent it is cost effective
 - b. Complete an energy savings optimization study and implementation plan for the entire system considering the following:
 - (1) Explore use of alternative fuels, including replacement of fleet vehicles with hybrid vehicles
 - (2) Review operating practices and explore use of energy efficient equipment and alternative energy
 - (3) Develop county-wide bio-solids management plan.
 - (4) Develop a plan for transmission system optimization.

F. Optimize Utility Operations and Treatment

1. Optimize water and wastewater treatment techniques
2. Complete implementation of the Enterprise Resource System including Computerized Maintenance Management System (CMMS), Asset Management.
3. Develop measurable benchmarks for evaluating performance.
4. Expand unaccounted-for water program
 - a. Review procedures to validate revenue and non-revenue loss accounting
 - b. Expand leak detection efforts

- c. Accelerate AMI program to establish real time data to identify areas of unaccounted-for water loss

- 5. Enhance AMI through additional data collectors

- 6. Develop implementation strategy and continue development of reclaimed water program
 - a. Conduct cost benefit analysis on installation of reclaimed water throughout the service area
 - b. Explore partnerships with Keys wastewater providers to reclaim their wastewater flows
 - c. Develop Reclaimed Water Master Plans.