



Water Resources Department

Strategic Plan

2015 - 2020

**Clermont County Water Resources Department
Strategic Plan 2015-2020**

Message from the Director of Utilities

Originally established in 1950 as the Water and Sewer District, the Clermont County Water Resources Department continues to provide reliable and safe drinking water and wastewater treatment to its customers at an affordable rate. In order to help protect our most precious natural resource, the Office of Environmental Quality has multiple programs and partnerships in place to help preserve and protect water quality. As the water and wastewater infrastructure continues to age, the Water Resources Department is focusing Capital Improvement efforts to repair and replacement programs to extend or renew the useful life of our assets.

This Strategic Plan shows the commitment of the Water Resources Department to continue providing the highest quality services possible. Through efficient operation and maintenance of our infrastructure and utilization of new and improved technologies, we strive to meet the needs of both current and future residents while protecting our natural water resources. This commitment is predicated by the Board of County Commissioners' direction to be responsive to our customers, support economic development and maintain a quality of life factor that makes Clermont County a great place to live, work and play. We encourage and solicit feedback from our customers so that we can strengthen and improve a standard of excellence merited by the citizens of Clermont County.

Lyle G. Bloom, P.E.

Director of Utilities

Our Mission

The Clermont County Water Resources Department will provide current and future customers with a dependable, safe and high quality supply of drinking water, and advanced treatment and disposal of wastewater and residuals at affordable rates, with courteous and timely customer service, while cooperating with other agencies to protect and preserve our natural water resources and environment.

Our Vision

To sustain a benchmark utility that sets the standard for water resource management and effective public service, and is recognized and emulated by others for its level of excellence and leadership.

Core Services

The Water Resources Department provides several valuable services to its customers, including the provision of safe and affordable drinking water, wastewater treatment, maintenance of the water and wastewater infrastructure, and protection of water quality. The Department's core services are described in more detail below:

Customer Service: The Water Resources Department exists to serve our customers. Customer satisfaction and the protection of the health, safety and welfare of the citizens of Clermont County are of utmost importance. The staff makes every effort to address the needs and concerns of our customers as promptly and efficiently as possible.

Drinking Water: The Water Resources Department constantly strives to develop, maintain and operate the facilities necessary to provide a plentiful supply of high quality drinking water for our customers. The Department continually monitors regulatory changes and adapts to ensure compliance.

Wastewater Treatment: Centralized sewer services are instrumental in protecting public health and achieving sustainable growth in an urbanizing environment. The Water Resources Department recycles an average waste stream of 14 million gallons per day, returning clean water to our streams, and produces treated bio-solids appropriate for beneficial reuse. This holistic approach goes beyond centralized sewers and extends to comprehensive water quality management through innovative solutions to complex issues of wastewater treatment. We are committed to maintaining a balance between economic growth and protection of the County's natural resources.

Engineering: The Engineering Division of the Water Resources Department is responsible for managing and annually updating the Five-Year Capital Improvement Plan to address capacity needs and reliability of existing infrastructure for both the water and wastewater systems. Engineering staff also manage petition and assessment projects to serve new customers of the water and wastewater systems. The Division works in conjunction with consultants as needed to secure outside expertise to supplement in-house resources, and provides bidding services, construction management, and inspection to insure the integrity of the infrastructure. Staff within the Engineering Division maintain and update water and wastewater infrastructure and maintenance layers within the County's Geographic Information System (GIS). The Engineering Division also provides plan review and inspection for water and wastewater infrastructure associated with new development.

Environmental Quality: The Department's Office of Environmental Quality advocates a holistic approach to protection of water quality and the County's natural resources by emphasizing a watershed approach, where both point and non-point sources of pollution along with stream habitat issues are addressed together to preserve or restore

the quality of Clermont County's rivers and streams. The Office of Environmental Quality also serves as the solid waste district for both Clermont and Adams County. The Solid Waste District's primary role is the development and implementation of the Solid Waste Management Plan for the two-county area.

Financial: The revenue needed to perform the many services provided by the Water Resources Department is generated through user fees. The water and sewer fee structures are developed to recover costs based on the demands placed on the systems. User fees are calculated based on the cost of providing services, plus replacement and improvement necessary to sustain the existing infrastructure absent new growth. Capacity fees for new development prevent such projects from being subsidized by existing customers. Rates are reviewed on a bi-annual basis to ensure that they remain fair and equitable.

Business Model:

The business model for the Water Resources Department is based on customer service and non-subsidy financial management. As a government agency, our primary focus is service to our customers. Current policy established by the Board of County Commissioners requires a rate structure that derives revenues sufficient to meet our financial demands based on the allocation of costs to the entity that creates the service demand. As such, capacity fees are assessed to cover the cost of building infrastructure associated with new development. User fees are charged to current customers based on the cost for service delivery, operation and maintenance of the systems, debt service, and replacement and improvement costs for maintaining existing infrastructure. Expansion of the system is accomplished through donated assets (main extensions by developers) or petition. Petitions are requests from existing property owners for extensions of the public infrastructure to obtain services, and are accompanied by assessments of costs to the benefitted properties.

Strategic Goals:

The Clermont County Water Resources Department has chosen to adopt “Ten Attributes of Effectively Managed Water Sector Utilities” as developed by a national utility management steering committee as our strategic goals. These will help lead the Department’s efforts toward desired end results and influence our objectives and tasks. Descriptions of the Department’s strategic goals are provided below.

1. *Customer Satisfaction* – Provide reliable, responsive and affordable services in line with what our customers expect. Receive timely customer feedback to maintain responsiveness to customer needs and emergencies.
2. *Water Resource Availability* – ensure water availability consistent with current and future customer needs through long-term resource supply and demand analysis, conservation and public education. Manage operations to provide for long-term surface water and aquifer sustainability and replenishment.
3. *Product Quality* – produce drinking water, treated effluent, and process residuals in full compliance with regulatory requirements, and consistent with customer, public health and ecological needs.
4. *Infrastructure Stability* – understand the condition of and costs associated with critical infrastructure assets. Maintain and enhance the condition of all assets over the long-term at the lowest possible cost and acceptable risk consistent with anticipated growth and customer and regulator expectations. Assure asset repair, rehabilitation and replacement efforts are coordinated with efforts of other government offices to minimize costs, disruptions and other negative consequences.
5. *Operational Optimization* – ensure ongoing, timely, cost-effective, reliable and sustainable performance improvements in all facets of Water Resource Department operations. Maintain awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
6. *Community Sustainability and Environmental Stewardship* – Manage operations and infrastructure to protect, restore and enhance the natural environment; efficiently use water and energy resources; promote economic vitality; and produce overall community improvement. Consider a variety of pollution prevention, watershed and source water protection approaches as part of an overall strategy to maintain and enhance ecological and community sustainability.
7. *Financial Viability* – Understand the full life-cycle cost of the utility; establish and maintain an effective balance between long-term debt, asset value, operations and maintenance expenditures, and operating revenues; establish predictable rates that are consistent with community and regulatory expectations and are adequate to recover

costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs.

8. *Customer Understanding and Support* – Create understanding and support from customers as well as other interested parties, including community and watershed interests, and regulatory bodies. Actively involve stakeholders in the decisions that will affect them, including those pertaining to service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions.
9. *Succession Planning, Job Retention and Training* – Recruit and retain a workforce that is competent, motivated, adaptive and safe-working; provide for continual learning and improvement. Ensure employee institutional knowledge is retained and improved upon over time. Provide a focus on and emphasize opportunities for professional and leadership development; strive to create an integrated and well-coordinated team.
10. *Operational Resiliency* – ensure utility leadership and staff work together and with others to anticipate and avoid problems. Proactively identify, assess, establish tolerance levels for, and effectively manage a full range of risks consistent with industry trends and system reliability goals.

Objectives

The Water Resources Department has identified objectives for each of the core services it provides to help achieve our mission and vision. Each of the objectives below is aligned with one or more of the Department's Ten Strategic Goals.

Customer Service:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Maintain water and sewer rates at or below the median rate for similar sized utilities on a regional basis	Customer Satisfaction; Financial Viability
Provide accurate, timely bills for services provided to our customers	Customer Satisfaction, Financial Viability
Provide easy access to courteous, responsive customer services	Customer Satisfaction; Operational Optimization; Stakeholder Understanding and Support
Enhance methods of communicating with customers that is efficient, timely and current with technology	Customer Satisfaction; Operational Optimization; Stakeholder Understanding and Support
Provide timely response to customer inquiries and requests	Customer Satisfaction
Maintain historical data in electronic format to provide immediate phone response to customer inquiries	Customer Satisfaction; Stakeholder Understanding and Support
Create and maintain automated phone messages containing general information regarding emergencies or other special conditions	Customer Satisfaction
Develop and maintain an emergency preparedness plan	Customer Satisfaction, Water Resource Availability, Operational Optimization

Drinking Water:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Effectively operate and maintain the Department's three drinking water treatment plants and maintain compliance with all Drinking Water Regulations.	Water Resource Availability, Product Quality, Customer Satisfaction
Effectively manage water age throughout the distribution system to reduce disinfection byproduct formation and enhance water quality	Product Quality, Operational Optimization, Customer Satisfaction
Conduct improvements to treatment plants and water distribution system to maintain water pressure and supply during peak demands with no water use restrictions	Customer Satisfaction, Water Resource Availability
Implement and annually update the water main replacement program to replace aging infrastructure.	Customer Satisfaction, Infrastructure Stability, Financial Viability
Prepare and implement wellfield protection plans and redevelopment process. Assure long-term sustainable yield and water quality through effective management	Product Quality, Water Resource Availability, Community Sustainability and Environmental Stewardship
Develop and implement a Valve Maintenance Program	Operational Optimization
In cooperation with local fire departments, provide responsive and efficient hydrant maintenance	Operational Optimization, Water Resource Availability, Customer Satisfaction
Transition to a paperless, Computerized Maintenance Management System (CMMS) to schedule and track preventive, predictive and emergency maintenance activities	Operational Optimization

Wastewater Treatment:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Operate and maintain wastewater treatment plants and laboratory to ensure full compliance with Ohio EPA discharge permits, and protect the receiving stream water quality	Product Quality, Operational Optimization, Community Sustainability and Environmental Stewardship
Efficiently process and dispose of biosolids generated during the wastewater treatment process to on-site operations with the target goal of beneficial re-use	Product Quality, Operational Optimization, Community Sustainability and Environmental Stewardship
Restrict odor associated with wastewater treatment and biosolids management operations	Customer Satisfaction, Operational Optimization
Maintain septage receiving station at Middle East Fork Wastewater Treatment Plant	Community Sustainability and Environmental Stewardship
Maintain and periodically update the hydraulic model of the sanitary sewer collection system	Operational Optimization
Operate and maintain the sanitary sewer collection system to transport all wastewater flow to the treatment plants	Infrastructure Stability, Operational Optimization, Product Quality
Continue to implement and enhance the inflow and infiltration removal program to maintain capacity in the sanitary sewer system and avoid backups	Infrastructure Stability, Operational Optimization, Community Sustainability and Environmental Stewardship, Customer Satisfaction
Operate the wastewater analytical laboratory to comply with wastewater treatment plant monitoring requirements	Operational Optimization, Product Quality

Engineering:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Provide effective customer service and response	Customer Satisfaction; Stakeholder Understanding and Support
Provide plan review and inspection for new development	Water Resource Availability; Infrastructure Stability; Operational Optimization
Manage financial resources and provide regular reports and information to the Board of County Commissioners	Financial Viability; Operational Resiliency
Manage water petition and assessment projects to serve residents who are not currently served by public drinking water	Water Resource Availability; Customer Satisfaction; Stakeholder Understanding and Support
Manage wastewater petition and assessment projects to serve unsewered areas of the County	Customer Satisfaction; Community Sustainability and Environmental Stewardship; Operational Optimization
Develop water treatment and distribution system capacity to sustain growth and economic development	Water Resource Availability; Operational Optimization; Customer Satisfaction
Enhance water storage capability for fire protection and peak demand	Water Resource Availability; Operational Optimization; Customer Satisfaction
Develop or enhance wastewater treatment capacity to treat peak flows and meet permit limits	Community Sustainability and Environmental Stewardship; Operational Optimization
Develop wastewater collection system capacity to reduce or eliminate the risk of basement flooding or sanitary sewer overflows	Community Sustainability and Environmental Stewardship; Operational Optimization
Manage water and wastewater replacement and rehabilitation projects to renew the useful life of assets	Infrastructure Stability, Financial Viability, Customer Satisfaction
Validate recommendations within the Waterworks and Wastewater Master Plans and incorporate into the Capital Improvement Plan	Water Resource Availability; Infrastructure Stability
Provide asset management by maintaining infrastructure and customer data in a Geographic Information System (GIS) database	Infrastructure Stability; Operational Optimization
Maintain and periodically update standard details and specifications, as part of the Rules and Regulations, for the installation of water and wastewater infrastructure	Infrastructure Stability; Operational Optimization

Environmental Quality:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Provide watershed planning and implementation to balance sustained growth and impacts on natural systems	Water Resource Availability, Community Sustainability and Environmental Stewardship, Stakeholder Understanding and Support
Perform water quality monitoring and data assessment to provide an informational platform for water resource management decisions	Water Resource Availability, Community Sustainability and Environmental Stewardship, Stakeholder Understanding and Support
Provide laboratory analysis to maximize wastewater treatment efficiency	Operational Resiliency, Financial Viability
Protect sewer collection and treatment system from untreatable industrial wastewater and illicit discharges	Operational Resiliency, Infrastructure Stability, Financial Viability
Respond to environmental complaints / concerns; represent environmental concerns including emergency response	Water Resource Availability, Operational Resiliency, Customer Satisfaction
Represent Clermont County in regional environmental forums and organizations	Community Sustainability and Environmental Stewardship
Provide a solid waste plan to reduce material being landfilled	Community Sustainability and Environmental Stewardship
Provide recycling and/or disposal opportunities for households and businesses	Community Sustainability and Environmental Stewardship
Provide education and awareness programs on environmental and solid waste topics	Community Sustainability and Environmental Stewardship, Stakeholder Understanding and Support
Provide an alternative for disposal and recycling of household hazardous waste	Community Sustainability and Environmental Stewardship
Implement a roadside litter collection program	Community Sustainability and Environmental Stewardship

Financial:

<i>Objective</i>	<i>Strategic Goal Alignment</i>
Maintain and periodically update User Fees and structure to ensure a revenue stream sufficient to operate, replace & improve the system as well as meet debt service requirements	Stakeholder Understanding and Support; Financial viability
Maintain system capacity fees at a rate that recovers sufficient cost from new users of the system based on their demand for additional capacity	Stakeholder Understanding and Support; Financial viability
Annual review and reporting of financial status of the operation for bond holders, rating agencies and internal management	Stakeholder Understanding and Support; Financial viability
Maintain cash flow necessary for operation of the systems through accurate and timely billing and efficient collection processes	Financial viability

Annual Performance Indicators

To better measure our success as an organization, we have developed several performance indicators to help determine whether or not we have been successful in meeting our strategic goals and program objectives. The current list of performance indicators and the strategic goals they align with are presented below:

Customer Satisfaction

1. Average water bill and sewer bill should be at or below the median rate for similar sized utilities in the region.
2. Complete installation and implementation of an AMI/AMR Water Meter System by 2018 to help improve timeliness and accuracy of meter reads and billing information.
3. Strive for live contact. Customer service voice mails should normally be returned within one hour and informational requests within 24 hours.
4. Customers with requests that require field visits should receive a response within 48 hours, except emergencies which would be addressed within two hours.
5. Respond to major water meter and service line leaks within 24 hours, and minor leaks within 48 hours.
6. Complete new installations of water meters within two weeks of request.
7. No customers experience a building backup caused by a problem with the public sewer system. Though backups do occur from time to time, protection of our customers and flooding avoidance is of paramount importance.
8. No odor complaints. Any odor should be restricted to on-site operations.

Water Resource Availability

1. When the peak consumption day reaches 80 percent of the fixed capacity, the Department will begin the process to expand our water supply and treatment capabilities.
2. Implement Source Water and Watershed Protection Plans for all drinking water sources.
3. Target water pressures between 40 and 80 pounds per square inch (psi) (steeper terrain may result in higher pressures in some areas). The system is divided into five pressure zones to help accomplish this goal.
4. Respond to water main breaks within two hours.
5. Maintain pressure necessary for firefighting activities 100 percent of the time.
6. Correct hydrant problems within 30 days of inspection.

Product Quality

1. Drinking Water Quality – meet or exceed 100% permit requirements; meet/stay under Maximum Contaminant Levels 100% of time.
2. Wastewater Treatment Quality – meet or exceed 100% Ohio EPA permit requirements.
3. Wastewater Overflows – Limit wastewater overflows from the collection system to less than two (2) per 100 miles of collection system per year.
4. Beneficial use of biosolids – At least 20% of the biosolids produced annually will be land applied for beneficial use.

Infrastructure Stability

1. On average, replace approximately 20,000 feet of water main per year as part of the Water Main Replacement Program.
2. On average, rehabilitate approximately 15,000 feet of sanitary sewer per year as part of the Collection System Rehabilitation Program.
3. Conduct sanitary sewer improvements to convey, store and treat peak flows and eliminate sanitary sewer overflows.
4. Develop and maintain a comprehensive inventory and condition assessment of all sanitary sewers through televised inspections every 10 years.
5. Inspect water tanks on a ten year cycle and repaint tanks at least once every 20 years.
6. Maintain water main break rates below 36 per 100 miles of water main per year.

Operational Optimization

1. No water use restrictions during periods of peak demand.
2. Thoroughly review and provide annual updates to the Emergency Water Contingency Plan.
3. Clean and rehabilitate wells when the sustained yield decreases to 75% of the initial yield.
4. Maintain minimum free chlorine levels (0.2 – 4.0 mg/L) in water mains.
5. Maintain ability to treat design flow of each wastewater treatment plant.
6. Identify and eliminate a minimum of 25 sources of inflow and infiltration from the collection system per year.
7. Clean all sanitary sewers on a six-year cycle.
8. Clean surge tanks and wet wells annually.
9. Test 1000 valves and valve boxes per year and repair as needed.
10. By 2020, Implement a Computerized Maintenance Management System (CMMS) to track maintenance activities and assist with preventive and predictive maintenance needs.

Community Sustainability & Environmental Stewardship

1. Provide access to the septage receiving station for county customers at least eight hours a day, 365 days a year. Sample at least 10 percent of the loads received.
2. Host or partner with three volunteer community clean-ups each year (East Fork River Sweep, Clean & Green, Ohio River Sweep).
3. Implement Solid Waste Management Plan and update every five years.
4. Assure computer and other electronic waste disposal or recycling options are available for residents.
5. Collect litter on at least 500 miles of Clermont County roadways annually.

Financial Viability

1. Maintain Moody's underlying bond ratings at or above "A."
2. Debt service coverage – greater than or equal to 120 percent.
3. Collection rate greater than 95 percent (less than 5 percent bad debt).
4. Maintain a \$5 million reserve in the Water Capital Improvement Fund for unanticipated capital expenditures.
5. Maintain a \$5 million reserve in the Sewer Capital Improvement Fund for unanticipated capital expenditures.

Customer Understanding and Support

1. Publish annual results of performance indicators from the Strategic Plan.
2. Target at least five different environmental quality themes with the public education program.
3. Provide 175 in-school environmental presentations to K-through 12 students annually
4. Publish an annual water quality monitoring report.
5. Publish quarterly environmental electronic newsletters.
6. Provide monthly updates and project specific information on the Water Resources Department web site.
7. Post all public meetings on Water Resource Department web site.

Succession Planning, Job Retention and Training

1. Provide formal orientation and onboarding for all new employees.
2. Employees will receive an average of 20 hours of technical training on an annual basis to remain abreast of advances in technology and changes in environmental and regulatory standards.
3. Continue regular Safety Committee Meetings and provide regular safety training events for all Water Resources Department employees.
4. Supervisory training will be offered to aspiring employees as well as current supervisors on an annual basis to ensure a quality management staff.

Operational Resiliency

1. 100 percent of the Water Resources Department treatment plant operators will be licensed by Ohio EPA with a Class I or higher certificate.
2. New hire unlicensed operators will have two years to successfully complete the licensing requirement.
3. Provide resources and training to maintain a safe and knowledgeable workforce and zero loss of time workplace injuries.

Looking Ahead – Beyond 2020

The Strategic Plan is intended to keep us moving toward achieving our mission and vision until revisited in 2020. More than just a printed document, this plan is intended to serve as a management tool to help the Water Resources Department allocate resources where they are most needed and plan for the future. It also helps us measure our successes. To show our progress, the Department will issue performance results on an annual basis.

The Water Resources Department will continue to face new challenges on a regular basis, whether they take the form of new environmental regulations, new advances in technology, new growth and development, or increases in basic operating costs. We are committed to finding creative, effective and cost-efficient ways to provide a safe, dependable and high quality water supply, provide advanced treatment of wastewater, protect the natural resources of Clermont County and continue to provide the quality services that our customers have come to expect.