2020 STRATEGIC PLAN

Water Resources Department 21749 W. Yuma Road, Suite 107, Buckeye, AZ 85326

Message from the director ...

This is an amazing time to be part of the City of Buckeye Water Resources team! To serve as an employee in the fastest growing city in the country is an honor. Being a part of the growth, expansion, and change in the city is both challenging and exciting. The clean, safe, and efficient delivery of water; protection and conservation of our supplies; removal, and treatment of wastewater is the very heart of a healthy community.

I have the privilege of working with some of the industry's best and most talented water and wastewater staff. Together we have provided a plan for our future. In this strategic plan you will find our mission, values, standards, plans, metrics, and benchmarks that we will use to continue to provide water and wastewater services to the community that we serve. This plan will serve as our compass to continue providing critical and essential services to maintain a healthy community.

We have aligned our daily work with the effective utility management national standards and strategies to ensure that we are using proven best practices that result in efficient and effective delivery of services. We have also aligned our strategic plan with council initiatives that will allow us to achieve the following:

- Improve water quality
- Enhance the customer experience
- Support economic growth
- Invest in future water supplies
- Maintain financial stability

This is a living document and will evolve as the department does. We will review and update our strategic plan every two years, to keep up with the changing needs of this fast growing city.

The Water Resources department is just beginning our long-term journey. Every one of our team members is valuable and important. What we do matters. What we do is critically important. What we do is life-sustaining, lifesaving, and life-improving. This strategic plan shows how working together with a common mission, vision and goals can result in amazing outcomes. The Water Resources department does great things every day and we are happy to share our plans for the future.

Alisha Solano

Water Resources Director

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Our Vision, Mission and Values...

OUR VISION IS TO PROVIDE SUSTAINABLE WATER AND WASTEWATER SERVICES TO OUR GROWING COMMUNITY

Our Mission is to provide our customers with excellent service through responsible management of resources.

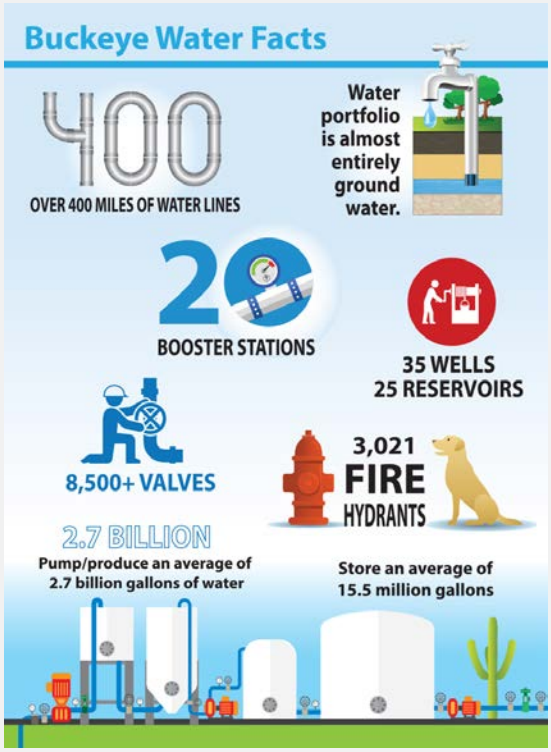
VALUES

- Treat customers with respect.
- Keep customers informed.
- Work well with others.
- Be fiscally responsible.
- Work efficiently, effectively, and safely.

What We Do ...

Ensure the availability of sustainable water supplies

The City of Buckeye sources almost of all its potable water from groundwater wells. Water Resources continuously works with other agencies and associations to provide plan review and recommendations to maintain existing sources and locate other viable water sources for long-term sustainability. We have accumulated 3,510 acre-feet of long-term storage credits[1] and recharge approximately 240-acre feet of effluent annually. We also deliver more than 800-acre feet of effluent annually to a groundwater savings facility for long-term storage credits.



Manage the budget, water conservation and education, outreach, and water resources

The staff manages official reporting of the department's day-to-day activities such as customer service improvements, improvements to processes and equipment as well as new staffing. We manage our budget through monthly and quarterly reviews and well defined metrics to ensure transparency. We reach out to customers, students, and the public to educate them on the importance of water conservation and teach them steps they can take to conserve water.

Manage the electrical components, instrumentation, and controls of all city water and wastewater facilities

We strive to achieve uninterrupted power for our automated controls that operate hundreds of valves, motors, pumps, and power equipment. The team is also responsible for the Supervisory Control and Data Acquisition, referred to as the SCADA system, which provides data, monitoring, and control capabilities of the day-to-day operations, some of which the SCADA can facilitate remotely via computer.

Service and maintain water distribution systems

We maintain over 400 miles of pipes, 8,500 valves, and 3,021 fire hydrants. We verify that all systems are operating correctly; routinely flush the systems of debris and sediments; and manually turn valves to verify their ability to operate correctly in an emergency shut down. We respond to and repair main breaks; taste and odor issues as well as the occasional beehive in a meter box.

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[1] **Long-term storage credits** - The Central Arizona Groundwater Replenishment District (CAGRD) is a division of the Central Arizona Project (CAP) that helps water providers in the Phoenix, Tucson, and Pinal Active Management Area (AMA) demonstrate the required 100-year assured water supply under Arizona Law. This is done by replenishing, recharging, or otherwise replacing groundwater for cities such as Buckeye that do not have the right or access to any, or a sufficient amount of, renewable water supplies such as CAP. Long-term storage credits are applied to the City of Buckeye, the water provider, because of its recharge efforts.

Provide quality drinking water

We have 35 groundwater wells that pump water for potable[2] use. The water from some wells must be treated to remove naturally occurring minerals, such as arsenic. The department maintains all systems in compliance with the Environmental Protection Agency (EPA), the Arizona Department of Environmental Quality (ADEQ), and Maricopa County standards.

Prepare permit applications and reports for regulatory agencies

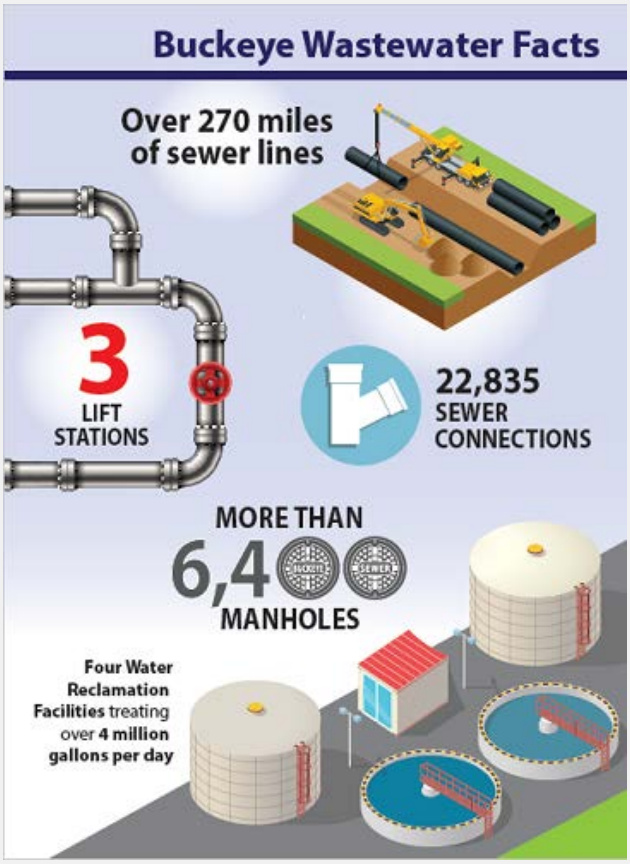
We report to including the Arizona Department of Water Resources, Arizona Department of Environmental Quality, Maricopa County Environmental Services Department, the Central Arizona Groundwater Replenishment District, and the U.S. Bureau of Reclamation[3]. We do this to guarantee our compliance with state and federal regulations as well as to certify our compliance with the groundwater recharge requirements.

[2] **Potable** The term potable means safe to drink; drinkable.

[3] **The United States Bureau of Reclamation (USBOR)** is the ultimate authority for CAP water supplies. The USBOR is also the partner government agency for the West Valley Water Association (WVWA). The City of Buckeye is an active member of the WVWA and we are preparing the West Salt River Basin Study Report in cooperation with the USBOR. We are also collaborating on a special study (Hassayampa Study) with the USBOR and we are required to prepare a written report as part of the study.

Manage Wastewater

We are responsible for the operation and maintenance of four (4) wastewater treatment facilities in the city. We properly treat wastewater and produce effluent in compliance with permits issued by the county, state, and federal regulatory agencies. The wastewater systems deliver Class A+ quality effluent[4] to city parks, golf courses, and other customers via an effluent delivery system. The team recharges excess effluent not consumed by customers, and delivers it to a groundwater savings facility.



Operate and maintain the sewer system

We ensure the sewers flow free of obstructions to the wastewater treatment facilities. The team inspects and cleans the sewer manholes and sewer mains.

Provide accurate and timely customer service, billing, and collection services to approximately 26,000 water, wastewater, and solid waste customers

Additionally, the team manages two customer service locations and the service orders that maintain meters and ensure accurate reads on approximately 23,000 meters.

[4] **Class A+ quality effluent** The A+ rating is derived from ADEQ for the different treatment technologies in use. A+ has the highest ranking and is required for secondary uses such as irrigation. The "A" in the standard means the wastewater is treated, filtered and disinfected until there are no routinely detectable pathogens (bacteria). The "+" is for those utilities that remove Nitrates to below the drinking water MCL of 10 ppm.

Significant Accomplishments …

The department has successfully implemented portions of, or completed, several large projects in the last five years including implementing specific SCADA systems for improved automation of the delivery of services as well as migrating to an entirely new billing and financial system. The Customer Service and Utility Billing Division and meter team have overcome many obstacles from the acquisition of the former Global system and integrating 7,000 new customers. Water Resources has also completed a comprehensive rate study and fee review and has proposed a new repair and replacement fee that provides for the long-term stability of revenues to fund much needed capital and maintenance improvements to preserve the existing water systems.

Water Operations

- Pumped, treated and delivered a total of 2.7 billion gallons of water to our customers.
- Completed seven (7) annual county inspections with zero (0) deficiencies.
- Installed five hundred and twenty-eight (528) new water meters system-wide.
- Replaced five hundred and seven (507) old meters that were no longer reading.
- Installed two thousand and five hundred (2,500) new meter antennas.
- Performed twenty-six (26) pressure/flow tests for new development.
- Performed ten thousand and six hundred seventy-one (10,671) blue stakes for new development.
- Repaired thirty-six (36) main breaks.
- Installed, repaired or replaced one hundred and fifty (150) service lines.
- Completed SCADA upgrades on four (4) water booster stations.
- Inspected and calibrated over one thousand (1,000) field instruments. Replaced new airlines, fine air diffusers, and air control in treatment basins at the Central Water Reclamation Facility to improve the treatment process.
- Delivered effluent water to the RID canal for long-term water storage credits.
- Installed new influent flow meter at the Central Water Reclamation Facility.
- Upgraded SCADA at the Sundance Wastewater Reclamation Facility.
- Maintained environmental compliance at all four (4) water reclamation facilities.
- Rehabilitated two (2) arsenic removal treatment units at the Sundance Water Campus.
- Retrofitted new aeration system in the four (4) Sequencing Batch Reactors (SBRS) at the Sundance Wastewater Reclamation Facility.

Customer Service and Utility Billing

- Answered over 51,000 customer service calls annually.
- Generated and properly billed over 330,000 bills annually.
- Processed approximately 542,000 payments annually.
- Opened a second Customer Service location with no disruption to customer service.

Water Conservation, Education and Outreach

- Proactively contacted 2,618 customers to help them reduce high water usage.
- Participated in five citywide public events to educate customers on conserving water including:
  - Project WET Water Festival for 347 Buckeye fourth grade students; and
  - The Sci-Tech Festival.
- Promoted Fix a Leak Week.
- Met regularly with water conservation professionals from other cities and water providers and shared ideas on how best to promote water conservation.
- Proposed new water conservation codes.
- Submitted annual water conservation reports to the Arizona Department of Water Resources and EPA WaterSense[5].

Water Resource and Sustainability

- Attended monthly water supply acquisition meetings.
- Prepared a Water Resource Master Plan update to present to the City Manager and City Council for adoption.
- Managed Type 1 and Type 2 water right leases.
- Collaborated with Pulte Homes to deliver raw, untreated Central Arizona Project water to the Festival Ranch golf course, reducing the amount of potable water used daily
- Processed permits to drill and operate new wells as a source for drinking water.
- Provided plan review on several new wells.
- Provided plan review for three new well facilities and one new water campus.
- Submitted annual reports to the Arizona Department of Water Resources for the Tartesso Recharge Facility, Type 1 and Type 2 Water Rights; Municipal Provider Reports for City of Buckeye, Valencia, Water Utility of Greater Buckeye, and Hopeville; underground storage; and dewatering well permit.
- Submitted annual reports to the Central Arizona Groundwater Replenishment District for the City of Buckeye, Valencia, and the Water Utility of Greater Buckeye Member Lands.
- Participated in water resource meetings at the Arizona Department of Water Resources, and Central Arizona Project offices. Provided input to the Arizona Department of Water Resources regarding the Buckeye waterlogged area conditions, and potential desalination project.
- Participated in monthly West Valley Water Association meetings and provided input for water resource shortfall mitigation strategies for West Salt River Valley Basin Study.

[5] **EPA Watersense[5]** The City of Buckeye Water Resources is required to submit a conservation report to WaterSense each year because we are promotional partner. In return, WaterSense allows us to use water conservation materials and flyers free of charge.

Goals, Strategies and Objectives ...

Product Quality

Goals

1. Ensure high quality drinking water is delivered to customers in full compliance with regulatory requirements.

2. Provide treated effluent water supplies in full compliance with regulatory requirements to protect public health.

Strategies

- Use best practices to ensure all water and wastewater operations achieve and maintain appropriate local, county, state, and federal standards.
- Perform consistent process control sampling to maintain appropriate chemical levels in water and wastewater treatment.
- Minimize the amount of pollutants entering into the water reclamation facilities.
- Perform a local limits study to establish an Industrial Pretreatment Program (IPP)[6].
- Ensure effluent delivered to our customers meets or exceeds all water quality parameters.
- Maintain a collaborative relationship with regulators to help shape policies and procedures and stay informed about regulatory requirements and activities.
- Ensure drinking water delivered to our customers meets or surpasses all water quality parameters and is of adequate flow and pressure to ensure reliability.
- Install taps in the Tartesso area for monthly bacteria testing according to ADEQ standards.
- Continue the backflow program to prevent potential contaminates from flowing into the potable[4] water system.
- Respond to and investigate customer concerns related to water quality in their home.

Objectives for the next two to three years

- Continue to install taps in newly developed areas to better facilitate monthly bacti-testing.
- Complete upgrades to the formal Global distribution system to integrate with the City of Buckeye to reduce aesthetic water quality issues.
- Complete a Wastewater Pretreatment Program and update to the existing city code.

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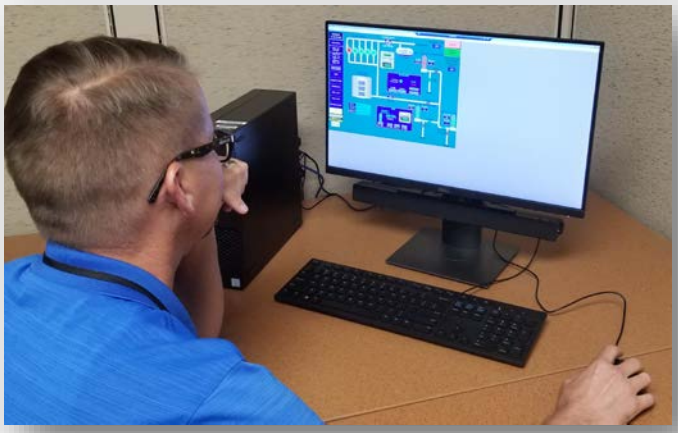
[6] **Industrial pretreatment program (IPP)** is a federally mandated pollution control program under the Clean Water Act. The function is to regulate the discharges of industrial and commercial facilities to the sanitary sewer system.

Measurements

- Maintain 100% compliance with sampling requirements from regulatory agencies.
- Continue 100% compliance with treatment standards established by regulatory agencies.



Customer Satisfaction

Goals

1. Provide excellent customer service that builds consumer confidence and trust through the responsible management of high-quality water and wastewater service and delivery.

Ongoing Strategies

- Immediately respond to all customer questions and concerns with care.
- Resolve customer disputes within five business days of receipt.
- Document response times for customer requests and report the department's performance against set goals annually.
- Provide all staff with timely and adequate customer service training according to their position within the organization.
- Continue to be accountable for providing, and accurately accounting, all billings, receipting, new service, and customer service order requests by investing in business process changes and technologies that promote customer care and convenience.
- Reorganize and add new billing cycles by service type to create efficiencies in Customer Service and Utility Billing to maximize staff availability to customer needs.
- Update the city code to align with goals for improved customer service.
- Provide an online tool for customers to access their meter read data and educate them on how to use this data to manage their water usage.

Objectives for the next two to three years

- Complete a survey with gap analysis and recommendations for the development of key indicators that will be monitored for service improvement.
- Develop a plan for a third party credit review to allow approved customers to bypass paying a deposit.
- Continue to implement customer dispute training based on recordings of customer calls to the Customer Service line.
- Develop a plan to set benchmarks for customer service using nationally recognized business practices.
- Create public awareness for future rate increases, bonds, infrastructure projects, and new technology investments through continuous engagement.
- Continue improvements to the Water Resources department web page to provide the most relevant and timely information that is easy to find and read.
- Actively participate in local customer service professional organizations.

Measurements

- 12% of customer base to use auto-pay monthly.
- Call Abandonment Rate to remain at 10% or less and reported monthly.

Employee and Leadership Development

Goals

1. Recruit and retain skilled, proactive, change-oriented staff.
2. Increase the value of staff skill and expertise in the areas of water and wastewater resources, operations, and safety.
3. Create a culture of stewardship and desire to embody the values of the department.

Strategies

- Develop and implement a safety program.
- Create and employ staffing plans that ensure critical work is performed.
- Establish an environment that encourages succession and sharing institutional knowledge to retain employees.
- Provide staff with the tools needed to ease adapting to change.
- Promote leadership and stewardship through mentoring.
- Forecast customer base growth from 1-5 years and reconcile with necessary staffing levels to properly budget for future staffing needs.
- Refer to Customer Service and Utility Billing data and call metrics to identify training needs.

Objectives for the next two to three years

- Create and implement a succession plan.
- Continuously review existing safety plans and update policies with a training schedule based on position.
- Perform analysis for all job hazards and critical tasks.
- Refer to Customer Service and Utility Billing data and call metrics to maintain established levels of service through adequate staffing.

Measurements

- 100%-designated staff attends required safety training.
- 100%-designated staff attends required training to maintain certifications.

Operational Optimization

Goals

1. Monitor and evaluate the capacity of water and wastewater systems as development occurs and coordinate the capital improvement plan accordingly.
2. Implement best operational management practices aligned with national standards.

Strategies

- Continue to ensure that all staff has the appropriate knowledge of proper operations of equipment and systems.
- Actively participate and comment on engineering designs of all capital projects and new development.
- Conduct asset condition assessments and repair or replace infrastructure as necessary.
- Perform timely and cost-effective preventative maintenance on infrastructure.
- Continue to improve the formal process for communicating asset record changes from the field to the department's GIS asset registry.
- Complete the AMI project to ensure all water meters used in the collection of data for utility billing and water usage are functional and accurate.
- Develop a plan for utilizing effluent water supplies.
- Ensure all sewage collected is transported to the treatment facilities with no system overflows.
- Deliver flood irrigation water to the customers on the system effectively and efficiently.
- Ensure system-wide water loss remains less than ten percent[7].
- Minimize resource use and loss from day to day operations.

- Be aware of and quickly adopt operational and technology improvements.
- Manage performance measurements and data to improve process and systems.

[7] **Water Loss**– Less than 10% water loss is an industry standard set by the American Water Works Association. The Arizona Department of Water Resources uses this value when regulating water uses.

Objectives for the next two to three years

- Implement and maintain an asset management program.
- Complete repairs to Sundance Wastewater Treatment Plant Anoxic Basin #4 by the end of fiscal year 2020.
- Phase one of the Broadway Water Campus online before May 1, 2020.
- Increase water reuse or recharge to 75%.
- Keep the GIS current and utilize the technology to assist in sewer cleanout and other water and wastewater maintenance programs.
- Continuously implement the Council adopted Water Master Plan.
- Develop a plan for beneficial use of effluent water.

Measurements

- Reduce unscheduled repairs by 5%.
- Greater than 98% of meters reading to the cloud technology by the end of the fiscal year 2020.
- Reduce sewer system blockages by 5% annually.

Financial Viability

Goals

1. Ensure both water and wastewater funds are structurally balanced by accurately forecasting revenues and expenditures that support continued operations, maintenance and repair, as well as a planned capital improvement program.
2. Maintain the city established metrics for reserves and debt service ratios.

Strategies

- Maximize every dollar spent while maintaining fiscal accountability and transparency through annual reporting.
- Research and develop rates and fees that ensure revenues are sufficient to cover the needs of the water and wastewater operations.
- Effectively balance long-term debt, asset values, operations, maintenance expenditures, and operating revenues.
- Search out and apply for grants, low-interest loans and programs that save the city money
- Adherence to city financial policies and procedures.
- Continuing processing and submitting all invoices to the Finance department for payment in less than 15 days of receipt of the invoice from the vendor.
- Revise current internal controls and implement new controls as needed to enhance efficiencies.
- Maintain at least a 90-day operating reserve balance.
- Decrease the water/sewer debt write-off year over year.

Objectives for the next two to three years

- Conduct analysis of resources and expenditures to develop and maintain an operating budget, a continuous five-year CIP, and a reserve balance.
- Update the rates and fees for water and wastewater to ensure the cost of service is charged accurately.

Measurements

- Maintain a minimum of 25% of operating expenditures in reserves.
- Maintain a minimum 5% revenue to expense ratio (total operational revenue only divided by total expense).
- Maintain a 1.6 times debt service ratio.

Infrastructure Strategy and Performance

Goals

1. Recommend plans to the Council for infrastructure investments consistent with community needs, anticipated growth, reliability goals, and relevant community priorities.

Strategies

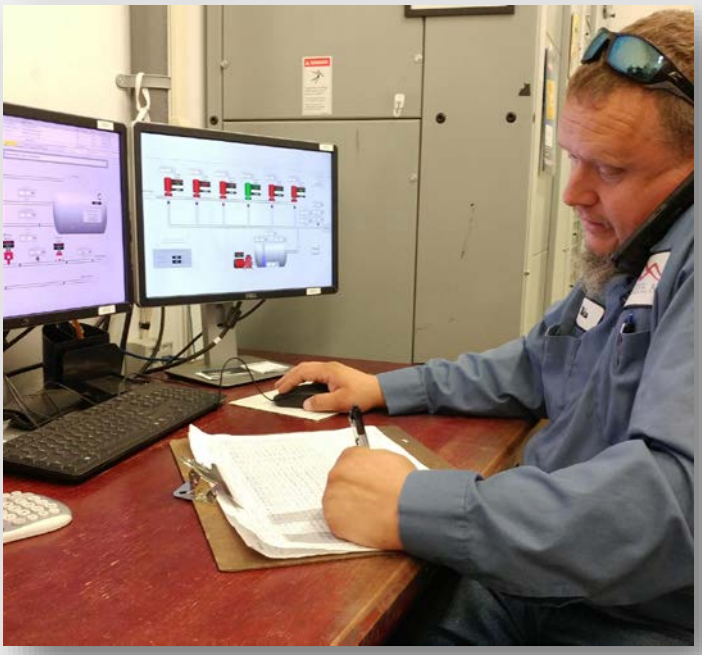
- Develop and implement an asset management plan and program.
- Implement, in alignment with the asset management program, a Capacity Management Operations and Maintenance (CMOM) program for the planned maintenance and repair of systems with minimal disruption to customers.
- Complete the Water Resources Master Plan update.
- Participate in plan review of projects and new development to ensure compatibility with the strategies set out in the Water Resources Master Plan.
- All water delivered to our customers is of adequate flow and pressure to ensure reliability and fire flow standards.
- Assure asset repair, rehabilitation and replacement efforts are coordinated with the community to minimize disruptions and other negative consequences.

Objectives for the next two to three years

- Develop and conduct a condition assessment of all critical assets.
- Analyze the risk of potential operations failure and its consequences.
- Continually examine the cost and benefits of rehabilitation versus replacement to maximize the return on investment.
- Conduct a sewer inspection and condition assessment program and implement a repair and replacement schedule.
- Ensure that the preventative maintenance schedule is aligned with the asset management program.
- Exercise critical water valves in the distribution system annually.

Measurements

- Verify operability of 100% of system valves over a 2-3 year period.



Enterprise Resiliency

Goals

1. Ensure required staffing levels are met, 24 hours a day, 365 days a year, and are consistent with citywide emergency management plans.
2. Prepare and maintain redundancy plans to manage operations if equipment or power fails.

Strategies

- Ensure water service is reliable and meets fire flow standards with adequate water pressure.
- Identify benchmarks for acceptable levels of operational tolerance and risk, and monitor these levels to anticipate and avoid problems.
- Participate in citywide emergency drills.
- Ensure all remotely operated instruments and controls in water and wastewater facilities are properly maintained to continue operation, data collection, and alarm notification in the event of a failure.
- Develop and implement a plan to ensure security needs.
- Detect water line leaks before they become breaks.
- Maintain a reliable water and wastewater system to continually meet peak demands, system pressure requirements, and provide adequate redundancy.

Objectives for the next two to three years

- Accurately predict water and wastewater system expansions and upgrades through the regular review and update of the Water Resources Master Plan to ensure reliability and redundancy.
- Update emergency response plans annually.

Measurements

- Total recordable injury rate of less than 8.4 injuries per year.
- Complete 50% development of the federally mandated System Resiliency Plan.
- Complete 25% development of the federally mandated Emergency Response Plan Update.
- 100% of instruments calibrated annually.

Community and Water Resource Sustainability

Goals

1. Continue to utilize existing water supplies in a sustainable manner, and plan for the acquisition and development of long-term sustainable future water supplies.
2. Reduce per capita water demands.
3. Reduce landscape watering per acre.

Strategies

- Complete the Water Resources Master Plan Update.
- Provide unique education opportunities to various public groups (students, residents, businesses).
  - Plan and sponsor Project WET Water Festival.
  - Promote Fix-a-Leak Week.
  - Develop an interactive display and participate in Sci-tech Festival at the Buckeye Air Fair.
  - Display the Water-Use-It-Wisely water tower at the Coyote Branch Library, and staff a water conservation booth at the Southwest Horticulture Annual Day of Education (SHADE) landscaping conference
- Increase and promote proactive customer interactions to reduce water usage and loss.
- Participate in interagency planning of future water supplies for the west valley.
- Advocate for the extension of the Buckeye Waterlogged Area exemptions.
- Actively participate in the Gila River Flood Risk Management Feasibility Study.
- Support future economic development discussions and plans.
- Improve website conservation and education content and readability.

Objectives for the next two to three years

- Develop and utilize existing water supplies sustainably by drafting a short-term strategic plan to implement one or more recommendations from the Water Resources Master Plan.
- Adequate planning of resources to implement the outer four years of the five-year CIP.

Measurements:

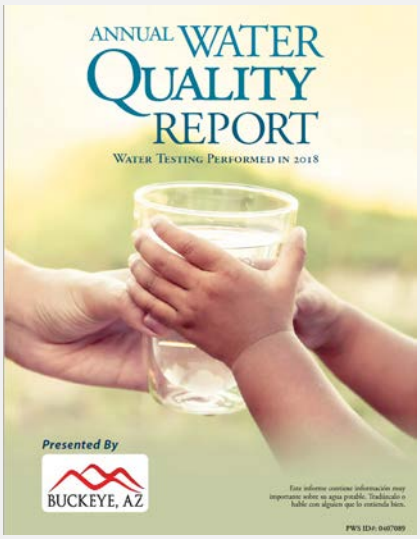
- Increase outreach efforts by 5% annually.
- Reduce lost and unaccounted for water annually.

Stakeholder Understanding and Support

Goals

1. Create an atmosphere of transparency and trust between department staff, management, elected officials and customers.

Strategies



- Promote public confidence through education, transparency, professional character and ethical behavior.
- Make the annual Consumer Confidence report available to all residents on the city's web page.
- Bring forward relevant topics for discussion at Council work sessions before requesting action.
- Actively report timely information in the City Manager's bi-weekly report to keep staff and the public informed of departmental strategies, activities, and successes.
- Foster productive and positive relationships with other departments and the City Council.
- Increase our presence within the community to foster positive relationships.
- Conduct public outreach of rate modifications for all stakeholders.
- Collaborate with the Marketing and Communications division to utilize the department web page and other mediums to coordinate timely, responsive messages to the public on relevant issues.
- Collaborate with water conservation professionals and organizations to share ideas on how best to promote water conservation and best practices with city customers.
- Support and implement city policies.
- Increase positive media/press coverage by posting educational articles and videos on the city's web page.

Objectives for the next two to three years

- Develop a formal water/wastewater 101 for various stakeholder groups.
- Develop a program to involve local student's participation in new ideas and messages on the website and social media.

Measurements

- 100% noticing to all customers affected within 90 days of an impending rate/fee change.
- Increase proactive customer contact by 5%.

Scorecard

Category	Budget Metric	FY 19-20 Score
Product Quality	• 100% compliance with sampling requirements from regulatory agencies • 100% compliance with treatment standards established by regulatory agencies	
Customer Satisfaction	• Auto Pay Participation –12% of customer base monthly • Call Abandonment Rate – 10% or less of total calls presented	
Employee and Leadership Development	• 100%-designated staff attends required safety training • 100%-designated staff attend required training to maintain certifications.	
Operational Optimization	• Reduce unscheduled repairs by 5% • Greater than 95% of meters reading by the end of the fiscal year. • Reduce sewer system blockages by 5% annually	
Financial Viability	• Maintain a minimum of 25% of operating expenditures in reserves. • Maintain a minimum 5% operational revenue to expense ratio total revenue divided by total expense. • Maintain a 1.6 times debt service ratio.	

Category	Budget Metric	FY 19-20 Score
Infrastructure Stability	• Verify operability of 100% of system valves over a 2-3 year period.	
Enterprise Resiliency	• Total recordable injury rate of less than 8.4. • Complete 50% development of the federally mandated System Resiliency Plan. • Complete 25% development of the federally mandated Emergency Response Plan Update. • 100% of instruments calibrated annually.	
Water Resources and Community Sustainability	• Increase outreach efforts by 5% annually. • Reduce lost and unaccounted for water annually.	
Stakeholder Understanding and Support	• 100% noticing to all customers affected within 90 days of an impending rate change. • Increase proactive customer outreach by 5%	

Industry Standards– *Coming in FY2021!*

The following industry standards are to measure the core functions of our business against others in our industry to determine if we are operating effectively and responsibly. The Water Resources Department must first align its processes to this strategic plan and then track the following metrics of our work. Implementation of some of these areas may take multiple fiscal years.

Industry Standards				
Core Functions	**Metric**	**Method**	**Benchmark**	**Score**
Management of Core Competencies	Training hours per employee	Total of qualified formal training hours for all employees ÷ total FTE's (FTE = 2,080 hours per year of employee time equivalent) worked by employees during the reporting period.		
Operational Optimization			**BM**	**Score**
Resource Optimization	Customer accounts per employee	Number of accounts ÷number of FTE's		
	MGD Water delivered/processed per employee	Average MGD delivered/processed ÷ FTE's per year.		
Financial Viability			**BM**	**Score**
Budget Management Effectiveness	Debt Ratio	Total liabilities ÷ total assets		
Infrastructure Strategy and Performance			BM	Score
Asset system and Renewal Replacement	Asset (system) renewal / replacement rate	100 x (total actual expenditures or total amount of funds reserved for renewal and replacement for each asset group ÷ total present worth for renewal and replacement needs for each asset group). [this metric requires asset management plan in place]		
Collection System Integrity	Collection system failure rate (%)	100 x (total number of collection system failures ÷ total miles of collection system piping per year)		
Infrastructure Planning and Maintenance	Planned Maintenance ratio by hours	100 x (hours of planned maintenance ÷ (hours of planned + corrective maintenance)		
	Planned Maintenance ratio by cost	100 x (cost of planned maintenance ÷(cost of planned + corrective maintenance))		
Enterprise Resiliency			BM	Score
Recordable incidents of injury or illness	Total Recordable incident rate	(Number of work-related injuries and illnesses x 200,000) ÷ employee hours worked.		
Insurance Claims	Number of insurance claims	Number of general liability and auto insurance claims per 200,000 employee hours worked.		
	Severity of Insurance Claims	Total dollar amount of general liability and auto insurance claims per 200,000 employee hours worked.		
Risk Assessment and response Preparedness	Number and frequency of ERP exercises per year	100 x (number of critical employees who participate in ERP exercises ÷ total number of critical employees)		
Operational Resiliency Under Emergency Conditions	Critical Staff Resiliency	Average number of response capable backup staff for critical operation and maintenance positions (calculated as the sum of all response –capable backup staff ÷ total number of critical operation and maintenance positions)		
	Source water Resiliency	Period of time (e.g., hours or days) minimum daily demand can be met with the primary raw water source unavailable. (Note: "minimum daily demand is the average daily demand for the lowest production month of the year.)		
Service Affordability	Bill affordability (households for which rates may represent and unaffordable level) %	100 x (Number of households served for which average water bill is > "X" % (often 2-2.5%) of median household income ÷ total number of households served.)		

Industry Standards				
Core Functions	**Metric**	**Method**	**Benchmark**	**Score**
Community Sustainability			BM	Score
	NA			
Stakeholder Understanding and Support			BM	Score
Media / Press Coverage	Total number of media Stories	Total number of media stories (social media, newspapers, TV, radio, etc.) concerning the utility per year		
	Media Coverage Tone (%)	100 x (Number of media stories concerning the utility that portray the utility in a positive way ÷ total number of media stories concerning the utility) per year		
	Media Coverage Accuracy (%)	100 x (number of media stories that accurately describe the utility ÷ total number of media stories concerning the utility) per year.		
	Number of outreach events	Number of outreach events conducted to build support for utility, value of water, and value of water Services.