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# 2019 Strategic Plan

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Wooster Water  
Utilities

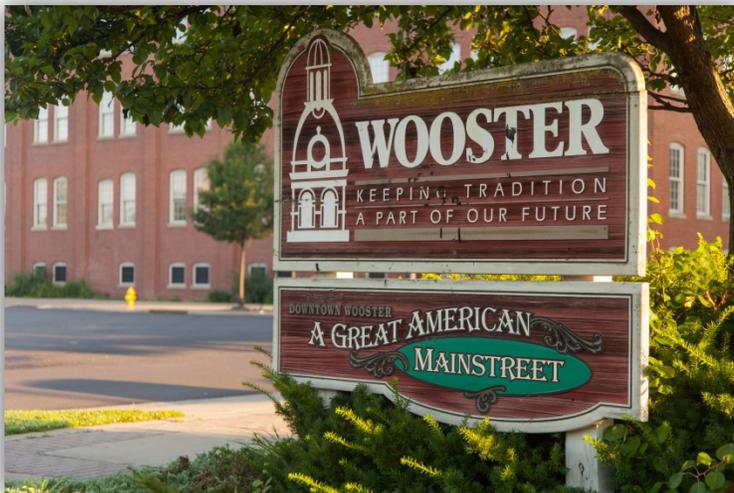
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Nathan W. Coey, Utilities  
Manager

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*"Safety, Reliability, and Excellence!"*





## Water Utilities 2019 Strategic Plan

### Purpose

The purpose of the Wooster Water Utilities (WWU) Strategic Plan is to provide guidance and focus on direct management of the department. The 2019 edition is to summarize current status and focus on specific attribute ranking. The 2019 edition will also identify attribute goals, actions, and measures of success. Annual revision will serve as preceding year reporting with focus on improvements for the upcoming year.

The content of this report and reviews are from the current Utilities Manager. Any future updates and plan reviews will include the following:

- Participation in the AWWA Nationwide Benchmarking Survey. This will provide comparative statistics in the nation in relation to Wooster practices.
- Meetings with Wooster leadership and not limited to department level staff.
- Meeting with Wooster stakeholders including the public and elected officials.
- On-line employee surveys.
- Review of categorical goals, actions, and subsequent measures of success.

### Strategic Planning Schedule 2019

- Submit 2019 Strategic Plan to the Director of Administration on March 22, 2019.
- First and second quarter report/review on goals; adjust and redefine if necessary. Target date July 12, 2019.
- Review goal measurable for current year, third quarter review, goal setting for the coming year under the annual budgeting process. Target completion date September 27, 2019.
- Complete 2020 Strategic Plan with calendar year goals and complete fourth quarter goal review. Target completion date December 27, 2019.
- Complete 2019 measurable review and annual data collection. Submit data review (annual reporting) combined into the 2020 Strategic Plan to the Director of Administration. Target completion date January 31, 2020.

## Our Mission

The mission of the City of Wooster is to partner with our community to deliver services, conserve resources, protect quality of life, and plan for the future. We will endeavor to accomplish this mission in the most efficient and fiscally responsible manner possible, and in accordance to the City of Wooster's Core Values. *The Daily Mission of Clean Water is our resolve.*

## Our Vision

Stakeholders, customers, and peers recognize our utility as a leader of excellence. Our focus is to be the epitome of public servanthood, stewardship, environmentally conscious, and dedicated to our community. *The Daily Mission of Clean Water is our vision.*

## Our Values

Our values create cultural expectations and define the pursuit of excellence in public servanthood. *The Daily Mission of Clean water is defined by our values.*

Accountability – We accept responsibility for our personal and organizational decisions and actions. We will deliver cost effective and efficient services with the objective of doing our work right the first time. We are concerned about our natural, historic, economic and aesthetic resources and endeavor to enhance their sustainability for future generations. In doing so, we will:

- ◆ Accept the expectation of public trust and our mission is outward focused on public quality of life.
- ◆ Communicate with our stakeholders in transparency to build trust.
- ◆ Ensure operational strategies to meet regulatory standards.
- ◆ Provide timely reports to stakeholders regarding department activities.
- ◆ Provide open house / tours related to department operations.
- ◆ Gauge stakeholder satisfaction through intentional public surveys.

Continuous Improvement – We provide the highest quality service with the resources available by promoting innovation and flexibility to meet the changing needs in the community. In doing so, we will:

- ◆ Accept the anticipation of excellence which includes continual growth and improvement.
- ◆ Educate the staff and stakeholders in the daily mission of clean water.
- ◆ Ensure operational strategies are in line with regulatory expectations and future trends.

Leadership & Management – We value the importance of serving as a role model and mentor within the organization and community. We make decisions that show responsible management of all our resources. In doing so, we will:

- ◆ Accept our role as a community leader.
- ◆ Prioritize public health and public safety.
- ◆ Utilize leading edge technology to create sustainable operations.

- ◆ Manage all department affairs to ensure integrity and reliability.
- ◆ Update and implement standard operating procedures.
- ◆ Evaluate operations with data management to gauge current and future trends.
- ◆ Recruit, train, and develop staff with the department mission and goals in mind.

Respect & Communication – We are honest and treat our coworkers and the public with courtesy and dignity. We promote professional and friendly communication while providing excellent customer service at all times. In doing so, we will:

- ◆ Understand that our position expects healthy communication and respect with all stakeholders, customers, elected officials, and coworkers.
- ◆ Honor our commitments and focus on public satisfaction.
- ◆ Be humble and compassionate.
- ◆ Ensure an attitude exemplary of public stewardship.
- ◆ Be honest in all communications.
- ◆ Be creative and flexible.

Honesty & Integrity – We set high standards for our personal, professional, and organizational conduct and act with integrity as we strive to attain our mission. In doing so, we will:

- ◆ Adhere to high standards.
- ◆ Be transparent and trusted.
- ◆ Operate in a professional and ethical manner.
- ◆ Be honest in all communications.
- ◆ Operate in a manner that would ensure public confidence publically and privately.

Stewardship & Trust – We understand our responsibility to use public funds wisely. We will faithfully deliver services and make decisions that will meet the citizen’s needs. We commit to our core values and will openly communicate with the public and solicit feedback in order to achieve our goals. In doing so, we will:

- ◆ Operate in a manner the supports public trust and confidence.
- ◆ Be responsible in the use of all public resources.
- ◆ Ensure regulatory and customer expectations in an anticipatory manner that honors commitment and stewardship.
- ◆ Serve as an advocate at local, state, and federal levels on behalf of the general public.
- ◆ Recognize the value of stewardship and the solemn oath of public wellbeing and health.
- ◆ Openly engage stakeholders in the department activities and gauge satisfaction.
- ◆ Be driven by excellence in producing quality products and services.

Safety – We use education, prevention, and enforcement methods to protect life and property in our business and residential neighborhoods. Our safety awareness will maintain our infrastructure and facilities to provide a safe environment in which to live and work. In doing so, we will:

- ◆ Accept the significance of our role and trust to operate on behalf of the most vulnerable in our community.
- ◆ Accept the mission of the utility department and the focus on public safety and health.
- ◆ Provide education programs for the stakeholders.
- ◆ Provide training and education to ensure the safety of the public, resources, and employees.
- ◆ Measure and eliminate potential risks that could affect the public health and wellbeing.

In addition to the core values, the slogan of Wooster Water Utilities is as follows:

**"Safety, Reliability, and Excellence!"**

Safety

We work in a manner that ensures the integrity of the infrastructure. Safe water is the standard for our citizens and the focus of our daily mission. Our focus is on public health producing a safe product in all aspects. Safety is a focus on the people trusted to operate the infrastructure to ensure quality in every drop of water to our citizens.

Reliability

We work to ensure reliability to the customers we serve. It is our duty as stewards to ensure the infrastructure investments are well maintained to ensure quality of life. We are diligent in our operational methods to ensure high quality water every day. We honor the trust from our citizens by sharing information on the process and product quality.

Excellence

Excellence, in the mission of clean water is the expected daily standard. Citizens expect excellence in service provided, federal and state regulators require excellence, and the science of water treatment requires a commitment to excellence. As a life sustainer, water treatment must be approached with reverence understanding the solemn oath to the citizens as we serve on the frontline of public health. We expect the best from our infrastructure, engineers, strategic partners, and employees in our pursuit of excellence.



## Introduction

Water is essential to life. Elemental carbon is referred to as the “building block of life”, everything we see contains carbon. Water is the sustainer of life. It is no coincidence that the sphere on which we live is 71% water and the human body includes the same carbon to water ratio. Up to 60% of the human body is water, with major organs containing a higher percent and even our bones are 30% water. Water is vital to life.

The City of Wooster is home to a great deal of innovation and progressive efforts to ensure health and quality of life. In 1894, Minor Scovel reported to the Wooster Water Commission to help find sustainable water sources. The water service for the growing Wooster community was sporadic and suspect in quality. The nation was gripped in death tolls related to communicable diseases; specifically those spread by poor water use and discharge practices. Scovel shared with the commission a case of typhoid fever that was spread from a water reservoir to the public. Scovel urged elected officials to find a ground water source with a focus on public health. The study determined a safe ground water source at the site of the first treatment plant near Old Mansfield Road. However, it took nearly 40 years before Scovel’s recommendation became a reality. The report urged elected officials to spend no more than \$40,000 to build a modern water treatment plant to ensure public health. Scovel stated in the report, “Poor water is dear, and pure water is cheap at any prices.” Citation from *Report of the Water Extension Commission to the City Council of Wooster, Ohio Nov. 19<sup>th</sup>, 1894*

The dawn of modern civilization and supporting infrastructure for a growing population created publically owned water management works. Every day, every citizen uses or discards water in one form or another. The water cycle is nonstop, always moving, always changing and producing. The City of Wooster plays a vital role in the water cycle. Natural water is drawn from the ground and treated for drinking water. The water used by customers contains contaminants absorbed in the process, as water serves as the universal solvent. The wastewater is treated and delivered back to nature to start the natural and manmade cycle again. Nature serves as a standard of quality in the water cycle. Facilities are operated in a manner that is sustaining in all forms and to bring it to the purest level possible.

The daily mission of clean water requires our respect and diligence as front line defenders of the environment and public health.

Wooster Water Utilities (WWU) is owned and operated by the City of Wooster, Ohio. Services provided include water treatment and distribution, wastewater treatment and collection, and any service to ensure the delivery and treatment of water for the citizens of Wooster. WWU serves a current population of nearly 27,000 people with 9,907 active utility accounts, in a nearly 17 square mile service area. WWU has a total of 32 employees and operated with a 9.03 million dollar budget in 2018.

## Water Production Information

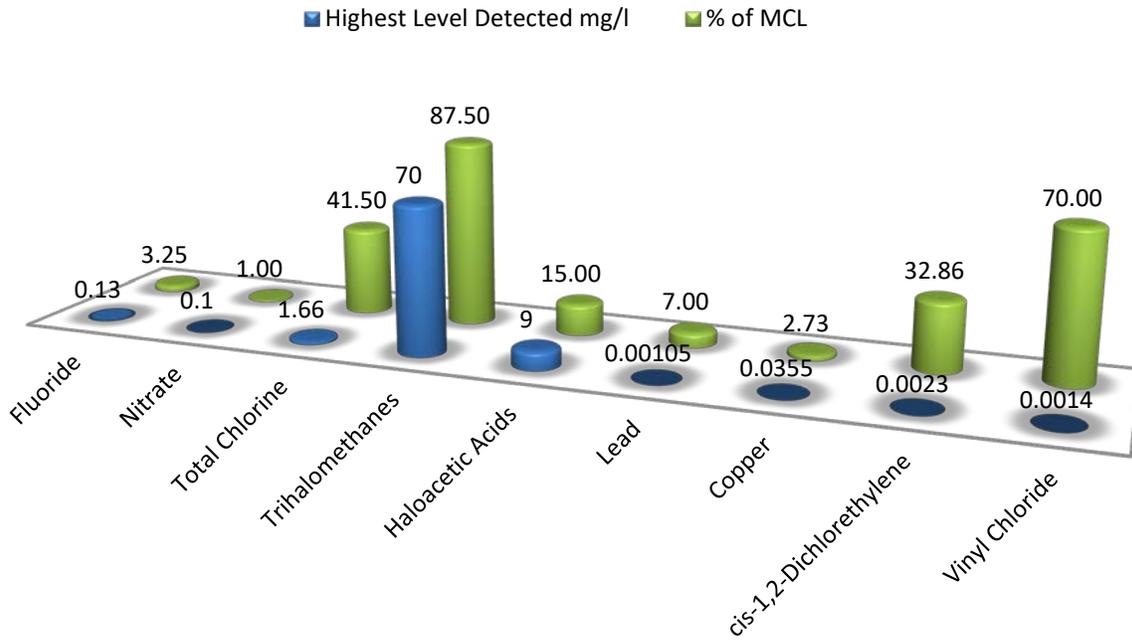
Water Production Facility (WPF) infrastructure assets include two separate source water wellfields with a total of nine wells, eight interceptor wells, and over four dozen ground water monitoring wells. Additional water assets include a water treatment facility, nine finished water storage tanks, five water booster stations, 161 miles of main line inventory, a staff of nine individuals, facilities, and necessary equipment for the function of the department. The current OEPA Class 3 water treatment facility process includes ground water sources, coagulation, flocculation, iron removal, softening, sedimentation, VOC removal, recarbonation, filtration, disinfection, and solids handling. The facility has been in operation since 1998.

In 2018, the Water Production Facility treated and delivered 1.0082 billion gallons of drinking water to the customers. The average daily flow production in 2018 was 2.76 million gallons, or 45.25% of the facility design capacity of 6.1 million gallons per day. The facility was designed with the use of 87 gallons per day/capital, at current flow rates the population equivalent is 31,724. The design capacity of the facility has the ability to produce enough water for an estimated population of 70,000 people.

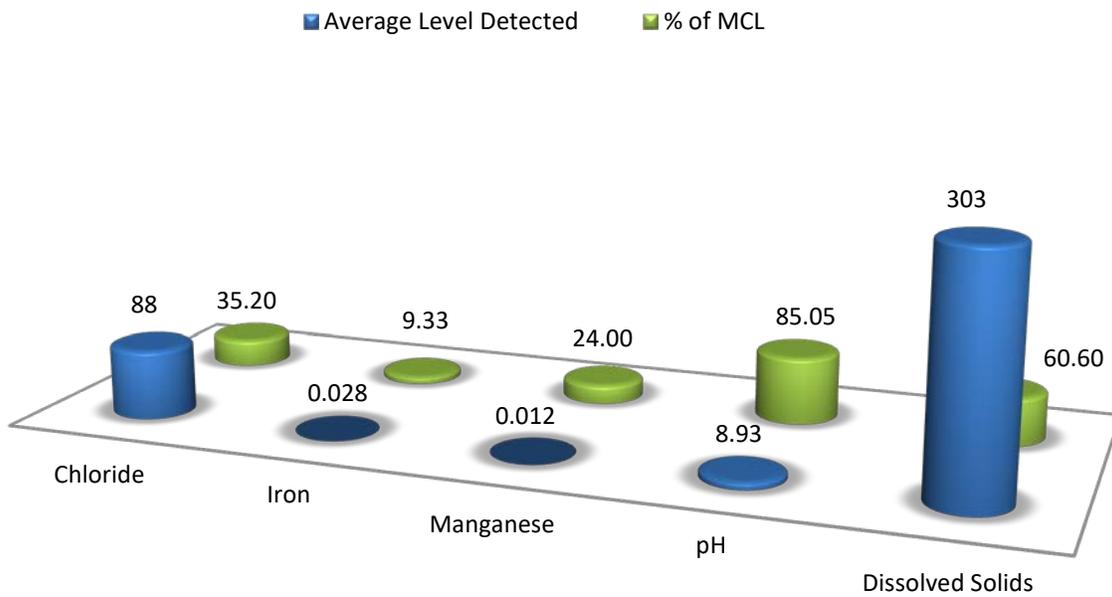
For the sake of this report, the data provided below relates to finished water treatment levels in comparison to OEPA Maximum Contaminate Levels (MCL's). Any parameters below detectable limits were not used in this report as results below detectable limits are generally not required in the annual OEPA required "Consumer Confidence Report". The purpose of this data is to indicate efforts to continually monitor operations in relation to treatment standards. The data provided in this report will be used as future benchmark results in facility optimization and future guidance reports.

In the 1980's, contaminants were detected in the Wooster South Wellfield, specifically the S-1 production well. Significant testing continues under the guidance of the Ohio EPA regarding the detected contaminants. A series of interceptor wells were installed to create a hydraulic barrier in the aquifer to mitigate pollution movement in the aquifer source water. Through an OEPA approved testing and operational technique the contamination is closely monitored, in some cases on a bi-weekly basis. The detected contaminants fall into a general category as "Volatile Organic Compounds" (VOC), specifically the Wooster testing focuses on cis-1,2 – Dichlorethylene and Vinyl Chloride . The VOC testing is included as it relates to treatment target levels in the blended source water. The testing reference serves as treatment goals in the removal of VOC's. The trigger for operational changes is when the blended source water MCL is exceeded on two consecutive samples. To date no VOC's or MCL's have been detected in the filtered or finished water.

## Primary Standards



## Secondary Standards



Based on the 2018 data, the following summary relates to the WPF.

- The average pH level is at 85% of the MCL cap of 10.5. It is important to note the low range MCL for pH is 7. Testing indicates finished water pH is in the acceptable mid-range. pH levels are directly related to the lime softening process and treatment levels are frequently monitored. While the most recent averages are in a range greater than 70% of the MCL, it is in an acceptable range and controlled with operational techniques.
- Trihalomehtanes are monitored as disinfection byproduct. The MCL established at the federal and state level as disinfection byproducts have the potential to be carcinogenic in very high ranges. Sampling occurs in parts of the system furthest away from the source and relates to water turn over in the system. While the highest level detected in 2018 is 87% of the MCL, the lowest level detected in the sampling year was 38% of the MCL. Data will continue to be monitored, along with system turn over evaluation.
- Vinyl chloride testing is required as it relates to the South Wellfield contamination detected in 1986. An intricate testing and monitoring program is in place to effectively remove VOC's with stripper towers in the treatment facility. The monitoring program is in place to ensure compliance and proper treatment techniques. While the highest level detected in 2018 was at 70% of the MCL, the average test results for the year resulted in levels 50% of the MCL. We will continue to monitor and utilize the 70% of the MCL level (for all VOC's) as an indicator to gauge any changes in the system. It is important to note no VOC's have been detected in the filter or finished water from the facility.

#### Additional Operational Benchmarking Data

- The Water Production Facility was 100% complaint with all federal and state regulations. This is a calculation of total days in compliance throughout the year.
- The ratio of employee to annual total gallons treated is equal to 126 million gallons/employee.
- The operation and maintenance cost per million gallons treated is equal to \$4,557.09. In comparison to the recovery system cost, the water system operates additional wells and booster stations outside the treatment system power grid.
- Through collaborative city wide department efforts the non-revenue water percent has been on a decline since 2013. 2018 saw a reduction to 21.89% from the 2017 23.73%.



## Water Resource Recovery Information

Water Resource Recovery Facility (WRRF) assets include 162 miles of sanitary sewer main, ten sanitary sewer lift stations, and a modern treatment facility with anaerobic digestion including the co-generation of methane gas and electrical energy for facility operation. Additional assets include a staff of twelve individuals, facilities, and necessary equipment for the function of the department.

Wastewater treatment for the citizens of Wooster has been in operation at the current site since 1938. The facilities went through upgrades in 1965, 2007, and 2014. In 2009, the OEPA placed enforcement actions against Wooster due to the under performance of the 2007 upgrade. Wooster has spent millions of dollars over the past decade to address treatment inadequacies and collection system improvements.

The Ohio EPA Class 4 facility includes a vertical loop reactor system, a modification of the traditional oxidation ditch activated sludge process with a storm flow mode of operation. The processes include grit and grease removal, primary settling tanks, vertical loop reactor, final settling tanks, biological phosphorus removal, ultraviolet disinfection, post aeration, anaerobic digestion and solids handling. The facility plays a vital role in the local water cycle to eliminate pollutants in the wastewater prior to discharge to the Killbuck Creek to enter back into the natural water cycle.

The 2014 upgrade, through a cooperative effort with an outside entity, the facility was converted to full co-generation. The ability to receive outside waste streams to support the energy needs of the facility also creates a revenue stream. The facility currently accepts semi-solid and liquid waste streams to the facility through hauling fees paid for by the waste generator. The facility is selective at the acceptance of other municipal biosolids, food processing wastes, and septic system waste. The facility serves as a power distribution center for the WRRF and the WPF.

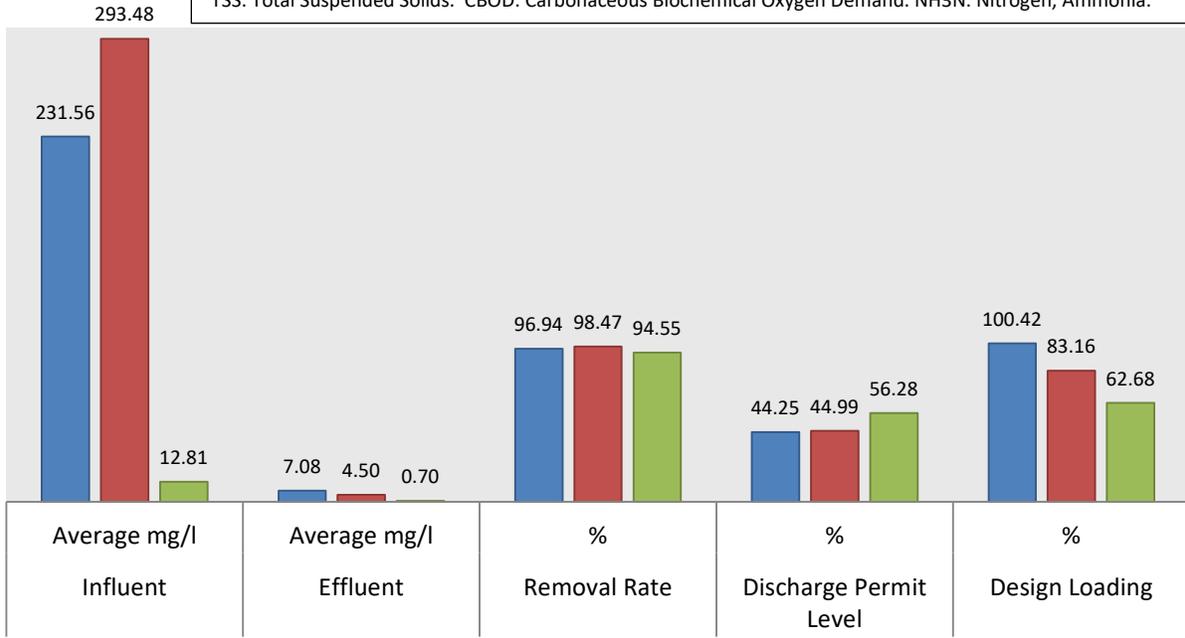
In 2018, the Water Resource Recovery Facility received, treated, and discharged 1.913 billion gallons of recovered water back into the natural water cycle. The average daily flow in 2018 was 5.27 million gallons, or 70.27% of the facility design capacity of 7.5 million gallons per day. The facility was designed with the peak high flow rate of 27 million gallons per day. The average daily flow design level was exceeded 41 times in 2018 directly related to the 44.1 inches of precipitation for the calendar year. Based on available data of metered water usage, nearly 47% of the annual flow rate is directly related to inflow and infiltration (I&I) sources. Based on traditional design data, the current facility should support a population equivalent of 70,000 people. However, specific design and loading criteria must be evaluated as growth, regulations, and treatment technologies change.

For the sake of this report, the data provided below relates to discharge treatment levels in comparison to OEPA permitted discharge levels. Levels are established by the regulatory community to ensure public health, healthy aquatic life at the receiving stream, and the removal of pollutants into the natural water cycle. The purpose of this data is to indicate efforts to continually monitor operations in relation to treatment standards. The data provided in this report will be used as future benchmark results in facility optimization and future guidance reports.

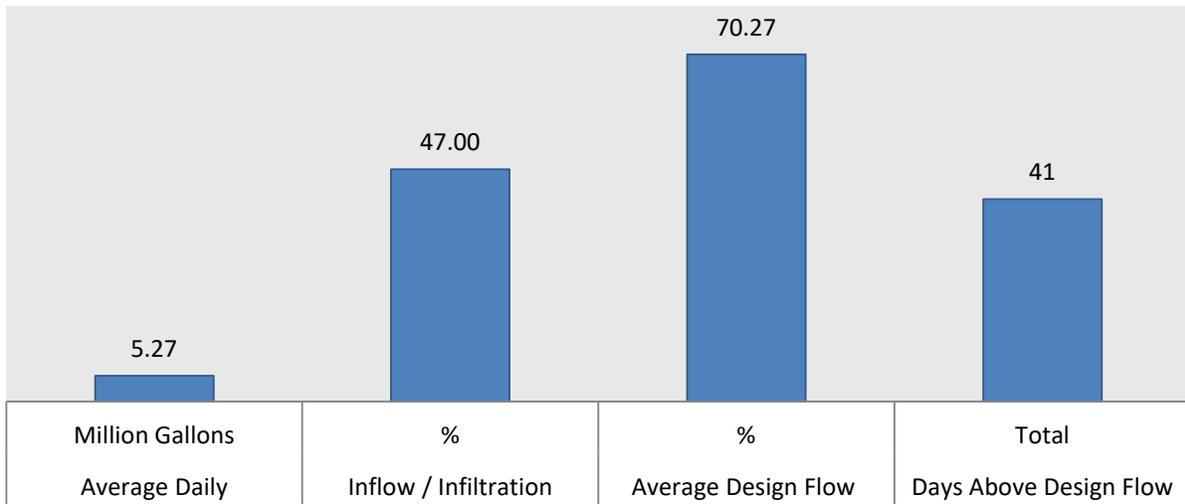
## Wooster WRRF Operational Averages 2018

■ TSS ■ CBOD ■ NH3N

TSS: Total Suspended Solids. CBOD: Carbonaceous Biochemical Oxygen Demand. NH3N: Nitrogen, Ammonia.



## Wooster WRRF 2018 Flow Data Total Flow 1,912,930,000 gallons



Based on the 2018 data, the following summary relates to the WRRF.

- Across the most common pollutant levels, the facility is greater than 90% on removal rates.
- The data indicates the facility, on average, operates at the solids loading rate. In 2018, this was slightly over 100% of the design mark. This will require future evaluation in relation to growth. While this data point serves as a trend indicator, the important data set is the removal rate.
- The data indicates the facility, on average operates above 80% of the design loading rate for CBOD. This will require future evaluation in relation to growth. While this data point serves as a trend indicator, the important data set is the removal rate.
- The facility operates at 70% of the average design flow which includes the inflow and infiltration contributions. While the facility is meeting regulatory requirements, future consideration includes additional I & I removal to ensure the investments meet growth requirements.

#### Additional Operational Benchmarking Data

- The Water Production Facility was 97% compliant with all federal and state regulations. This is a calculation of days in compliance throughout the year. Related to high flows there was acute exceedances of suspended solids in February, and acute ammonia exceedances in February, March and April. It is important to note, these exceedances were directly related to I and I related storm flows.
- The ratio of employee to annual total gallons treated is equal to 153 million gallons/employee.
- The annual operation and maintenance cost per million gallons treated is equal to \$2,317.96.
- The facility created 3.9 mega-watts of electricity or 48.75% of annual power needs for both treatment facilities. The calculated cost savings of electricity production versus purchasing electricity from the grid is equal to \$325,588.
- The facility generated \$889,500.27 in revenue from the acceptance of third party waste to the recovery facility.
- A total of 2,702 dry tons of class A biosolids were provided to local agricultural fields for soil enrichment and ultimate reduction of commercial fertilizers. The beneficial reuse disposal cost is equal to \$260/dry ton.

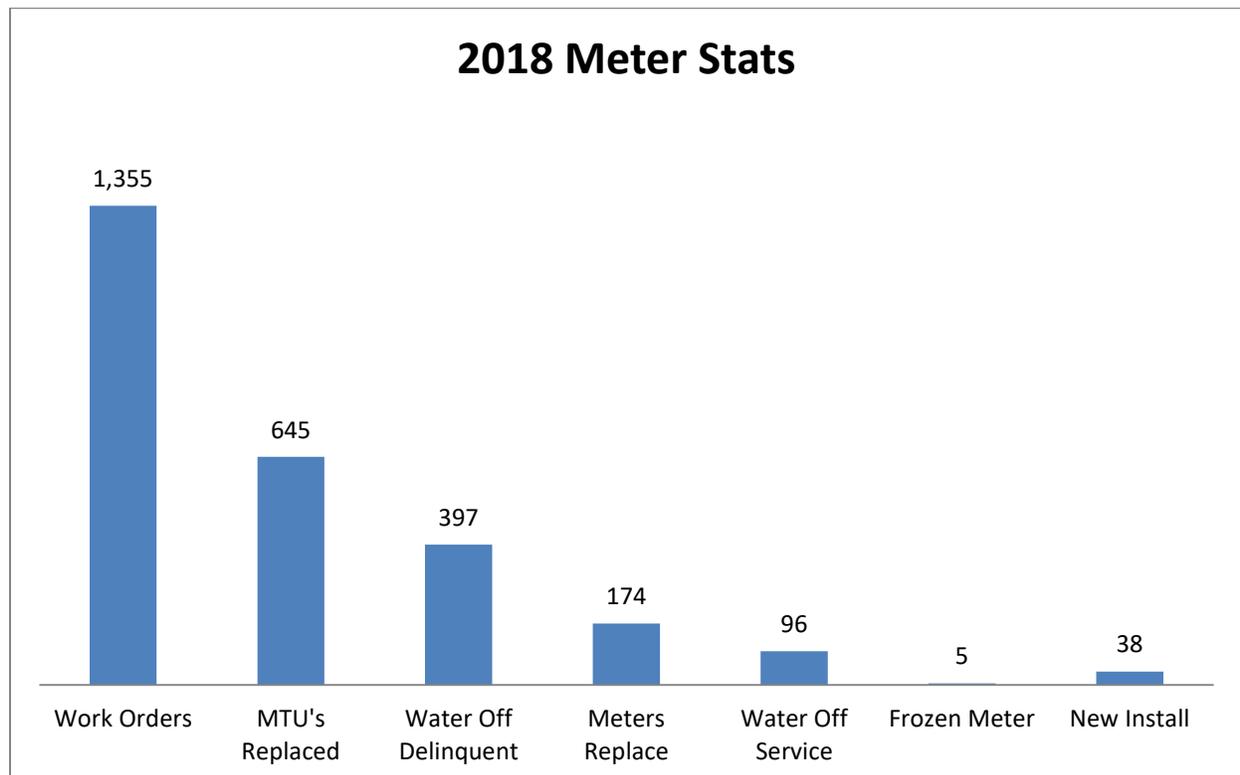


## Distribution, Collection, and Meter Information

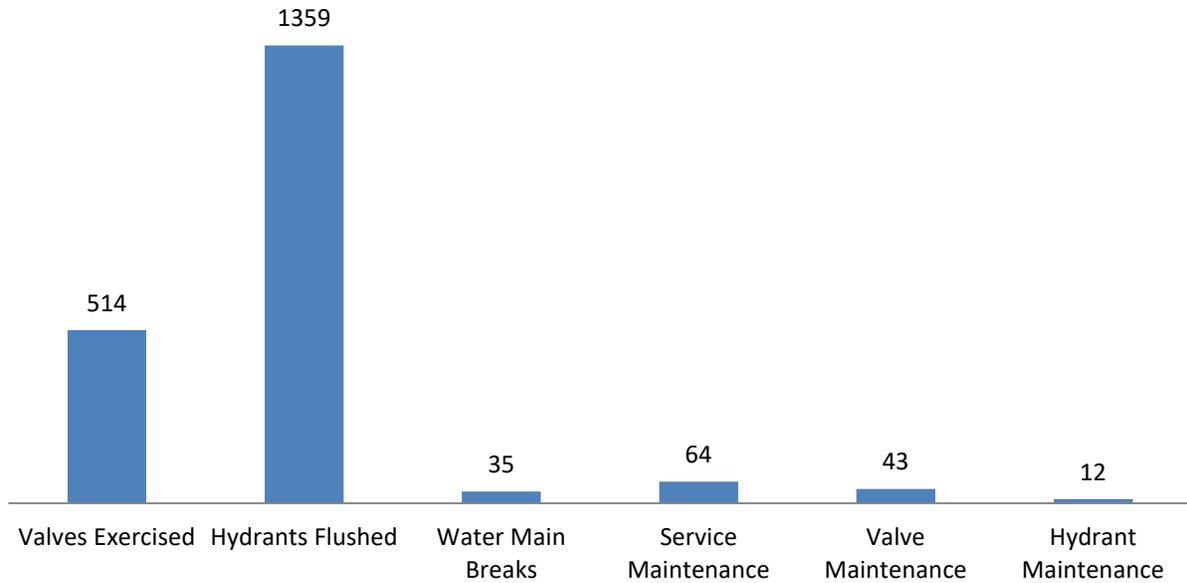
The Distribution, Collection, and Meter (DCM) division works to ensure proper service delivery to our customers. DCM assets include 162 miles of sanitary sewer main, 161 miles of water main, 1,142 fire hydrants, 4,558 water valves, 3,308 sanitary manholes, metering units for the 9,907 customer accounts, and a well maintained geographic information system (GIS) for the infrastructure location . DCM assets also include a workforce of ten individuals, facilities, sanitary sewer cleaning and televising equipment, excavation equipment, fleet vehicles and all equipment necessary for task completion.

For the sake of this report, the data provided below relates to tasks completed in the mission of providing service to customers. The data provided is not intended to quantify the DCM workflow, but to provide a view of currently tracked tasks. For example, the total number of water main breaks in 2018 totaled 35. While this is specific to the Wooster system, the data can be compared to other similarly sized communities in the future. It is however important to note that the work that goes into each main line job. Tasks include mobilization, isolation, excavation, repair, restoration, and communication with the public. On average, four employees are needed to complete the work on an average of six hours each job. The estimated 840 man hours in 2018 includes work after normal business hours and usually in unfavorable conditions.

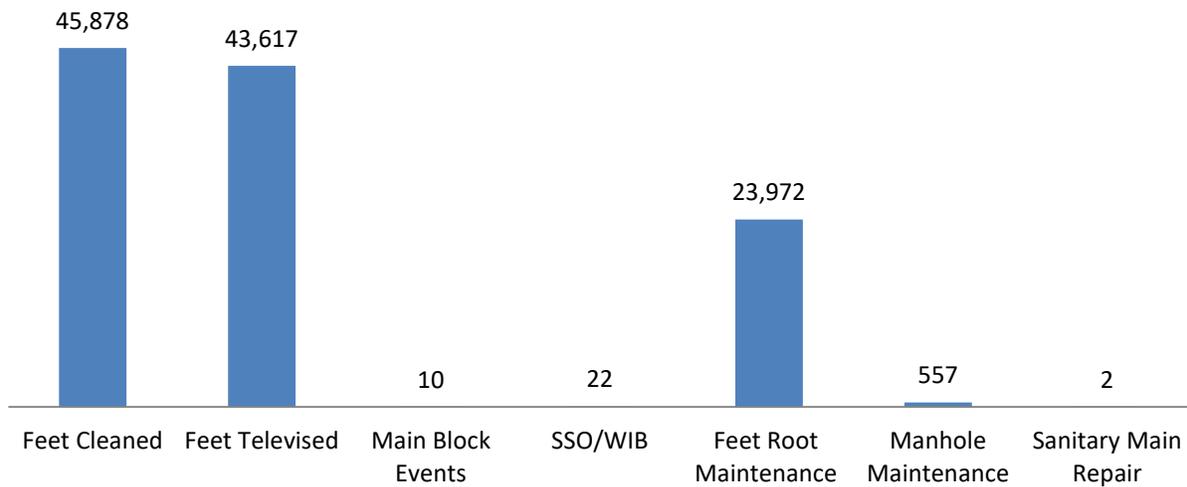
The DCM is most often the face of the department to the customers. The nature of the service wing of the department includes direct customer interaction. This could be in the form of service requested by the customer or service initiated by city services. DCM works close with Utility Billing to ensure timely delivery of service not limited to accurate meter reading, meter replacement, and service verification.



## 2018 Distribution Stats



## 2018 Collection Stats



Based on the 2018 data, the following summary relates to DCM.

- Basic data summary indicates the vital support service provided through DCM. While the treatment of distributed and collected water is vital to a community, infrastructure support ensures the integrity of expected level of service.

#### DCM Benchmarking Data

- A total of 1,355 work orders were completed for the 9,907 customer accounts. This equates to a ratio of 13.7 service orders/100 customer accounts.
- A total of 645 meter transmitting units (MTU's) were replaced in comparison to 174 meters replaced.
- A total of 397 accounts were disconnected due to delinquency. This represents 4% of the customer base. This is indicative of excellence in customer service and service collection efforts.
- A total of 514 water main valves were exercised to ensure proper operation in the event of required isolation. This represents 11.3% of the total valves indicated in the GIS system.
- A combined average of 44,748 feet of sanitary main line was preventively cleaned and televised. This represents over 5% of the current main line inventory. The ability to conduct this work in house provides an estimated cost savings of \$60,000 versus contractual fees.
- The 2018 unplanned main line water service disruptions are equal to 4.1 disruptions/per 100,000 feet of system inventory.
- The 2018 unplanned main line sewer service disruptions are equal to 3.7 disruptions/per 100,000 feet of system inventory.



## Utility Strategic Planning Background

In 2008, in a cooperative effort with the Water Environment Federation (WEF), American Water Works Association (AWWA), and the US EPA created the framework for utility strategic planning. The guidance document, *“Effective Utility Management, A Primer for Water and Wastewater Utilities”* provided the “Ten Attributes of Effectively Managed Water Sector Utilities”. Please see the diagram below regarding the recommended reviewable attributes.

## Ten Attributes of Effectively Managed Water Sector Utilities

2019 Review Focus\*



**2019 WWU Strategic Plan Review Themes**

The 2019 Wooster Water Utilities Strategic Plan includes the review of the following categories:

- ◆ Product Quality
- ◆ Employee Development
- ◆ Operational Optimization
- ◆ Financial Viability
- ◆ Infrastructure Stability
- ◆ Operational Resiliency

Theme review is based on lowest to highest ranking based on current known data and information. The ranking was completed by the Utilities Manager based on currently available information. The review provides an opportunity to evaluate current strengths and weaknesses. Attributes in the shaded graphic area are strong candidates for improvement efforts.

**Wooster Water Utilities Attribute Ranking**

<b>Rating</b>	Lower Achievement	5							
		4		OO	ED				
		3						OR	
	Higher Achievement	2	PC				IS		
		1				FV			
				1	2	3	4	5	6
			More Important			Less Important			
Ranking									
						2019 Attributes Review			
R1	Effective, systematic approach and implementation; consistently achieve goals.						PC = Product Quality ED= Employee/Leadership Development OO= Operational Optimization FV= Financial Viability IS= Infrastructure Stability OR= Operational Resiliency		
R2	Workable systems in place ; mostly achieve goals.								
R3	Partial systems in place with moderate achievement, but could improve.								
R4	Occasionally address this when specific need arises.								
R5	No system for addressing this.								

Strategic Initiative Review

*Definitions provided from the “Effective Utility Management” document.*

- Product Quality, Priority 1, Rating 2
  - **Product Quality** is the focus on producing potable water, treated effluent, and process residuals in compliance with regulatory and reliability requirements and consistent with customer, public health, and ecological needs. In addition, **Customer Satisfaction** is included in this review category with the focus on providing reliable, responsive and affordable services in line with explicit, customer-accepted service levels. Receives timely customer feedback to maintain responsiveness to customer needs and emergencies.
  - Strength. WWU received high marks in this category as it relates to consistent proven efforts to provide high quality treated water to the community. Product quality has been the driver on recent facility upgrades and system reinvestment. WWU has received national attention regarding practices. Continue 100% water compliance and improve recovery compliance percent.
  - Weakness. WWU currently does not have a path to gauge and react to customer satisfaction.
  - Opportunity. WWU has the potential to become a premier leader in utility management through intentional performance indicator tracking with a focus on product excellence and customer satisfaction.
  - Threat. The management of intentional product messaging is required in our sector. Public perception and satisfaction should be a focus regarding emerging contaminants and regulatory changes. There is no current, intentional product messaging in place outside of basic regulatory requirements. WWU has received national recognition on efforts; outward focus must include state and regional awareness.

2019 Strategic Initiative      Product Quality

Goals	Actions	Measure of Success
Improve data tracking and reporting.	Participate in the annual AWWA Benchmarking Survey.	Compare WWU benchmark data with national comparison.
Gauge customer satisfaction on an annual basis.	Produce customer surveys and communicate survey availability.	Utilize survey results to gauge and build customer satisfaction.
Update Standard Operating Procedures.	Intentional effort to update all plans and anticipation regulatory changes.	Procedures ensure compliance reliability and continuity.
Update Source Water Protection Plan.	Internal and consultant based review of current and future protection needs.	Plan in place to ensure customer and regulatory confidence.
Active, intentional product messaging.	Public education; publications, open communication and use all media type.	A well informed customer is a confident customer.

- Employee/Leadership Development, Priority 3, Rating 4
  - **Employee / Leadership Development** recruits and retains a workforce that is competent, motivated, adaptive, and safe-working. Establishes a participatory, collaborative organization dedicated to continual learning and improvement. Ensures employee institutional knowledge is retained and improved upon over time. Provides a focus on and emphasizes opportunities for professional and leadership development and strives to create an integrated and well-coordinated senior leadership team.
  - Strength. WWU has a diverse workforce with professional skills to ensure proper department execution of duties. The ratio of certifications needs is healthy with the current staffing level. Intentional efforts through budgeting and policy are in place to provide professional growth opportunities for the staff. The certification and continuing education resources are stout. The average training hours per employee in 2018 is equal to 22.
  - Weakness. WWU currently does not have a succession plan in place to ensure professional development and talent preservation. There is not a plan in place to ensure intentional, specific focus on staff in all ranks.
  - Opportunity. WWU has the potential to become a premier leader in utility workforce training. The state of the art facilities, technology, and equipment can be the envy of many communities. Our organization can be a leader in workforce education internally and externally with a specific training plan. We have the opportunity to work with local higher learning institutions to continue to develop and recruit local talent.
  - Threat. WWU is not unique in the threat of a workforce nearing retirement age and the inability to recruit sufficient replacement talent. The threat is increased without the ability to quantify and review employee satisfaction. Active engagement is needed to build a workplace complementary to the changing workforce needs.

2019 Strategic Initiative	Employee / Leadership Development	
Goals	Actions	Measure of Success
Succession Plan, Staffing Plan.	Complete needs based staffing plan and succession plan with strategic partners.	Ensure optimum staff levels and pathway for succession.
Employee Satisfaction Survey.	Provide annual survey to staff to gauge satisfaction.	Adapt plans to address survey results.
Develop WWU Specific Training Modules.	Utilize educational partners for professional and leadership development.	Ability to promote and retain the workforce.
Develop internal training modules.	WWU specific training based on SOP's and adapting to regulatory changes.	Educated workforce based on WWU goals and values.

- Operational Optimization, Priority 2, Rating 4

- **Operational Optimization** focus is on ensuring ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations. Minimizes resource use, loss, and impacts from day-to-day operations. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
- Strength. WWU has done a remarkable job reducing the percentage of non-revenue water since the year 2000. A collaborative approach through several departments has yielded a high success rate. Wooster is committed to operational efficiency. Efforts are currently underway to complete a water system hydraulic model along with future considerations for a sewer system hydraulic model.
- Weakness. WWU currently does not have an aggressive plan in place to address inflow and infiltration (I & I) into the collection system and subsequently the treatment facility. While Wooster has made excellent strides in addressing the combined sewer overflows, the nature of I & I remediation can be difficult in a combined system.
- Opportunity. WWU has the potential to ensure long term system capacity by continuing to address non-revenue water loss and aggressive I & I elimination practices. Through concentrated efforts in data management, maintenance tracking, and resource allocation; improvements are achievable in this category along with product quality.
- Threat. If left unchecked inefficient asset management can lead to a lack of customer confidence. Particularly, if loss margins are not maintained at healthy levels, rate increases could be met with opposition. Without direct data management and performance indicators in place, it may be difficult to adapt quickly to any regulatory changes.
  - Operational Optimization and Product Quality improvements share common future performance indicators; it begins with properly tracking and trending the data.

2019 Strategic Initiative      Operational Optimization

Goals	Actions	Measure of Success
Reduce 2020 non-revenue water percent.	Continue to repair and delineate leaks. Continue to efficiently meter water use.	Overall percent reduction from 2019 to 2020.
Reduce I & I percentage (based on water meter use) in the system.	Study potential high ROI remediation areas through testing, base line indicators.	Reduction in SSO's and calculated I & I flow rates.
Data tracking software.	Purchase and build data for the tracking of operations and maintenance.	Consistent application of data regarding resource allocations.
Technology optimization review.	Review best practices; evaluate emerging technology for data collection and operation.	Utilize instant flow data in the operation of the department.

- Financial Viability, Priority 4, Rating 1

- **Financial Viability** focus is on understanding full life-cycle cost of the utility and establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. Establishes predictable rates 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.
  - **Disclaimer.** At the time of this report the reviewer does not have full understanding of current debt and budget figures outside of the operations budget. Future strategic review will provide additional information to the overall financial health of the department.
- Strength. WWU has an excellent rate structure in place to ensure healthy fiscal operation. A 5% rate increase was put into place for 2019. In comparison to the OEPA Annual Rate Study (most recent report completed in November 2018), WWU is in line with averages in the state. It is important to note, the most recent data from the OEPA was for the 2017 calendar year. The annual average in the survey was equal to \$1,311, or water average of \$634 and sewer \$677 per year. WWU comparatively (at the ¾ meter rate) is \$1,270.92 annually, or water average of \$689.04 and sewer \$581.88 per year. WWU is nearly 97% of the state average which serves as an indicator of current cost trends. The average monthly use of 7,756 gallons was used for the comparative calculation based on the OEPA criteria. While each community is unique with specific rate drivers, it provides a comparison which does show consistency. Wooster has a solid capital improvement plan in place and has indicated excellence in this area.
  - The city has shown commitment to financial responsibility. Rates and review of rates are in place to recover costs, provide for reserves, maintain support from bond rating agencies, and plan and invest for future needs. High ranks in this category as the city has done an excellent job in financial resource management.
- Weakness. The reviewer finds the schedule of rates to be confusing and difficult to interpret. The reviewer feels this could be true for the general consumer. It is quite possible it makes better sense in the bill format. The ability to transparently communicate rate structure (at this time the reviewer may not be able to effectively communicate) falls in line with intentional messaging and branding.
- Opportunity. The reviewer has no comment on this category at the time of the report.
- Threat. WWU is not unique in the threat of the ever-changing national and global economics. At this time the reviewer has no specific threats for comment.

2019 Strategic Initiative		Financial Viability
Goals	Actions	Measure of Success
Simplify schedule of fees.	Develop a plan to provide transparency and ease of interpretation.	Public understands rates and provides feedback.

- Infrastructure Stability, Priority 5, Rating 2
  - **Infrastructure Stability** is the understanding of conditions and costs associated with critical infrastructure assets. Maintains and enhances 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. Assures asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences.
  - Strength. WWU received high marks in this category as it relates to collaborative efforts with Wooster Engineering. The reviewer finds the recent past and current infrastructure reinvestment efforts to be outstanding. Wooster has a plan into the future to continue with the commitment to excellence and commitment to outstanding service.
    - The Water Asset Management Plan has had a strong start with support from engineering.
    - Efforts are underway to complete a water system hydraulic modeling.
  - Weakness. The reviewer does not currently report a weakness in this category.
  - Opportunity. WWU has the potential to become a premier leader in utility management. Recommend the completion of the Water Asset Management Plan and then use the same model to proactively create a plan for the sewer system.
  - Threat. The threat of aging infrastructure nationwide is gaining the attention of state and federal legislators. While identifying critical infrastructure age and condition will present a focused pathway for rehabilitation, the threat is not removed. Infrastructure vigilance in evaluating, revitalizing, optimizing and increasing the long term reliability is the goal of any successful utility.

2019 Strategic Initiative      Infrastructure Stability

Goals	Actions	Measure of Success
Complete update to the Water Asset Management Plan.	Review; collect the remaining data and information required in the document.	Message of excellence to customers and regulators.
Consider Sewer Asset Management Plan.	Follow the model in the WAMP and build document.	Ahead of future regulations on this topic.
Continue to update and improve the GIS system.	Data review based on infrastructure age, rate of failure, and failure consequence.	Priority based reinvestment to ensure long-term reliability.

- Operational Resiliency, Priority 6, Rating 3
  - **Operational Resiliency** focus is to ensure utility leadership and staff work together to anticipate and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including legal, regulatory, financial, environmental, safety, security, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.
    - **This category shares common theme with other categories. Efficiency, with focus on organizational values, begins with data management.** Operational Resiliency, Operational Optimization and Product Quality improvements share common future performance indicators; it begins with properly tracking and trending the data.
  - Strength. WWU has worked well with the Engineering Division on efforts to date. Healthy efforts on GIS management, capital improvements, and operational improvements. The Water Asset Management Plan, rate structure, combined sewer improvements, capital improvement plan, and the bioenergy facility are examples of efforts and commitment in infrastructure resiliency.
  - Weakness. Very few tolerance levels exist for operations outside of specific regulatory standard. It is appropriate for an operation of this size to establish specific tolerances for internal control instead of relying on regulatory levels. Without a clear definition of what data should be used and what it means; it is difficult to identify said goals (benchmarks, operational set points) and utilize performance indicators for management.
  - Opportunity. WWU has the potential to become a premier leader in utility management. Once data management tools and solid, specific operational plans (SOP's, Asset Management Plans, etc.) are in place, the objectives and goals can be identified and performance easily gauged internally.
  - Threat. Three categories (Product Quality, Operational Optimization, and Operational Resiliency) share a symbiotic relationship as it relates to current review regarding tracking and managing data. Improvement or impairment in any of the three common focus categories shares a combined trajectory.

2019 Strategic Initiative      Operational Resiliency

Goals	Actions	Measure of Success
Implement a department wide data management program.	Purchase and build data for the tracking of operations and maintenance.	Establish internal controls and performance indication tools.
Establish operational tolerances.	Build and utilize department wide data management program in all categories.	Ability to operate and manage operations intentionally.
Utilize succession/staffing plan ensures proper staff resources.	Complete staffing / succession plan to establish internal staffing controls.	Sufficient and prepared staff for now and the future.

## 2019 WWU Strategic Plan Review Summary

As a customer owned utility, we are committed to providing reliable, high quality water treatment services. The Strategic Plan is a tool to ensure effective management of essential service responsibilities to the citizens of the City of Wooster. We will continue to strive towards our mission of “Safety, Reliability, and Excellence!” to the extent if our residents could choose their water utility, they would select Wooster.

The goal of this document is to provide an intentional, internal review of current operations and current goals and initiatives. Additional knowledge and understanding is needed to better define and present data related to the categories. While this review is not intended to be comprehensive, it is a review of current understanding of the commentator. This report will serve as goals for the remainder of the 2019 calendar year. Measures of success greatly depend on the ability to accomplish the goals referenced in this document. The focus of the 2020 plan and data presentation hinges on the ability to meet and implement of the goals set forth in this document.

The content of this report and reviews are from the current Utilities Manager. Any future updates and plan reviews will include the following:

- Participation in the AWWA Nationwide Benchmarking Survey. This will provide comparative statistics in the nation in relation to Wooster practices.
- Surveys and meetings with Wooster leadership and not limited to department level staff.
- Surveys and meetings with Wooster stakeholders including the public and elected officials.
- Review of categorical goals, actions, and subsequent measure of success.

## Administering the WWU Strategic Plan

The WWU Strategic Plan will be published to the City of Wooster’s webpage as reports are available. The Wooster Utilities Manager will provide regular updates (see schedule page 1) on department progress on goals and measures of success. The effort to share this document internally and externally will provide guidance and the opportunity to encourage stakeholder and public dialog. WWU is here to serve the community and success depends greatly on the ability to share the message and efforts with the public in full transparency.

The annual release of future Strategic Plan will include a comprehensive review of annual reporting with initial submission to the Director of Administration for presentation to City Council.

WWU welcomes questions and comments regarding the 2019 Strategic Plan and the general management of services provided. Please feel free to contact:

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*Wooster*  
**Water  
Utilities**

The logo icon consists of a blue water drop in the center, surrounded by a circular arrow. The top half of the arrow is blue and the bottom half is green, suggesting a cycle or sustainability.

*“Safety, Reliability, and Excellence!”*