

December 2019

2019 ReWa Metric Summary Report Metric Background Information



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Introduction

In 2019 ReWa identified thirty-eight metrics to support enterprise-wide performance Tracking; to guide improvements and to set targets for the future. This document provides information about the metrics and outlines how the metric is calculated. The metrics are organized by the attributes that they support for the Effective Utility Management Program.

Lastly, a majority of the metrics were selected from the 2019 AWWA Utility Benchmarking Program specifically for Wastewater Utilities. This program collected performance indicator data from 10 Wastewater Only and 90 Combined Water and Wastewater Utilities in 2018. The list of utilities that participated in the survey include:

AK	Anchorage Water & Wastewater Utility	Combined Utility
AL	Decatur Utilities	Combined Utility
AR	Little Rock Reclamation Authority	Wastewater Only
AZ	Phoenix Water Services Department	Combined Utility
AZ	Town of Clarksdale	Combined Utility
CA	City of Ontario	Combined Utility
CA	Coachella Valley Water District	Combined Utility
CA	El Dorado Irrigation District	Combined Utility
CA	Lake Arrowhead Community Services	Combined Utility
CA	San Francisco Public Utilities Commission	Combined Utility
CA	Santa Rosa Water	Combined Utility
CA	Yorba Linda Water District	Combined Utility
CA	Central Contra Costa Sanitary District	Wastewater Only
CA	Victor Valley Wastewater Reclamation Authority	Wastewater Only
CO	Department of Bolder Dept. of Public Works	Combined Utility
CO	City of Westminster Utilities	Combined Utility
CO	Fort Collins Utilities	Combined Utility
CO	Town of Castle Rock	Combined Utility
CT	Town of Bethel	Combined Utility
FL	Broward County Water & Wastewater Services	Combined Utility
FL	Charlotte County Utilities	Combined Utility
FL	City of St. Petersburg Water Resources Dept.	Combined Utility
FL	City of Winter Haven	Combined Utility
FL	Cooper City Utilities	Combined Utility
FL	Gainesville Regional Utilities	Combined Utility
FL	Hillsborough County	Combined Utility
FL	JEA	Combined Utility
FL	Miami-Dade Water & Sewer Department	Combined Utility
FL	NMB Water	Combined Utility
FL	Toho Water Authority	Combined Utility
FL	Orange County Utilities	Combined Utility
GA	Athens-Clarke County Public Utilities Dept.	Combined Utility
GA	Atlanta Department of Watershed Mgmt.	Combined Utility
GA	Columbus Water Works	Combined Utility
GA	Douglasville Douglas County Water/Sewer Authority	Combined Utility
GA	Gwinnett County Department of Water Resources	Combined Utility
IN	Citizens Energy Group	Combined Utility
IN	City of Bloomington Utilities	Combined Utility

IN	Fort Wayne City Utilities	Combined Utility
KS	City of Olathe	Combined Utility
ME	Portland Water District	Combined Utility
MD	Anne Arundel County – Bureau of Utility Operations	Combined Utility
MD	Washington Suburban Sanitary Commission	Combined Utility
MI	City of Ann Arbor	Combined Utility
MI	Great Lakes Water Authority	Combined Utility
MI	Sebewaing Light & Water Department	Combined Utility
MN	St. Cloud Public Utilities	Combined Utility
MN	City of Minneapolis Water Works	Wastewater Only
MO	Kansas City Water	Combined Utility
MO	City of Springfield, MO	Wastewater Only
MO	Metropolitan St. Louis Sewer District	Wastewater Only
NC	Charlotte Water	Combined Utility
NC	City of Greensboro Water Department	Combined Utility
NC	City of Raleigh	Combined Utility
NC	Orange Water & Sewer Authority	Combined Utility
NJ	American Water Company	Combined Utility
NM	Albuquerque Bernalillo County Water Utility Authority	Combined Utility
NV	Carson City Public Works	Combined Utility
NV	City of Henderson	Combined Utility
OH	Avon Lake Regional Water	Combined Utility
OH	Butler County Water & Sewer	Combined Utility
OH	City of Gahanna	Combined Utility
OH	City of Painesville	Combined Utility
OH	City of Toledo Water Division	Combined Utility
OH	Northwest Ohio Regional Sewer District	Wastewater Only
OK	Oklahoma City Utilities Department	Combined Utility
OK	Tulsa Metropolitan Utility Authority	Combined Utility
OR	City of Bend Utility Department	Combined Utility
OR	Clean Water Services	Wastewater Only
PA	Bucks County Water & Sewer Authority	Combined Utility
PA	Philadelphia Water	Combined Utility
SC	Charleston Water	Combined Utility
SC	Renewable Water Resources	Wastewater Only
TN	Johnson City Water Department	Combined Utility
TN	Nashville Metro Water & Sewer	Combined Utility
TX	Austin Water Utility	Combined Utility
TX	City of Corpus Christi	Combined Utility
TX	City of Longview	Combined Utility
TX	City of Sugar Land	Combined Utility
TX	Dallas Water Utilities	Combined Utility
TX	Denton Municipal Utilities	Combined Utility
TX	Fort Bend County MUD No. 25	Combined Utility
TX	Fort Worth Water Department	Combined Utility
TX	Houston Water	Combined Utility
TX	McAllen Public Utility	Combined Utility
TX	San Antonio Water System	Combined Utility
UT	Salt Lake City Public Utilities	Combined Utility
UT	Taylorville-Bennion Improvement District	Combined Utility
VA	Arlington County/DPW/WSS	Combined Utility

VA	Chesapeake Department of Public Utilities	Combined Utility
VA	County of Chesterfield	Combined Utility
VA	Hanover County Department of Public Utilities	Combined Utility
VA	Prince William County Service Authority	Combined Utility
VA	City of Richmond, Department of Public Utilities	Combined Utility
WA	Seattle Public Utilities	Combined Utility
WA	Pierce County Sewer	Wastewater Only

Community Sustainability

Residential Cost of Wastewater Service

Supported by Administration and Finance

Annual Metric

This performance indicator allows ReWa to compare the residential charges for wastewater based on a defined quantity of water usage with other utilities. The following criteria are used to determine the residential cost of wastewater service:

- Amount billed for wastewater service using 7,500 gallons of water per month
- Average residential wastewater bill amount for one month of service
- Average monthly usage

**ReWa Residential Cost of Wastewater Service (based on 7,500 gallons):
\$ 55.95/month**

**ReWa Average Residential Wastewater Bill for 1 month of service:
\$ 35.44/month**

ReWa Customer Average Monthly Usage of water: 3,863 gallons/month

AWWA 2019 Utility Benchmark Survey Data:

- Median Residential Cost of Wastewater Service: \$ 52.20/month
- 75th Percentile: \$ 46.28/month
- 25th Percentile: \$ 59.14/month

- Median Residential Monthly Bill: \$ 43.27/month
- 75th Percentile: \$ 35.44/month
- 25th Percentile: \$ 48.44/month

- Median Residential Avg Monthly Water Usage: 4,494 gallons/month
- 75th Percentile: 4,336 gallons/month
- 25th Percentile: 4,995 gallons/month

Community Sustainability

Wastewater Service Affordability

Supported by Administration and Finance

Annual Metric

This performance indicator allows ReWa to measure the affordability of wastewater services as a percentage of local median household income (MHI). The following criteria are used to determine wastewater service affordability:

Wastewater Service Affordability = $\frac{\text{Avg residential mo. wastewater bill} \times 12}{\text{Real median annual household income}}$
(% of MHI)

ReWa Wastewater Service Affordability: 0.77 %

AWWA 2019 Utility Benchmark Survey Data:

- Median Wastewater Service Affordability: 0.91 %
- 75th Percentile: 0.64 %
- 25th Percentile: 1.04 %

Community Sustainability

Total Number of Accounts Supported by Customer Service Annual Metric

This performance indicator allows ReWa to measure the total number of wastewater service agreements at a single property or commercial/residential unit.

ReWa Wastewater Service Total Number of Accounts: 139,294

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Number of Accounts: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Community Sustainability

Total Number of Connections Supported by Engineering Annual Metric

This performance indicator allows ReWa to measure the total number of wastewater service connections throughout the Wastewater Collection System.

ReWa Wastewater Service Total Number of Connections: 3,086

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Number of Accounts: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Community Sustainability

Total Green Energy (kWh) Produced *Supported by Water Resources Recovery* *Quarterly Metric*

This performance indicator allows ReWa to measure the total amount of green energy produced each month from ReWa's CHP System and the Solar Farms located at the WRRFs (Durbin Creek, Gilder Creek, Mauldin Road and Piedmont).

ReWa Total Green Energy Produced by the CHP System: 688,992 kWh
ReWa Total Green Energy Produced by the Solar Farms: 1,542,584 kWh
ReWa Total Green Energy Produced: 2,231,576 kWh

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Green Energy Produced: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Community Sustainability

Total Energy (kWh) Purchased *Supported by Water Resources Recovery* *Quarterly Metric*

This performance indicator allows ReWa to measure the total amount of energy purchased each month to support the WRRFs

ReWa Total Energy Purchased: 35,555,366 kWh

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Energy Purchased: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Customer Satisfaction

Number of Customer Concerns

Supported by Customer Service

Quarterly Metric

This performance indicator allows ReWa to measure the complaint frequency related to customer service or core utility services expressed as the number of complaints per 1,000 customer accounts. The two categories, "customer service" and "technical service", allow a utility to track the complaints that are "people related" and those that are "product related".

Customer Service = $\frac{\text{Total Number of Customer Service Concerns} \times 1,000}{\text{Total Number of Accounts (Residential, Commercial, Industrial)}}$

Technical Service = $\frac{\text{Total Number of Technical Service Concerns} \times 1,000}{\text{Total Number of Accounts (Residential, Commercial, Industrial)}}$

ReWa Customer Service Concerns: 0.3 Concerns/1000 Accounts

ReWa Technical Service Concerns: 3.3 Concerns/1000 Accounts

AWWA 2019 Utility Benchmark Survey Data:

- Median Number of Customer Service Concerns: 0.4
- 75th Percentile: 0.3
- 25th Percentile: 0.6

- Median Number of Technical Service Concerns: 2.6
- 75th Percentile: 1.3
- 25th Percentile: 3.3

Employee Development

Employee Training

Supported by Human Resources

Quarterly Metric

This performance indicator allows ReWa to measure the amount of training that employees receive expressed as the annual number of training hours per employee as full-time equivalents (FTEs). This indicator does not address the effectiveness or efficiency of training programs.

Training (hr/employee)= $\frac{\text{Total Training Hours Completed by All Employees}}{\text{Total Number of FTEs}}$

ReWa Employee Training: 12.7 Hours per Employee

AWWA 2019 Utility Benchmark Survey Data:

- Median Employee Training: 25.8
- 75th Percentile: 39.1
- 25th Percentile: 14.5

Financial Viability

Debt Ratio

Supported by Finance
Annual Metric

This performance indicator allows ReWa to quantify its level of indebtedness. It is a measure of the extent to which assets are financed through borrowing. The higher the debt ratio, the more dependent the utility is on debt financing.

$$\text{Debt Ratio (\%)} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

ReWa Debt Ratio: 43 %

AWWA 2019 Utility Benchmark Survey Data:

- Median Debt Ratio 42 %
- 75th Percentile: 29 %
- 25th Percentile: 48 %

Financial Viability

Debt-Service Coverage Ratio

Supported by Finance
Annual Metric

This performance indicator allows ReWa to quantify its level of “cash flow”. It is the ratio of net operating income to total debt service. It is the amount of cash flow available to meet interest, principal and sinking fund payments. Debt-service coverage ratios less than one indicates a negative cash flow, meaning a utility is not generating enough income to pay its debt obligations strictly through operations.

$$\text{Debt-Service Coverage Ratio} = \frac{\text{Total Operating Revenue} - \text{Total O\&M Costs}}{\text{Total Debt Service}}$$

ReWa Debt-Service Coverage Ratio: 2.03

AWWA 2019 Utility Benchmark Survey Data:

- Median Debt-Service Coverage Ratio 2.05
- 75th Percentile: 13.04
- 25th Percentile: 1.43

Financial Viability

Days of Cash on Hand

Supported by Finance

Annual Metric

This performance indicator allows ReWa to measure its financial liquidity by quantifying the number of days of available cash on hand.

Days of Cash on Hand = $\frac{\text{Undesignated Cash and Cash Equivalents}}{(\text{Operating Expenses Excluding Depreciation}/365 \text{ Days})}$

ReWa Days of Cash on Hand: 388 Days of Cash on Hand

AWWA 2019 Utility Benchmark Survey Data:

- Median Days of Cash on Hand: 291
- 75th Percentile: 667
- 25th Percentile: 160

Financial Viability

Days of Working Capital

Supported by Finance

Annual Metric

This performance indicator allows ReWa to measure how efficiently it is currently functioning. Days of working capital refers to how many days it takes for a company to convert its working capital into revenue.

Days of Working Capital = $\frac{(\text{Current Unrestricted Assets} - \text{Current Liabilities})}{(\text{Operating Expenses Excluding Depreciation}/365 \text{ Days})}$

ReWa Days of Working Capital: 117 Days of Working Capital

AWWA 2019 Utility Benchmark Survey Data:

- Median Days of Working Capital: 359
- 75th Percentile: 136
- 25th Percentile: 511

Infrastructure Stability

System Renewal and Replacement for WRRFs

Supported by Finance

Annual Metric

This performance indicator allows ReWa to quantify the percent renewal and replacement activities for the Water Resource Recovery Facilities.

$$\text{System R\&R (\%)} = \frac{\text{Total Amount of Funds Reserved for WRRF R\&R}}{\text{Total Present Worth of R\&R Needs for WWRFs}}$$

The total present worth of R&R needs are typically estimated. ReWa references the value of its WWRF assets from identified insurance values. In addition, asset life spans are estimated with default values noted below:

- Wastewater Treatment and Pumping Facilities: 50 years
- Wastewater Collection System Components: 100 years

ReWa System Renewal & Replacement for WWRFs: 1.0 %

AWWA 2019 Utility Benchmark Survey Data:

- Median System R&R for WWRFs: 1.1 %
- 75th Percentile: 1.8 %
- 25th Percentile: 0.7 %

Infrastructure Stability

System Renewal and Replacement for Pump Station Facilities

Supported by Finance

Annual Metric

This performance indicator allows ReWa to quantify the percent renewal and replacement activities for the Pump Station Facilities.

$$\text{System R\&R (\%)} = \frac{\text{Total Amount of Funds Reserved for PS R\&R}}{\text{Total Present Worth of R\&R Needs for Pump Stations}}$$

The total present worth of R&R needs are typically estimated. ReWa references the value of its Pump Station assets from identified insurance values. In addition, asset life spans are estimated with default values noted below:

- Wastewater Treatment and Pumping Facilities: 50 years
- Wastewater Collection System Components: 100 years

ReWa System Renewal & Replacement for Pump Stations: 4.3 %

AWWA 2019 Utility Benchmark Survey Data:

- Median System R&R for Pump Stations: 2.2 %
- 75th Percentile: 4.8 %
- 25th Percentile: 1.6 %

Infrastructure Stability

System Renewal and Replacement for Collection System

Components

Supported by Finance

Annual Metric

This performance indicator allows ReWa to quantify the percent renewal and replacement activities for the Collection System Components.

$$\text{System R\&R (\%)} = \frac{\text{Total Amount of Funds Reserved for CSC R\&R}}{\text{Total Present Worth of R\&R Needs for Pump Stations}}$$

The total present worth of R&R needs are typically estimated. ReWa references the value of its assets from identified insurance values. In addition, asset life spans are estimated with default values noted below:

- Wastewater Treatment and Pumping Facilities: 50 years
- Wastewater Collection System Components: 100 years

**ReWa System Renewal & Replacement for Collection System Components:
1.8 %**

AWWA 2019 Utility Benchmark Survey Data:

- Median System R&R for Collection System Components: 1.7 %
- 75th Percentile: 2.5 %
- 25th Percentile: 1.4 %

Infrastructure Stability

Total Miles of Pipe and Miles of Pipe Added to the Wastewater Collection System

Supported by Engineering & Collections System

Annual Metric

This performance indicator allows ReWa to track the expansion and size of the Wastewater Collection System via miles of collection system pipe.

ReWa Total Miles of Pipe in the Collection System: 396 Miles of Pipe
ReWa Miles of Pipe Added to the Collection System: 44 Miles of Pipe

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Miles of Pipe in the Collection System: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Infrastructure Stability

Total Miles of Pipe Lined in the Wastewater Collection System

Supported by Engineering & Collections System

Annual Metric

This performance indicator allows ReWa to track the level rehabilitation efforts made towards the wastewater collection pipes within the Collection System.

ReWa Total Miles of Pipe Lined in the Collection System: 75 Miles of Pipe

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Miles of Pipe Lined in the Collection System: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Infrastructure Stability

Total Manholes in the Wastewater Collection System

Supported by Engineering & Collections System

Annual Metric

This performance indicator allows ReWa to track the expansion and size of the Wastewater Collection System via number of manholes in the collection system.

ReWa Total Number of Manholes in the Collection System: 7698

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Number of Manholes in the Collection System: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Infrastructure Stability

Total Number of Pump Stations, Total Number of Pump Stations Added to and Total Number of Pump Stations Retired from the Wastewater Collection System

Supported by Engineering & Collections System

Annual Metric

This performance indicator allows ReWa to track the expansion and size of the Wastewater Collection System via the number of wastewater pump stations.

ReWa Total Number of Pump Stations in the Collection System: 83

ReWa Total Number of Pump Stations Added to the Collection System: 14

ReWa Total Number of Pump Stations Retired from the Collection System: 0

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Number of Pump Stations: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Optimization

% Biosolids Beneficially Reused *Supported by Biosolids Management* *Quarterly Metric*

This performance indicator allows ReWa to track the percentage of biosolids beneficially reused versus the percentage of biosolids disposed.

ReWa % Biosolids Beneficially Reused: 85 %
ReWa % Biosolids Disposed: 15 %

AWWA 2019 Utility Benchmark Survey Data:

- Median % Biosolids Beneficially Reused versus Disposed: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Optimization

Biosolids Cost per Dry Ton *Supported by Biosolids Management* *Quarterly Metric*

This performance indicator allows ReWa to track the cost per dry ton for biosolids that are land applied or disposed in a landfill. This metric is not a “full cost account” of the total costs per dry ton of biosolids and only includes outsourced transportation and application/disposal costs.

Biosolids Costs per Dry Ton =
$$\frac{\text{Cost for Contracted Transportation, Disposal/Land Application of Biosolids}}{\text{Total Dry Tons of Biosolids Disposed/Land Applied}}$$

ReWa Biosolids Costs per Dry Ton: \$ 256 per Dry Ton

AWWA 2019 Utility Benchmark Survey Data:

- Median Biosolids Costs per Dry Ton: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Optimization

Total SSO Rate - (Collection System Integrity)

Supported by Collections System

Monthly Metric

This performance indicator quantifies the condition of a wastewater collection system expressed as the annual number of failures per 100 miles of collection system piping. A collection system failure is a loss of capacity resulting from a flow restriction in a gravity or pressurized wastewater pipe. This indicator is based on 100 mile of pipe in a system.

$$\text{Total SSO Rate (Collection System Integrity)} = \frac{\text{Total number of SSOs} \times 100}{\text{Total miles of collection system piping}}$$

ReWa Total SSO Rate (Collection System Integrity): 3.3

AWWA 2019 Utility Benchmark Survey Data:

- Median Total SSO Rate (Collection System Integrity) 2.6
- 75th Percentile: 1.4
- 25th Percentile: 3.9

Operational Optimization

Total Wet Weather and Dry Weather SSO Rate (Noncapacity and Capacity Sewer Overflow) Supported by Collections System Monthly Metric

This performance indicator measures the total number of noncapacity (wet weather) and capacity (dry weather) sewer overflow events expressed as a ration of the number of events per 100 miles of wastewater collection system piping. They are intended to measure sewer overflows created by conditions within the collection system components under the control of ReWa.

A dry weather sewer overflow occurs when the collection system is not under the influence of stormwater and a blockage (e.g., roots, grease, rags, debris) is present in the collection system components or a pressurized pipe fails.

A wet weather sewer overflow occurs when the collection system piping is overwhelmed with stormwater inflowing or infiltrating into the collection system components. Sewer overflows caused by limitations or problems within customer-controlled piping and facilities are excluded from this indicator.

$$\text{Wet Weather Sewer Overflow Rate} = \frac{\text{Total \# of Wet Weather SSOs} \times 100}{\text{Total miles of collection system piping}}$$

$$\text{Dry Weather Sewer Overflow Rate} = \frac{\text{Total \# of Dry Weather SSOs} \times 100}{\text{Total miles of collection system piping}}$$

ReWa Wet Weather (Noncapacity) Sewer Overflow Rate: 3.3

ReWa Dry Weather (Capacity) Sewer Overflow Rate: 0

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Wet Weather Sewer Overflow Rate 1.4
- 75th Percentile: 0.9
- 25th Percentile: 3.5

- Median Total Dry Weather Sewer Overflow Rate 0
- 75th Percentile: 0
- 25th Percentile: 1.8

Operational Optimization

Total Vehicle Miles Driven *Supported by Maintenance* *Quarterly Metric*

This performance indicator quantifies the total number of miles each month that ReWa vehicles are driven to support the work of ReWa.

ReWa Total Vehicle Miles Driven: 725,000 Miles

AWWA 2019 Utility Benchmark Survey Data:

- Median Total Vehicle Miles Driven each Month N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Optimization

Total kWh per MG Water Treated *Supported by Water Resource Recovery* **Quarterly Metric**

This performance indicator quantifies the total kWh associated with the electricity consumed to treat water on a monthly basis.

$$\text{Total kWh per MG Water Treated} = \frac{\text{Monthly Total kWh consumed for all ReWa WRRFs}}{\text{Monthly Water Treated (MG)}}$$

ReWa Total kWh per MG Water Treated: 0.8

AWWA 2019 Utility Benchmark Survey Data:

- Median Total kWh per MG Water Treated N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Optimization

Annual Chemical Costs Chemical Costs per MG Water Treated *Supported by Water Resource Recovery* Annual Metric

This performance indicator allows ReWa to track the total costs for chemicals used to treat water at the WRRFs.

$$\text{Chemical Costs per MG Water Treated} = \frac{\text{Monthly Chemical Costs for all ReWa WRRFs}}{\text{Monthly Water Treated (MG)}}$$

ReWa Chemical Costs per MG Water Treated: \$ 112
ReWa Annual Chemical Costs: \$ 1,341,750

AWWA 2019 Utility Benchmark Survey Data:

- Median Chemical Costs per MG Treated: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Operational Resiliency

OSHA Incident Rate

Supported by Business Continuity Services

Monthly Metric

This performance indicator allows ReWa to track the number of employees that have been involved in a recordable work-related injury or illness. This metric also allows managers to identify safety patterns across different departments or facilities.

$$\text{OSHA Incident Rate} = \frac{\# \text{ of OSHA Recordable Injuries and Illnesses} \times 2000}{\text{Employee Total Hours Worked}}$$

ReWa OSHA Incident Rate: 1.74

2018 Statistics

- State of South Carolina: 3.3, which includes Trade, Transportation, and Utilities
- National: 3.4, which includes Trade, Transportation, and Utilities
- National for Water, Sewage, and "Other" Systems: 5.4

AWWA 2019 Utility Benchmark Survey Data:

- Median OSHA Incident Rate: 4.0
- 75th Percentile: 2.1
- 25th Percentile: 6.9

Operational Resiliency

% Employee Turnover

Supported by Human Resources

Monthly Metric

This performance indicator quantifies the number of employee departures normalized by ReWa's workforce (as FTEs) per year. Regular employee departures include employees who leave voluntarily, retired or were let go during the reporting period.

$$\% \text{ Employee Turnover} = \frac{\text{Number of Regular Employee Departures} \times 100\%}{\text{Total Number of FTEs}}$$

ReWa % Employee Turnover: 6.8 %

ReWa Total FTEs: 187

AWWA 2019 Utility Benchmark Survey Data:

- Median % Employee Turnover 7.8 %
- 75th Percentile: 6.4 %
- 25th Percentile: 11.1 %

- Median Total FTEs 197
- 75th Percentile: 329
- 25th Percentile: 159

Operational Resiliency

% Staff Eligible for Retirement *Supported by Human Resources* *Annual Metric*

This performance indicator provides a measure of the number of regular employees eligible for retirement within the next five years normalized by ReWa's workforce (as FTEs).

$$\% \text{ Staff Eligible for Retirement} = \frac{\# \text{ of Staff Eligible for Retirement} \times 100\%}{\text{Total Number of FTEs}}$$

ReWa % Staff Eligible for Retirement: 13.9 %

AWWA 2019 Utility Benchmark Survey Data:

- Median % Staff Eligible for Retirement 17.1 %
- 75th Percentile: 10.8 %
- 25th Percentile: 34.4 %

Product Quality

Number of Samples Analyzed for NPDES Compliance

Supported by Laboratory

Quarterly Metric

This performance indicator allows ReWa to quantify the number of samples analyzed each month to ensure that the water recycled back to the receiving streams meets NPDES permit requirements.

ReWa Number of Samples Analyzed for NPDES Compliance: 13,804

AWWA 2019 Utility Benchmark Survey Data:

- Median # of Samples Analyzed for NPDES Compliance: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Number of Samples Analyzed for Process Control

Supported by Laboratory

Quarterly Metric

This performance indicator allows ReWa to quantify the number of samples analyzed each month to support the operation of ReWa's Water Resource Recovery Facilities.

ReWa Number of Samples Analyzed for Process Control: 14,243

AWWA 2019 Utility Benchmark Survey Data:

- Median # of Samples Analyzed for Process Control: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Product Quality

Number of Samples Analyzed for the Pretreatment Program

Supported by Laboratory

Quarterly Metric

This performance indicator allows ReWa to quantify the number of samples analyzed each month to support the needs of ReWa's Pretreatment Program and to ensure that ReWa's Commercial and Industrial Customers are compliant with their Discharge Permits and Authorizations.

ReWa Number of Samples Analyzed for the Pretreatment Program: 2,795

AWWA 2019 Utility Benchmark Survey Data:

- Median # of Samples Analyzed for Pretreatment: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Number of Samples Analyzed in a Calendar Year

Supported by Laboratory

Annual Metric

This performance indicator allows ReWa to quantify the number of samples analyzed each year to ensure compliance, the effective operation of the Water Resource Recovery Facilities and the quality of water and biosolids recycled back to the environment.

ReWa Number of Samples Analyzed in a Calendar Year: 30,842

AWWA 2019 Utility Benchmark Survey Data:

- Median # of Samples Analyzed in a Calendar Year: N/A
- 75th Percentile: N/A
- 25th Percentile: N/A

Stakeholder Understanding

Stakeholder Outreach Index Supported by Communications Annual Metric

This performance indicator allows ReWa to measure its stakeholder outreach activities. It is calculated based on self-assigned points found in the various categories in the stakeholder outreach checklist provided below. Total scores can range from zero to twelve and are presented as a percentage of the maximum possible score of twelve.

Stakeholder Outreach Checklist:

1. We regularly conduct satisfaction surveys that result in a statistically significant measure (or set of measures) for customer satisfaction. (0 = never/rarely, 1 = less than annual frequency, 2 = at least annually).
2. We use the results of customer satisfaction surveys to improve our processes, practices and systems. (0 = never/rarely, 1 = less than annual frequency, 2 = at least annually).
3. We regularly conduct a series of interviews or open forums of focus groups with key stakeholders, such as public officials, regulators, community representatives, special-interest groups, developers, contractors, etc. (0 = never/rarely, 1 = less than annual frequency for 3 groups, 2 = at least annually for 3 groups).
4. We provide numerous channels and interactions (two-way) with stakeholders through publicly offered tours, speaking engagements, actively managed booths/kiosks, etc. on a regular, periodic basis. (0 = never/rarely, 1 = less than annual frequency for 3 groups or more channels/interactions, 2 = at least annually for 3 groups or more channels/interactions).
5. We provide numerous outreach programs/products on a regular basis to targeted stakeholders through the media, mailers, newsletters, etc. (0 = never/rarely, 1 = less than annual frequency for 3 groups or more programs/products, 2 = at least annually for 3 groups or more programs/products).
6. We regularly review all sources of stakeholder feedback and develop actions to address areas of dissatisfaction or opportunities for improvement. (0 = never/rarely, 1 = less than annual frequency, 2 = at least annually).

ReWa Stakeholder Outreach Index: 83 %

AWWA 2019 Utility Benchmark Survey Data:

- Median Stakeholder Outreach Index: 83 %
- 75th Percentile: 100 %
- 25th Percentile: 67 %