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# **Anchorage Water and Wastewater Utility**

*Anchorage: Performance. Value. Results.*

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## **Mission**

Supporting the public health, safety, and economic interests of the community by providing quality water and wastewater services in a responsible, efficient, and sustainable manner.

## **Core Services**

- Reliably treat and distribute potable water for domestic, commercial, and firefighting uses throughout the certificated service area.
- Reliably collect, treat and dispose of wastewater in accordance with laws and regulations that protect public health and the environment.

## **Accomplishment Goals**

- Provide reliable service
- Provide safe drinking water that meets or exceeds all standards
- Protect the environment through appropriate wastewater collection, treatment, and disposal.
- Fiscal responsibility and transparency with utility finances.
- Timely, professional, and courteous interactions with customers.
- Rates that fairly reflect the cost of providing service and maintaining infrastructure
- Continuous improvement in the efficiency of our operations
- Anticipate change and be prepared for the future.

## **Performance Measures**

Progress in achieving goals shall be measured by:

1. Compliance with all State and Federal drinking water standards  
/wastewater standards  
/Clean Air Act standards
2. Number of planned and unplanned water outages
3. Sanitary sewer overflows
4. Recordable incident rate (as compared to the standard incident rate for water and wastewater utilities)
5. Execution of capital improvement budget
6. Debt to equity ratio

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| <b>Measure #1: Compliance with all State and Federal drinking water, wastewater, and clean air standards</b> |
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**Type**

Effectiveness

**Accomplishment Goals Supported**

- Provide reliable service
- Provide safe drinking water that meets or exceeds all standards
- Protect the environment through appropriate wastewater collection, treatment, and disposal.

**Definition**

The number of regulatory requirements meeting compliance standards divided by the total number of regulatory requirements for the time period. The total number of regulatory requirements is the sum of daily, weekly and monthly compliance standards.

**Data Collection Method**

All samples collected are compared with the State or Federal regulatory standards and any violations are noted and reported in accordance with permit stipulations.

**Frequency**

The percent compliance measurement will be calculated quarterly, using running totals for the calendar year.

**Measured By**

The Treatment Division will prepare a report from the water quality and laboratory databases that identifies any samples or reportable incidents that do not meet regulatory standards.

**Reporting**

The Treatment Division Director will update the report quarterly from the water quality and laboratory databases. The information will be displayed in tabular form.

**Used By**

The Treatment Division Director and General Manager will use the information to gain a clearer understanding of performance of AWWU's treatment facilities and determine if changes in system operation or maintenance are required.

## Results

| Measure 1:<br>Compliance<br>with all State<br>and Federal<br>drinking water,<br>wastewater,<br>and clean air<br>standards | Goal | 2020   |      |      |     | Past Years |      |      |       |        |      |
|---------------------------------------------------------------------------------------------------------------------------|------|--------|------|------|-----|------------|------|------|-------|--------|------|
|                                                                                                                           |      | Q4     | Q3   | Q2   | Q1  | 2019       | 2018 | 2017 | 2016  | 2015   | 2014 |
| Safe Drinking Water Act Compliance (%)                                                                                    | 100  | 100    | 100  | 100  | 100 | 100        | 99.8 | 97.6 | 100   | 100    | 100  |
| Clean Water Act (NPDES permit) Compliance (%)                                                                             | 100  |        |      |      |     | 100        |      |      | 100   | 100    |      |
| -Asplund                                                                                                                  |      | 99.5   | 99.4 | 99.5 |     | 97.8       | 99.7 | 100  | 100   | 100    | 100  |
| -Eagle River                                                                                                              |      | 100    | 96.9 | 100  |     | 99.7       | 99.3 | 100  | 99.7  | 100    | 100  |
| -Girdwood                                                                                                                 |      | 98.2   | 99.5 | 100  |     | 99.4       | 100  | 100  | 99.7  | 99.5   | 100  |
| Clean Air Act Compliance (%) (Asplund Incinerator)                                                                        | 100  | 99.997 | 100  | 100  |     | 100        | 100  | 100  | 99.99 | 99.998 | 100  |

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| <b>Measure #2: Number of planned and unplanned water outages</b> |
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**Type**

Effectiveness

**Accomplishment Goal Supported**

- Provide reliable service
- Provide safe drinking water that meets or exceeds all standards
- Protect the environment through appropriate wastewater collection, treatment, and disposal.
- Timely, professional, and courteous interactions with customers.
- Continuous improvement in the efficiency of our operations
- Anticipate change and be prepared for the future

**Definition**

A water outage is defined as a disruption in service to a service connection. A service connection serves one customer, although multiple people may be affected by the disruption in service to a residence or a business.

**Data Collection Method**

A tally is kept through each calendar month of the number of customers who experience planned and unplanned water service disruptions for a range of durations listed below. The outage is as reported to AWWU and confirmed by observation or analysis in the field.

**Frequency**

The measurement will be recorded at the beginning of each month for the preceding month.

**Measured By**

Number of customers who do not have water service for the following durations:

- Less than 4 hours
- Between 4 hours and 12 hours
- Greater than 12 hours

Disruptions are counted for planned activities (customers are given advance notice in writing) and unplanned (emergency) activities.

**Reporting**

The Strategic Asset Services Section will create a monthly report that will be show water outages numerically and graphically.

**Used By**

The O&M Division, Customer Service Division, and Strategic Asset Services Section and the General Manager will review these data monthly to evaluate adequacy of operation and maintenance approaches, customer service response and pipe condition.

## Results

| Measure 2: Number of planned and unplanned water outages (customers per month) | Goal (Affected customers per month) | 2020 (monthly average) | 4 <sup>th</sup> Q 2020 (monthly average) | 3 <sup>rd</sup> Q 2020 (monthly average) | 2 <sup>nd</sup> Q 2020 (monthly average) | 1 <sup>st</sup> Q 2020 (monthly average) | Historical monthly average |      |      |      |      |
|--------------------------------------------------------------------------------|-------------------------------------|------------------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|----------------------------|------|------|------|------|
|                                                                                |                                     |                        |                                          |                                          |                                          |                                          | 2019                       | 2018 | 2017 | 2016 | 2015 |
| Planned Outages                                                                |                                     |                        |                                          |                                          |                                          |                                          |                            |      |      |      |      |
| <4 hours                                                                       | <20                                 | 37                     |                                          | 16                                       | 10                                       | 85                                       | 11                         | 10   | 10   | 5    | 18   |
| 4-12 hours                                                                     | <20                                 | 30                     |                                          | 80                                       | 10                                       | 0                                        | 37                         | 16   | 71   | 8    | 23   |
| >12 hours                                                                      | 0                                   | 0                      |                                          | 0                                        | 0                                        | 0                                        | 0                          | 3    | 0.2  | 0.2  | 0.2  |
| Unplanned Outages                                                              |                                     |                        |                                          |                                          |                                          |                                          |                            |      |      |      |      |
| <4 hours                                                                       | <20                                 | 79                     |                                          | 155                                      | 54                                       | 27                                       | 17                         | 38   | 15   | 92   | 41   |
| 4-12 hours                                                                     | <50                                 | 35                     |                                          | 7                                        | 42                                       | 55                                       | 36                         | 42   | 38   | 22   | 33   |
| >12 hours                                                                      | 0                                   | 4                      |                                          | 0                                        | 0                                        | 11                                       | 3                          | 11   | 3    | 5    | 0.2  |

### **Measure #3: Sanitary Sewer Overflows**

#### **Type**

Effectiveness

#### **Accomplishment Goals Supported**

- Provide reliable service.
- Timely, professional, and courteous interactions with customers.
- Protect the environment through appropriate wastewater collection, treatment, and disposal.
- Continuous improvement in the efficiency of our operations
- Anticipate change and be prepared for the future.

#### **Definition**

Total number of wastewater overflows onto the ground or wastewater back-ups into customer residences if caused by an obstruction in an AWWU sewer main, manhole, or cleanout. Overflows or backups that occur due to on-property blockages do not count.

#### **Data Collection Method**

The reportable number of sanitary sewer overflows is what is reported in writing to the EPA Region X office within a week of each occurrence.

#### **Frequency**

The measurement will be recorded each month for the previous month.

#### **Measured By**

Data collection is by direct observation by AWWU staff.

#### **Reporting**

The O&M Division will create a monthly report displaying overflow data numerically and graphically.

#### **Used By**

The O&M Division, Customer Service Division, and Strategic Asset Services Section and the General Manager will review these data monthly to evaluate adequacy of operation and maintenance approaches, customer service response and pipe condition.

## Results

|                                                                      | Goal | 2020 |     |     |     | Historical monthly average |      |      |      |      |      |
|----------------------------------------------------------------------|------|------|-----|-----|-----|----------------------------|------|------|------|------|------|
|                                                                      |      | Q4   | Q3  | Q2  | Q1  | 2019                       | 2018 | 2017 | 2016 | 2015 | 2014 |
| <b>Measure 3:<br/>Sanitary<br/>Sewer<br/>Overflows<br/>(monthly)</b> | <1.5 |      | 1.0 | 2.0 | .67 | 1.33                       | 1.23 | 0.91 | 1.48 | 1.58 | 1.75 |

|                                                                |
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| <b>Measure #4: Number of reportable injuries and accidents</b> |
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**Type**

Effectiveness

**Accomplishment Goal Supported**

- Provide reliable service
- Continuous improvement in the efficiency of our operations
- Anticipate change and be prepared for the future.

**Definition**

Number of OSHA recordable incidents multiplied by 200,000 (# defined by OSHA as 100 employees working full-time for a year) divided by number of hours worked by all employees. Compare Recordable incident rate to standard industrial rate (SIR) for water and wastewater utilities.

**Data Collection Method**

Accident and near-miss reports.

**Frequency**

Annually.

**Measured By**

Safety Program Manager, Administrative Services Division.

**Reporting**

The Administrative Services Division will maintain an accident and near miss report on a monthly basis. Data will be compiled, summarized, and reported at the end of the year. Reportable incidence rates will appear mid-calendar year.

**Used By**

The Safety Manager, all Division Directors and the General Manager will use the report to monitor and adjust working practices and focus training and attention to hazardous situations.

## Results

|                                                                        | Goal  | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 |
|------------------------------------------------------------------------|-------|------|------|------|------|------|------|------|
| <b>Measure 4: Number of reportable injuries and accidents (annual)</b> | <4.60 | 4.08 | 7.1  | 4.45 | 6.30 | 6.26 | 6.37 | 4.48 |

Note: Bureau of Labor Statistics (BLS) will normally post the previous year's incidence rate during the months of June or July. AWWU falls within the utilities sector of electric power generation, transmission and distribution; natural gas distribution; and water, sewer, and other systems.

Update - From the Bureau of Labor Statistics: **Important note on future data:** Beginning with the 2016 reference year, the Survey of Occupational Injuries and Illnesses (SOI) will present a single release of national data on **November 9, 2017**. This release will include industry counts and rates along with case circumstances and worker characteristics for cases requiring days away from work. In previous years, these data were released separately. State data was released on November 28, 2017. A similar schedule will be followed in subsequent years.

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| <b>Measure #5: Execution of Capital Improvement Budget</b> |
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**Type**

Efficiency

**Accomplishment Goal Supported**

- Provide reliable service
- Fiscal responsibility and transparency with utility finances.
- Rates that fairly reflect the cost of providing service and maintaining infrastructure
- Continuous improvement in the efficiency of our operations
- Anticipate change and be prepared for the future.

**Definition**

The ratio (as a percent) of capital project dollars expended through the fiscal year divided by the planned expenditure for the year as indicated in the approved Capital Improvement Budget.

**Data Collection Method**

Project Managers input % complete data and expected completion dates for each project named in the capital improvement budget.

**Frequency**

Estimates of the completeness (% complete) of all ongoing projects will be reported through the AWWU Engineering Division Project Management group annually and with quarterly updates to yearly progress.

**Measured By**

The Engineering Division will keep track of this information using the ERP tracking and reporting system.

**Reporting**

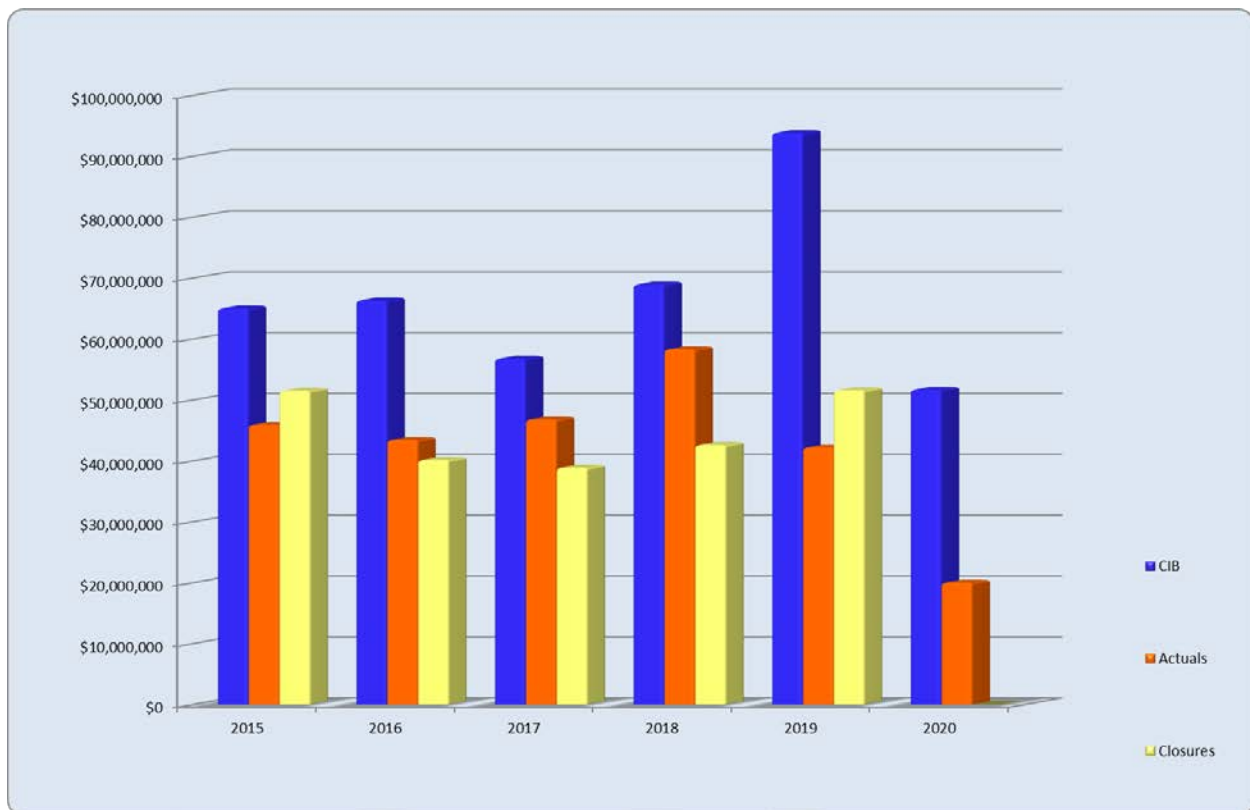
The information will be displayed numerically and graphically in monthly reports.

**Used By**

The Engineering Director and General Manager will use this data to gauge progress on use of capital project funds.

## Results

|                                                                                        | Goal | 2020 | Historical Information |      |      |      |      |      |
|----------------------------------------------------------------------------------------|------|------|------------------------|------|------|------|------|------|
|                                                                                        |      |      | 2019                   | 2018 | 2017 | 2016 | 2015 | 2014 |
| <b>Measure 5:<br/>Execution of<br/>Capital<br/>Improvement<br/>Budget<br/>(annual)</b> | 75%  | 38%  | 45%                    | 78%  | 64%  | 65%  | 71%  | 61%  |



### Budget, Expenditures, and Closures through September of 2020

Note – 2020 closure information is not known at this time and is not reflected on this graph

## **Measure #6: Debt to Equity Ratio**

### **Type**

Effectiveness

### **Accomplishment Goal Supported**

- Fiscal responsibility and transparency with utility finances.
- Anticipate change and be prepared for the future.

### **Definition**

The relative percentages of assets that are funded by debt and equity, respectively. The total of debt funding and equity funding equals 100%.

### **Data Collection Method**

The calculation is performed by comparing debt and equity to assets annually.

### **Frequency**

The measurement will be calculated annually upon completion of the Utility's audited financial statement.

### **Measured By**

The Finance Division will calculate this ratio from financial statement data.

### **Reporting**

The Finance Division manager will create and maintain an annual report. Trend information will be displayed in a table.

### **Used By**

The information will be used by the Finance Division Director, General Manager, Board, and Administration to help evaluate debt financing levels.

### **Results**

| <b>Measure 6:<br/>Debt to Equity<br/>Ratio (annual)</b> | <b>Goal</b> | <b>2019</b> | <b>2018</b> | <b>2017</b> | <b>2016</b> | <b>2015</b> | <b>2014</b> | <b>2013</b> |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Water Utility                                           | 67/33       | 58/42       | 60/40       | 61/39       | 62/38       | 63/37       | 62/38       | 65/35       |
| Wastewater<br>Utility                                   | 67/33       | 64/36       | 65/35       | 64/36       | 67/33       | 67/33       | 65/35       | 67/33       |

### PVR Measure WC: Managing Workers' Compensation Claims

Reducing job-related injuries is a priority for the Administration by ensuring safe work conditions and safe practices. By instilling safe work practices, we ensure not only the safety of our employees but reduce the potential for injuries and property damage to the public. The Municipality is self-insured and every injury poses a financial burden on the public and the injured worker's family. It just makes good sense to WORK SAFE.

Results are tracked by monitoring monthly reports issued by the Risk Management Division.

