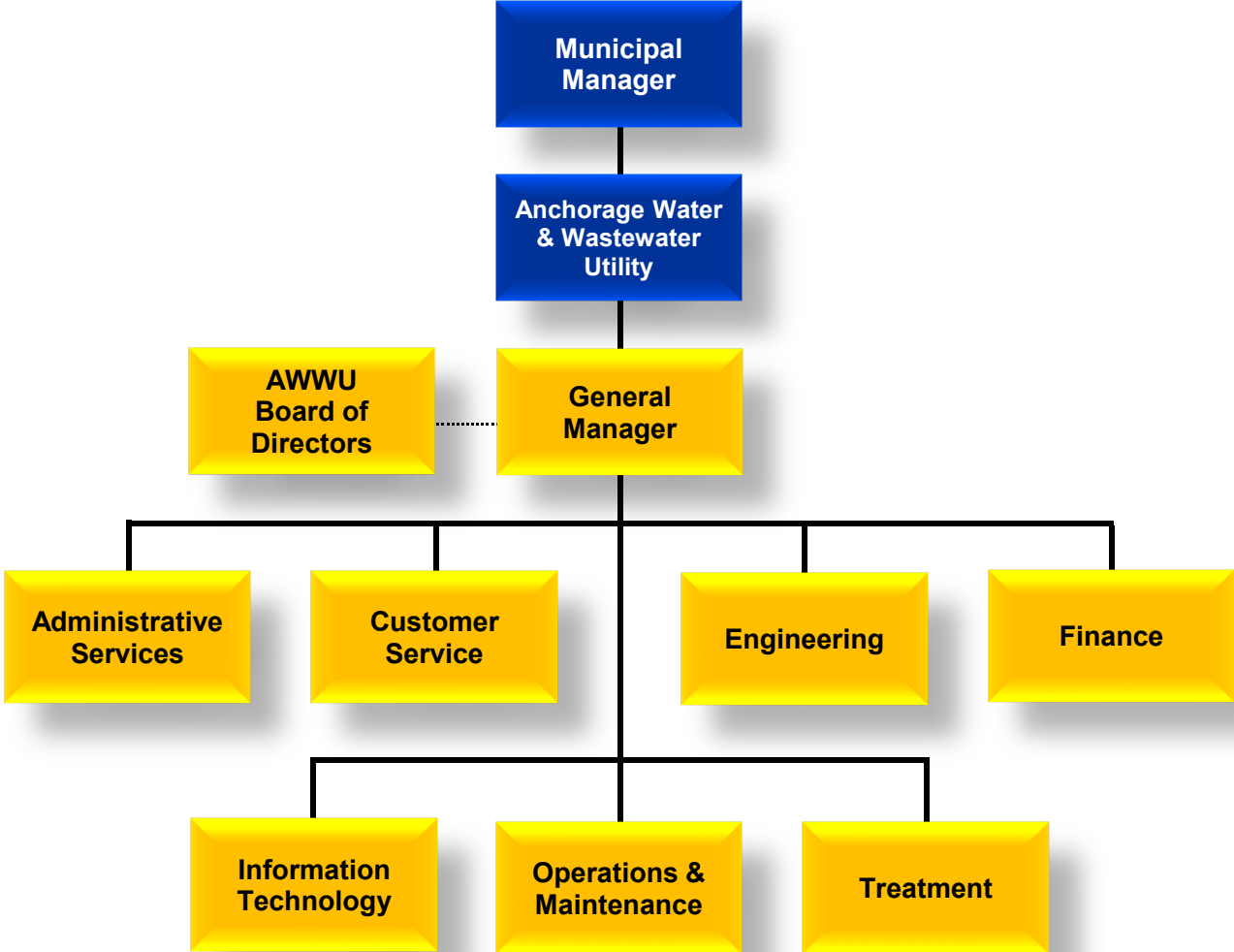


Anchorage Water & Wastewater Utility



Anchorage Water & Wastewater Utility Organizational Overview

Overview

The Anchorage Water and Wastewater Utility (AWWU) is the largest water and wastewater utility in Alaska. AWWU currently serves the Municipality of Anchorage extending from Eklutna to as far south as Girdwood. Although they share one workforce, AWWU operates as two separate economic and regulated entities: the Anchorage Water Utility (AWU) and the Anchorage Wastewater Utility (ASU).



AWWU Headquarters

System Description

To provide water and sewer services, AWWU owns and operates five Treatment Facilities (2 water and 3 wastewater), approximately 1,600 miles of pipe, and over 325,000 square feet of facility space distributed throughout the Municipality. The certificated water service area covers 130.4 square miles in three distinct geographic areas, Northern Communities, the Anchorage Bowl, and Girdwood Valley. Estimates place the water service population at approximately 243,000 people via nearly 56,700 customer accounts. The certificated sewer service area is larger, encompassing nearly all of the Municipality. ASU currently provides sewer service to approximately 252,500 people via approximately 57,600 customer accounts. Additionally, AWWU receives septage pumped from on-site wastewater systems on lots in areas not directly connected to the sewer system.



Ship Creek Water Treatment Facility

AWU's three sources of water are Eklutna Lake, Ship Creek, and groundwater accessed through a system of wells in the Northern Communities, the Anchorage Bowl, and Girdwood Valley. Eklutna Water Treatment Facility and the wells which supply Girdwood are operated year-round and serve as the primary supply sources for the Anchorage and Girdwood water systems. The Ship Creek Water Treatment Facility and the remainder of the water wells are used to augment the primary water supply, mainly in times of peak demand, as well as provide redundancy to the

Eklutna source for Eagle River and the Anchorage Bowl. Of these sources, the Eklutna Water Treatment Facility now provides approximately 91% of total water production for the Northern Communities/Eagle River and the Anchorage Bowl. In Girdwood, where system demand constitutes less than 2 percent of AWWU's total water production, all water produced and distributed is from two municipally-owned and managed wells.

ASU operates three wastewater treatment facilities (WWTF) to treat wastewater collected in three geographically separate but commonly managed sewer systems. The largest of these is the John M. Asplund WWTF located at Point Woronzof. The Asplund WWTF was constructed in

the early 1970's when Anchorage eliminated direct ocean discharges. It services the wastewater treatment needs of the Anchorage Bowl. The Asplund facility has received silver, gold, and platinum awards from the National Association of Clean Water Agencies for efficiency and environmental compliance. ASU is continually at work to maintain and enhance the facility. The Asplund facility operates in accordance with a National Pollution Discharge Elimination System (NPDES) permit administered by the U.S. Environmental Protection Agency (EPA). The permit, which expired in 2005 but has been administratively extended by EPA, allows discharge of effluent receiving primary treatment, in accordance with Section 301(h) of the Clean Water Act. The EPA is targeting September 2022 to complete a review of the existing permit.

The Eagle River WWTF was originally built in the 1960's and upgraded several times. It services the public wastewater treatment and disposal needs within Eagle River and Chugiak. The Eagle River facility provides biological secondary treatment and discharges treated effluent to Eagle River. The Eagle River Wastewater Treatment Facility Permit was renewed on March 1, 2020 by Alaska Department of Environmental Conservation (ADEC), which has assumed primacy from EPA over permits for wastewater discharge to fresh water and is valid for five years.



Asplund Facility



Girdwood Wastewater Treatment Plant

The third facility is Girdwood WWTF. It was originally constructed in the 1970's and also has undergone several process modifications and upgrades. The Girdwood facility provides biological secondary treatment and discharges treated effluent to Glacier Creek under an administratively extended NPDES permit administered by the ADEC. The core facility is now at the end of its useful life. Phase 1 of plant replacement and upgrades was completed in 2014. Phase 2 of the plant replacement and upgrade is being planned to conform to discharge requirements of a new permit.

Over the past decade, investments in physical infrastructure have resulted in an increase in the value of AWU and ASU. From 2010 to present, plant in service has increased by 27.1% from \$709.3 million to \$901.4 million for AWU and by 32.9% from \$554.6 million to \$737.1 million for ASU. This growth is primarily a result of an increasing amount of investment in transmission and distribution assets (water pipelines) and collection plant assets (wastewater pipelines).

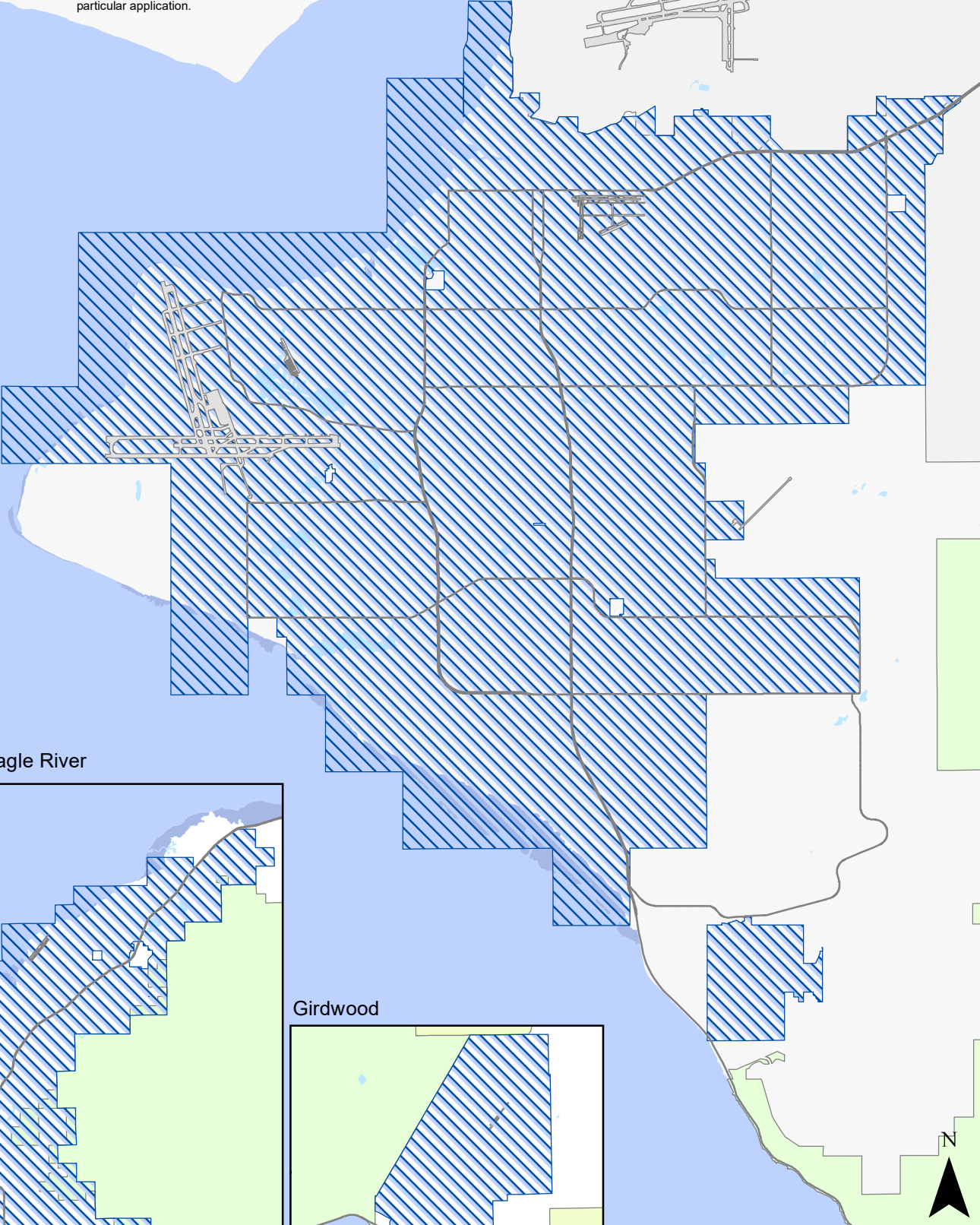
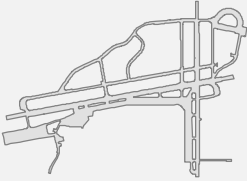
Organization

The General Manager's office is responsible for overall operation of AWWU that includes the following 7 divisions:

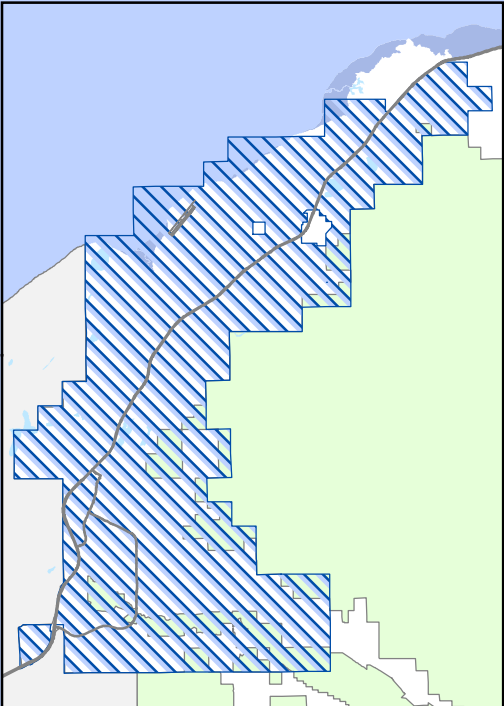
- Treatment Division is responsible for day-to-day operation of the treatment facilities and water distribution system and for maintaining compliance with all state and federal regulations.
- Operations and Maintenance (O&M) Division maintains the treatment facilities and repairs all water and sewer piping and lift stations. The O&M Division also operates the wastewater collection system and is responsible for AWWU's Supervisory Control and Data Acquisition (SCADA) system.
- Customer Service Division is responsible for responding to customer inquiries, billing and collections for both utilities, issuing of permits, and field service functions.
- Engineering Division is responsible for development and execution of AWWU's capital program and for system planning.
- Information Technology Division provides support for all AWWU computers, network, and software systems.
- Administrative Services Division provides for training, safety, and internal and external communications.
- Finance Division is responsible for all general ledger and plant accounting, preparation of utility budgets and financial statements, and regulatory filings.

Municipality of Anchorage AWWU Water Service District

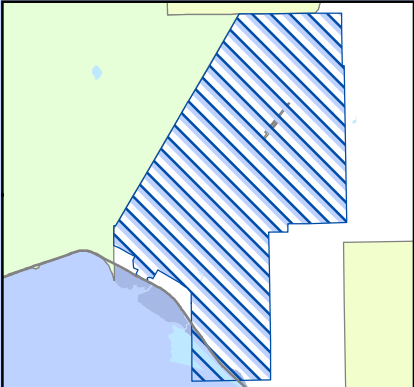
The Municipality of Anchorage (MOA) does not warrant the accuracy of maps or data provided, nor their suitability for any particular application.



Chugiak/Eagle River



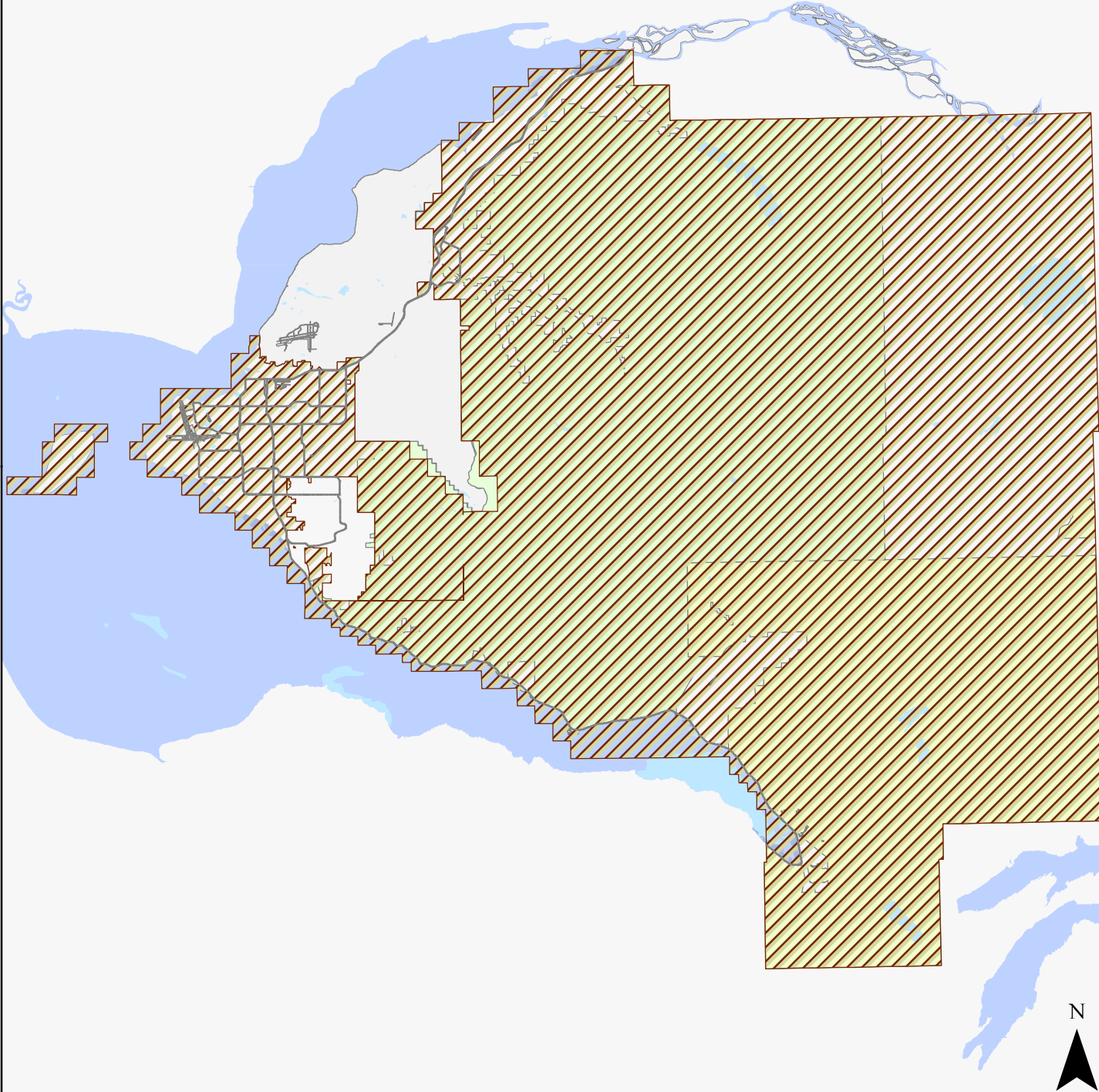
Girdwood



Prepared by:
Geographic Data and Information Center
September 2021
*Not to scale

Municipality of Anchorage AWWU Sewer Service District

The Municipality of Anchorage (MOA) does not warrant the accuracy of maps or data provided, nor their suitability for any particular application.



Prepared by:
Geographic Data and Information Center
September 2021
*Not to scale

Anchorage Water & Wastewater Utility Business Plan

Mission

Providing safe and reliable water and wastewater service today and into the future.

Services

Anchorage Water & Wastewater Utility (AWWU) is the largest water and wastewater utility in Alaska. AWWU currently serves the Municipality of Anchorage extending from Eklutna to as far south as Girdwood. Although they share one workforce, AWWU operates as two separate economic and regulated entities: the Anchorage Water Utility (AWU) and the Anchorage Wastewater Utility (ASU).

Business Goals

AWWU prepared an updated strategic plan in 2016. The plan includes the following goals:

- Be responsive to the needs of the community
- Be the model of innovation and efficiency in service to the public
- Be a responsible steward of ratepayer funds
- Be the employer of choice for existing and future staff

Strategies to Achieve Goals

AWWU has identified the following customer commitments which represent the outcomes or accomplishments of the Utilities' activities as viewed by the customer:

1. Provide safe drinking water that meets or exceeds all standards.
2. Protect the environment through appropriate wastewater collection, treatment, and disposal.
3. Provide reliable service.
4. Have timely, professional, and courteous interactions with customers.
5. Manage finances responsibly and transparently.
6. Set rates that fairly reflect the cost of providing service and maintaining infrastructure.
7. Deliver services affordably to promote a strong Anchorage economy.
8. Invest wisely to minimize risk and maintain service levels.
9. Continuously improve the efficiency of our operations.
10. Anticipate change and prepare for the future.

Performance Measures to Track Progress in Achieving Goals

AWWU measures progress in achieving these customer commitments using quantifiable performance measures, including the following:

1. Compliance with all State and Federal drinking water, wastewater and clean air standards.
2. Number of planned and unplanned water outages.
3. Sanitary sewer overflows.
4. Number of reportable injuries and accidents.
5. Execution of capital improvement budget.
6. Debt to equity ratio.

Anchorage Water & Wastewater Utility

Anchorage: Performance. Value. Results.

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

Measure #1: Compliance with all State and Federal drinking water, wastewater, and clean air standards

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: Compliance with all State and Federal drinking water, wastewater, and clean air standards	Goal	2021				Past Years					
		Q4	Q3	Q2	Q1	2020	2019	2018	2017	2016	2015
Safe Drinking Water Act Compliance (%)	100			100	100	100 %	100	99.8	97.6	100	100
Clean Water Act (NPDES permit) Compliance (%)	100			100	100	100	100			100	100
-Asplund				100	100	99.6	97.8	99.7	100	100	100
-Eagle River				100	99.7	98.95	99.7	99.3	100	99.7	100
-Girdwood				99.5	99.7	99.43	99.4	100	100	99.7	99.5
Clean Air Act Compliance (%) (Asplund Incinerator)	100			100	100	99.99	100	100	100	99.99	99.99

Measure #2: Number of planned and unplanned water outages

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)	2021 (monthly average)	4 th Q 2021 (monthly average)	3 rd Q 2021 (monthly average)	2 nd Q 2021 (monthly average)	1 st Q 2021 (monthly average)	Historical monthly average				
							2020	2019	2018	2017	2016
Planned Outages											
<4 hours	<20				0	0	30	11	10	10	5
4-12 hours	<20				4	0	23	37	16	71	8
>12 hours	0				0	0	0	0	3	0.2	0.2
Unplanned Outages											
<4 hours	<20				22	26	63	17	38	15	92
4-12 hours	<50				56	11	32	36	42	38	22
>12 hours	0				0	0	3	3	11	3	5

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	2021				Historical monthly average					
		Q4	Q3	Q2	Q1	2020	2019	2018	2017	2016	2015
Measure 3: Sanitary Sewer Overflows (monthly)	<1.5			2.67	1.0	1.1	1.33	1.23	0.91	1.48	1.58

Measure #4: Number of reportable injuries and accidents**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	2020	2019	2018	2017	2016	2015	2014
Measure 4: Number of reportable injuries and accidents (annual)	<4.60	.994	4.08	7.1	4.45	6.30	6.26	6.37

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 (SOII) 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.

Measure #5: Execution of Capital Improvement Budget

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

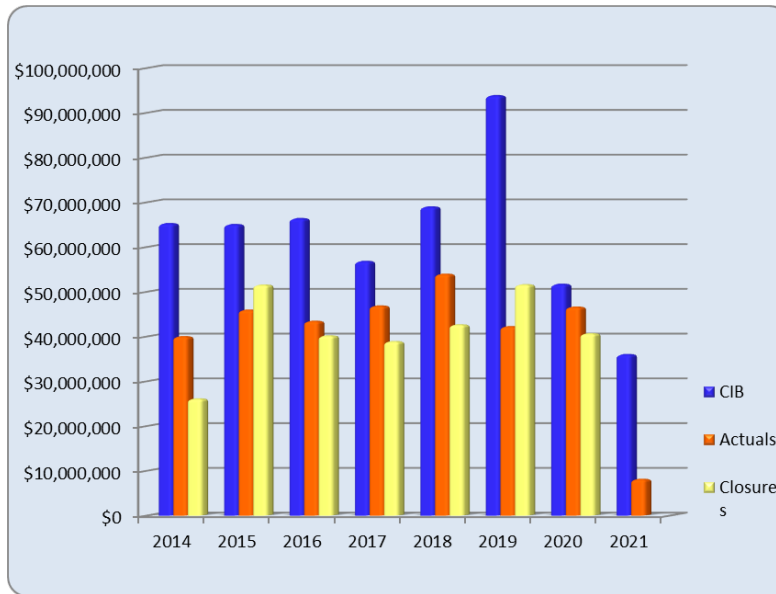
The information will be displayed numerically and graphically in monthly reports.

Used By

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

Results

	Goal	2021	Historical Information					
			2020	2019	2018	2017	2016	2015
Measure 5: Execution of Capital Improvement Budget (annual)	75%	23%	90%	45%	78%	64%	65%	71%



Budget, Expenditures, and Closures through June of 2021

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.

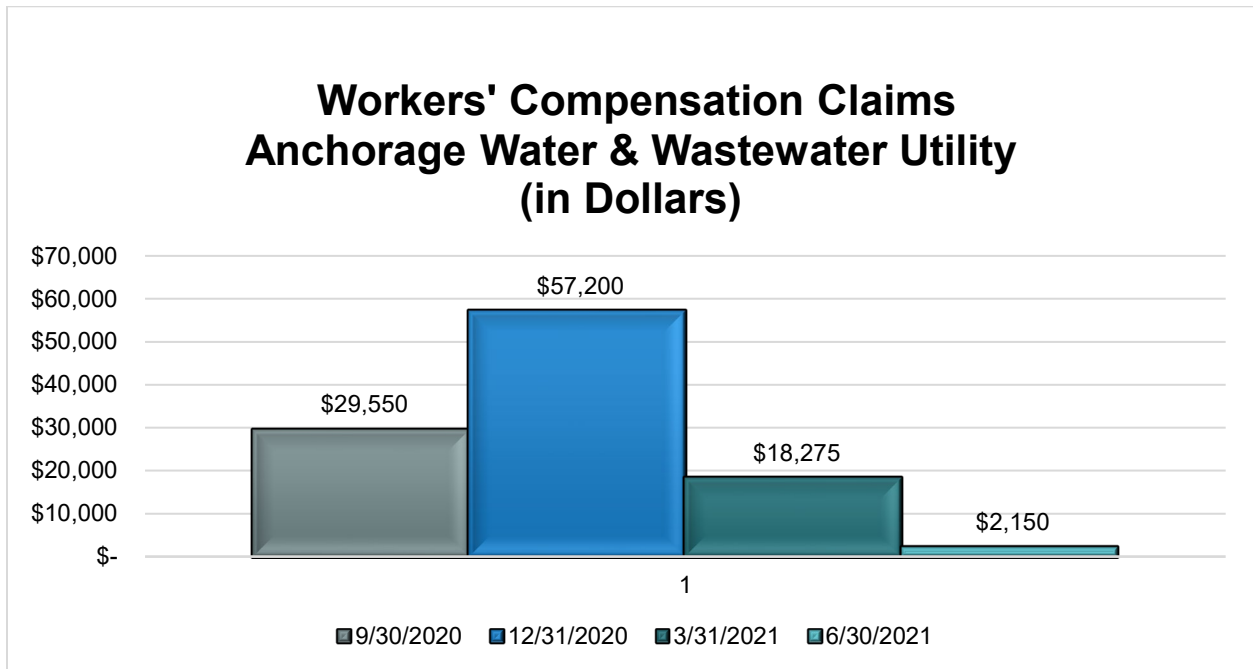
Results

Measure 6: Debt to Equity Ratio (annual)	Goal	2020	2019	2018	2017	2016	2015	2014
Water Utility	67/33	56/44	58/42	60/40	61/39	62/38	63/37	62/38
Wastewater Utility	67/33	63/37	64/36	65/35	64/36	67/33	67/33	65/35

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.



About Anchorage Water & Wastewater Utility

Anchorage Water Utility History

From the first intake of water at Lower Ship Creek, and a few miles of wood stave water lines downtown more than 100 years ago, Anchorage's public water utility has grown into an enterprise with a net plant in service of approximately \$550 million that delivers an average of 23 million gallons of water to customers each day. The original water system for Anchorage was installed by the Alaska Railroad in 1917. In 1921, the City purchased the water system and associated water rights from the Alaska Engineering Commission. As the City expanded by annexation, the water system was extended into new areas and independent water systems previously serving the annexed areas were acquired by the City. A 2.6-mile raw water line to Ship Creek was built in 1980 to replace an earlier raw water main originally constructed in 1962 for the Ship Creek Water Treatment Facility (WTF). In the 1950's, an aqueduct was drilled through the mountains north of Anchorage to supply water from Eklutna Lake to the Eklutna hydroelectric power plant along the Knik River. In 1985, the Anchorage Water & Wastewater Utility (AWWU) tapped this aqueduct and connected a 7.8-mile-long transmission main (intake portal) to provide water from Eklutna Lake to the Eklutna Water Treatment Facility. A 22-mile-long water transmission main was constructed to distribute the treated water from Eklutna to Chugiak, Eagle River, and on into Anchorage.

Anchorage Sewer Utility History

The Alaska Engineering Commission first installed sewers in downtown Anchorage in 1916 along the lower bluff near the Alaska Railroad Depot. As Anchorage grew, construction of sewers continued and by the end of World War II, sewers were available in much of the area between Ship Creek and Chester Creek, west of Cordova Street. The Greater Anchorage Area Borough (GAAB) was created in 1964 and was granted area wide sewer authority. The last major private sewer utility was acquired by the GAAB in 1972. Investment by the GAAB in the 1970's constructed the J.M. Asplund Wastewater Treatment Facility (WWTF) for Anchorage, the Girdwood Wastewater Treatment Facility and the Eagle River Wastewater Treatment Facility. The wastewater utility is now owned and governed by the Municipality of Anchorage after unification of the City of Anchorage and the GAAB on September 15, 1975. The rivers, creeks, and inlets downstream from Anchorage's wastewater treatment facilities are not adversely impacted by treated effluent, which is AWWU's principal measure of success. The Anchorage community benefits from the superior operation of the three wastewater treatment plants that serve its growing population. Anchorage's public wastewater utility has grown into an enterprise with a net plant in service of approximately \$423 million, treating an average of 29 million gallons of effluent each day.

Governance

AWWU has a seven-member Board of Directors as codified in Anchorage Municipal Code section 4.80.020. The Board is appointed by the Mayor to staggered 3-year terms, with nominees subject to the approval of the Anchorage Assembly. The Board, by code, makes recommendations to the Mayor, establishes procedures for customer complaints, and recommends changes in code to the Assembly that the Board deems necessary or desirable for the efficient operation of the Utility or for the benefit of its customers. The authority for operation and management of the Utility is under the control of the Mayor. The Board members are very experienced professionals in the fields of law, finance/accounting, engineering, and public health, in addition to 2 at-large citizen members. Regular meetings are held monthly and are open to the public. Board meetings focus on Utility operations and highlights.

Economic Regulation and Accounting

Since 1970, both the Anchorage Water Utility (AWU) and the Anchorage Wastewater Utility (ASU) have been regulated by the Alaska Public Utilities Commission, which was renamed the Regulatory Commission of Alaska (RCA) on July 1, 1999. AWU and ASU each hold a Certificate of Public Convenience and Necessity for serving portions of the Anchorage Bowl, Eagle River and Girdwood. The RCA must approve all rates and tariffs prior to implementation. They also regulate service areas and service quality. The RCA is composed of five members appointed to six-year staggered terms by the Governor of the State of Alaska and confirmed by the State Legislature.

AWWU is an Enterprise Fund. Enterprise Funds are used to account for operations where costs of providing services to the general public on a continuing basis are financed or recovered primarily through user charges or where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or change in net assets is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

AWWU applies all applicable provisions of the Governmental Accounting Standards Board which has authority for setting accounting standards for governmental entities. The accounting records of the Utility conform to the Uniform System of Accounts prescribed by the National Association of Regulatory Utility Commissioners. The accrual basis of accounting is used for Enterprise Funds. Revenues are recognized in the accounting period in which they are earned and become measurable. Expenses are recognized in the period incurred, if measurable.

AWWU's audited financial statements are available at [Financial Statements | Anchorage Water and Wastewater Utility \(awwu.biz\)](https://www.awwu.biz)

Environmental Regulation

AWU's activities are dictated by a wide variety of environmental regulations administered by the Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC). Potable water produced by AWU must comply with the regulations promulgated under the Safe Drinking Water Act (SDWA). The SDWA is the main federal law governing the quality of drinking water in the United States. The ADEC has authority (primacy) to administer the SDWA regulations for the EPA. The SDWA sets standards for the chemical and microbial quality of drinking water and establishes requirements for informing the public.

ASU's activities are also dictated by a wide variety of environmental regulations administered by the EPA and the ADEC. All wastewater discharges must comply with the regulations promulgated under the Clean Water Act (CWA). The CWA is the main federal law governing discharges into the waters of the United States. The CWA requires that each treatment facility have a unique National Pollution Discharge Elimination System (NPDES) permit that specifies the discharge limits from each facility for a wide variety of chemical and biological constituents. The ADEC has authority (primacy) to issue and administer the NPDES permits for ASU's Eagle River and Girdwood WWTFs. Authority to issue and administer the 301(h) modification for the Asplund WWTF has been retained by EPA, due to the special conditions of this discharge as outlined in section 301(h) of the CWA. In addition to the CWA laws, ASU's sewage sludge incinerator must also comply with the provisions specified in Title V of the Clean Air Act (CAA). ADEC has primacy for the CAA and administers the permit for EPA.

Failure to comply with the regulations promulgated under the SDWA, CWA and CAA can result in fines and/or compliance orders and criminal charges.

Physical Plant

The John M. Asplund WWTF is one of the few facilities in the nation operating as a primary treatment facility under Section 301(h) of the Clean Water Act. The primary treatment provided by this facility removes up to 46% of the biological oxygen demand and 80% of the solids from the influent wastewater meeting the criteria necessary for discharge to the marine waters of Cook Inlet.

The smaller Eagle River WWTF and Girdwood WWTF provide advanced secondary treatment prior to discharge to Eagle River and Glacier Creek, respectively. These facilities remove up to 99% of the pollutants from the incoming wastewater prior to discharge.

In 2020, the Asplund WWTF treated an average of 26.9 million gallons per day (mgd). The Eagle River WWTF treated an average 1.3 mgd and the Girdwood WWTF treated an average 0.5 mgd. The three facilities have a combined design capacity of 61.1 mgd. The wastewater collection system has approximately 764 miles of pipes.

The Asplund Facility, built in 1972, is Alaska's largest wastewater treatment plant. As wastewater treatment technology and the demands of community growth have developed over the last two decades, utility operators and engineers have kept pace. The Asplund plant underwent major renovations in 1982 and expanded and upgraded again in 1989.

A facilities plan update was prepared in 1999. The 1999 facilities plan evaluated the existing condition of the Asplund facility and identified improvements necessary to meet the future needs of the community. The facilities plan identified over \$40 million worth of improvements to the solids handling, headworks, administration, laboratory, incineration, thickening processes and control and power systems. AWWU undertook a majority of the recommended Asplund projects. These projects, along with careful operation, have made Asplund a modern, state-of-the-art treatment facility. In 2014, an updated facilities plan was prepared for Asplund. The plan recommended over \$17M of additional investment in Asplund over ten years' time to rehabilitate and maintain aging infrastructure. A significant portion of those recommendations have been completed since 2014. ASU continues to maintain its smaller treatment plants. Additional projects at Eagle River and Girdwood are underway, all designed to replace, rehabilitate, and provide for the near-term needs of the areas being serviced.

AWU's three sources of water are Eklutna Lake, Ship Creek and groundwater accessed through a system of wells in the Northern Communities, the Anchorage Bowl, and Girdwood Valley. Eklutna Water Treatment Facility and the wells which supply Girdwood are operated year-round and serve as the primary supply sources for the two water systems. The Ship Creek Water Treatment Facility and the remainder of water wells are used to augment the primary water supply as well as provide redundancy to the Eklutna source for Eagle River and the Anchorage Bowl.

Of these sources, the Eklutna WTF now provides, on average, 91 percent of total water production for the Northern Communities and the Anchorage Bowl. In Girdwood, where system demand constitutes less than 2 percent of AWWU's total water production, all water produced and distributed is from two wells.

Projects to maintain the surface water plants and AWU wells are on-going. The purpose of these projects is multiple fold: to rehabilitate and upgrade facilities where equipment has reached the end of its useful life; to automate and increase operational efficiency of facilities; to increase yield from existing well sites; and to meet stricter federal and state regulations regarding water quality.

Visit the AWWU website at: <https://www.awwu.biz/>

Anchorage Water & Wastewater Utility Highlights and Future Events

Affordability

A growing concern for water and wastewater utilities nationwide is the affordability of rates to ratepayers. AWWU shares the concerns of these other utilities. Increases in infrastructure and operating costs continue to lead to higher rates. Ongoing investment in infrastructure is critical for the Utility, as evidenced from the November 2018 earthquake. AWWU's infrastructure proved resilient; no customers went without service immediately following the earthquake. With this history and knowledge, AWWU is decreasing the amount of capital spending to be more in-line with depreciation levels.

Throughout 2019, 2020 and 2021, AWWU took the following steps to help reduce ongoing expenses:

- Education throughout the utility on energy efficiency and reduced demand charges.
- Reduced natural gas usage while maintaining compliance with air quality permits.
- Additional storage and reliability of the Asplund Wastewater Treatment Facility's disinfection system.

Focus in these areas will result in the savings of hundreds of thousands of dollars annually and those savings are reflected in the 2022 operating budget.

2022 Operating Expenses

With economic sustainability as an underlining principle for the Utility, AWWU is budgeting labor expenses at levels lower than budgeted in 2021 and is budgeting modest increases for non-labor. These measures will assist in meeting financial metrics as defined by the AWWU Board of Directors and as required by current debt covenants. Proposed reductions will affect AWWU's levels of service, response time, mean time to repair, and customer hold times, which may lead to an increase in customer complaints due to these spending reductions.

2022 Operating Revenues

Revenues in the 2022 budget are based on current and proposed rate filings with the Regulatory Commission of Alaska (RCA). At present, AWWU has a pending Revenue Requirements Study with the RCA with a 2% rate increase for the water utility and an 8% rate increase for the sewer utility. These interim and refundable rates are pending approval by the Commission. Should the rate increases granted be less than requested, Operating Revenue will be negatively impacted. AWWU plans to file another Revenue Requirements Study with the RCA at the end of 2021 asking for a 1.75% rate increase for the water utility and an 3.75% rate increase for the sewer utility effective January 1, 2022. Again, should these interim and refundable rates be decreased or denied by the RCA, Operating Revenues will be negatively impacted.

Rate Increases Calculated, Requested and Approved

	Calculated Rate Increases		Requested Permanent Rate Increases		Approved Rate Increases		Reason For Requesting Increases Less Than The Calculated Increases
	AWU	ASU	AWU	ASU	AWU	ASU	
2004	14.2%	8.1%	14.2%	8.1%	13.6%	8.1%	The calculated increases were requested due to the change in the MUSA calculation.
2005	7.2%	6.8%	7.2%	6.8%	7.8%	3.0%	The calculated increases were requested due to the change in the MUSA calculation.
2006	12.4%	15.0%	8.9%	10.6%	6.5%	10.6%	Policy direction to limit rate increases requested to reduce impact on customers.
2007	15.0%	17.8%	14.5%	13.0%	7.0%	9.5%	Policy direction to limit rate increases requested to reduce impact on customers.
2008	-	-	-	-	-	-	Rate changes were not requested by AWWU for 2008.
2009	8.7%	8.0%	7.0%	6.5%	5.6%	6.5%	Policy direction to limit rate increases requested to reduce impact on customers.
2010	7.0%	9.5%	2.5%	2.5%	2.5%	2.5%	Policy direction to limit rate increases requested to reduce impact on customers.
2011	18.5%	26.2%	8.0%	15.0%	8.0%	15.0%	Policy direction to limit rate increases requested to reduce impact on customers.
2012	13.0%	16.6%	6.0%	11.0%	6.0%	11.0%	Policy direction to limit rate increases requested to reduce impact on customers.
2013	9.1%	6.8%	6.0%	4.5%	6.0%	4.5%	Policy direction to limit rate increases requested to reduce impact on customers.
2014	5.6%	6.7%	4.0%	5.5%	2.3%	4.3%	AWWU stipulated to permanent rates lower than the rates requested.
2015	-	-	-	-	-	-	Rate changes were not requested by AWWU for 2015.
2016	-	-	-	-	-	-	Rate changes were not requested by AWWU for 2016.
2017	-	11.9%	-	9.5%	-	9.5%	Policy direction to limit rate increases requested to reduce impact on customers.
2018	4.5%	4.2%	3.0%	2.5%	3.0%	1.0%	
2019	8.3%	10.5%	7.0%	9.5%	6.5%	6.9%	AWWU stipulated to permanent rates lower than the rates requested.
2020	-	-	-	-	-	-	Rate changes were not requested by AWWU for 2020.
2021	4.86%	11.67%	2%	8%	TBD	TBD	Policy direction to limit rate increases requested to reduce impact on customers. Rate Case is still pending RCA decision by June 11, 2022.

To improve its debt position, AWWU must continue to request reasonable rates while controlling expenses. The budget provided in this package provides just such a balance.

Anchorage Water & Wastewater Utility External Impacts

Wastewater Treatment Facilities Discharge Permits

The State of Alaska Department of Environmental Conservation (ADEC) assumed authority for permitting wastewater discharges for the Girdwood and Eagle River Wastewater Treatment Facilities (WWTF) in November 2008. The Girdwood WWTF permit has been administratively extended by ADEC and continues to be effective and enforceable until a new permit is issued. The Eagle River WWTF permit was reissued by ADEC in 2020 and is valid for at least five years.

Authorization of discharge into marine waters from the Asplund WWTF remains under the auspices of the U.S. Environmental Protection Agency (EPA). The EPA is currently evaluating the Utility's application for reauthorization of the permit allowing only primary treatment, in accordance with criteria set out in Section 301(h) of the Clean Water Act. Subsequent to the agency's determination that the Asplund discharge meets the 301(h) criteria, EPA will consult with the National Marine Fisheries Service (NMFS) on the effects of the permit reauthorization on endangered species (i.e., the Cook Inlet beluga whale). If NMFS finds that the discharge reauthorization is likely to jeopardize continued existence of the species or adversely modify critical habitat, NMFS may impose conditions on the permit to mitigate the effects on the species. EPA has notified AWWU that they have targeted September 2022 to complete the review of the extension of the 301(h) permit.

Infrastructure

The infrastructure required to provide reliable water and sewer service requires continual annual capital investments to maintain expected service levels and prudently mitigate long term risk. Anchorage Water and Wastewater Utility (AWWU) continuously evaluates Anchorage Water Utility and Anchorage Sewer Utility assets using industry standard best management practices through our asset management program which identifies the need for specific capital projects. In this program, AWWU performs extensive condition assessment monitoring and evaluation using both AWWU staff and specialized contractors. This work culminates in business case analyses that best determine solutions offering the lowest overall life cycle costs.

The November 2018 earthquake was an empirical data point that exhibited the benefit of successful strategic investments made by AWWU over the last decade. While the earthquake did cause significant damage to AWWU systems, operations staff were able to maintain uninterrupted and reliable water and wastewater services through that catastrophic event. As such, AWWU has begun to modestly scale back capital investment.

Anchorage Water & Wastewater Utility Capital Overview

Capital Project Selection Process

Anchorage Water and Wastewater Utility (AWWU) continuously evaluates Anchorage Water Utility (AWU) and Anchorage Sewer Utility (ASU) assets using industry standard best management practices which identify the need for capital projects. As assets age and deteriorate over time they become problematic and either disproportionately lower customer levels of service, have disproportionately high operations and maintenance cost, or increase risk liability. Capital project expenditures address one or more of these issues. The typical origin of capital projects is from facility plans, asset management plans, master plans, or day to day operations. AWWU has the following types of capital projects:

- Water Treatment Facility Plant
- Water Transmission or Distribution
- Sewer Trunk or Collection System
- Wastewater Treatment Facility Plant
- Other Facilities and Plant not directly involved:
 - The treatment of raw water or delivery of finished water
 - The collection or treatment of sanitary sewer
- Miscellaneous Equipment (non-dedicated to a specific facility or location)
- Facility Plans and Master Plans
- Information Technology Hardware and Software
- Vehicles

For an issue of concern, not previously identified, to become a capital project listed above, AWWU develops a Business Case Evaluation (BCE) which summarizes the concern, identifies alternative solutions, and calculates the risk matrix score. AWWU uses a standardized risk matrix to score different aspects of potential projects like safety, security, criticality, customer needs, maintenance requirements, and financial benefit. The matrix score produces a risk number so projects in different categories can be compared (i.e., Water Treatment Facility Plant project vs. Information Technology Hardware and Software Project). AWWU takes these justification documents (BCE and matrix score) and in conjunction with the long-range financial plan, selects which capital projects to move forward and schedules them within the 6-year Capital Improvement Plan.

Significant Projects

Water Treatment Facility Plant Projects include improvements and equipment for the Eklutna Water Treatment Facility, Ship Creek Water Treatment Facility, and any source water improvements including wells or well sites.

Wastewater Treatment Facility Plant Projects include improvements and equipment for the Eagle River Wastewater Treatment Facility, Asplund Wastewater Treatment Facility, Girdwood Wastewater Treatment Facility, and Septage Receiving Stations.

Water Transmission and Distribution System Projects are any improvements to the pipe network of the distribution system from Eklutna Lake to Potter Valley in Anchorage and the distribution system in Girdwood.

Sewer Collection System Projects are any improvements to the pipe network of the sanitary sewer collection systems in Eagle River, Anchorage, and Girdwood.

For both AWU and ASU, general and intangible plant improvements are broken into the following projects:

- Facility and Master Plans
- Information Technology Hardware and Software
- Other Plant and Facilities include improvements to those facilities not directly associated with:
 - The treatment of raw water or delivery of finished water
 - The collection or treatment of sanitary sewer
- Miscellaneous Equipment (non-dedicated to a specific facility or location)
- Vehicles

A portion of annual capital funding is reserved for unplanned projects in any of the aforementioned categories and unanticipated coordination due to unplanned projects of agencies such as the Alaska Department of Transportation and Public Facilities or MOA Project Management and Engineering.

Impacts on Future Operating Budgets

One of the overarching goals of AWWU is to balance the ratepayer's expected level of service while maintaining reasonable rates. Rates are a function of both capital spend and annual operating expenses. One of the intents, among many, of the Capital Program is to decrease long term operating expenses. Other objectives of the Capital Program, such as risk mitigation, level of service adjustment, and parity replacement of existing infrastructure do not materially impact future operating budgets. The balance between current capital spend and future operating budgets is a function of AWWU's long-range financial plan that identifies the available capital funding in consideration of anticipated operational costs. AWWU's project selection process prioritizes the greatest operational cost savings for the ratepayers given prudent utility industry practices.

Anchorage Water Utility 8 Year Summary

(\$ in thousands)

Financial Overview	2020 Actuals	2021	2022	2023	2024	2025	2026	2027
	*Unaudited	Proforma	Approved	Forecast				
Revenues	65,591	65,929	67,039	70,209	72,629	75,169	77,719	80,409
Expenses and Transfers ⁽¹⁾	53,402	57,813	60,716	63,280	65,210	67,100	69,130	71,270
Net Income (Loss)	12,189	8,115	6,323	6,929	7,419	8,069	8,589	9,139
Charges by/to Other Departments	2,157	2,421	2,641	2,799	2,967	3,145	3,334	3,534
Municipal Enterprise/Utility Service Assessment	9,074	9,755	10,123	10,920	11,580	12,290	13,030	13,790
Dividend to General Government	1,630	-	300	400	500	600	700	800
Transfers to General Government ⁽²⁾	12,861	12,176	13,064	14,119	15,047	16,035	17,064	18,124
Operating Cash	41,348	37,817	32,127	26,896	23,673	20,672	21,825	22,903
Construction Cash Pool	7,239	19,239	20,339	20,494	20,657	20,778	20,855	20,911
Restricted Cash	-	937	1,124	2,289	2,373	2,461	2,552	2,643
Total Cash	48,587	57,993	53,590	49,679	46,703	43,911	45,232	46,457
Net Position/Equity 12/31	185,075	192,967	199,316	206,245	213,663	221,732	230,320	239,459
Capital Assets Beginning Balance	566,271	575,564	569,973	572,746	576,127	580,144	582,978	584,514
Asset Additions Placed in Service	26,077	13,618	22,342	23,330	24,366	23,518	22,596	23,064
Assets Retired	(1,090)	(4,100)	(3,900)	(3,900)	(3,900)	(3,900)	(3,900)	(3,900)
Change Depreciation (Increase)/Decrease	(15,694)	(15,109)	(15,669)	(16,049)	(16,449)	(16,784)	(17,160)	(17,560)
Net Capital Assets (12/31)	575,564	569,973	572,746	576,127	580,144	582,978	584,514	586,118
Equity Funding Available for Capital	11,000	10,000	10,000	10,000	10,000	10,000	6,000	6,000
Debt								
New Debt - Bonds ⁽³⁾	-	-	30,270	-	-	-	-	-
New Debt - Loans or Other	10,840	20,000	10,000	10,000	11,000	11,000	14,500	14,500
Total Outstanding LT Debt	235,116	240,547	234,513	227,962	222,396	216,142	212,901	208,699
Total Annual Debt Service Payment	16,286	19,970	21,219	21,469	21,384	21,948	22,549	23,394
Debt Service Requirement	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Debt Service Coverage (Bond)	3.42	3.05	2.46	2.45	2.66	2.75	2.77	2.87
Debt Service Coverage (Total)	1.85	1.34	1.18	1.19	1.24	1.25	1.25	1.24
Debt/Equity Ratio	56 / 44	55 / 45	54 / 46	53 / 47	51 / 49	49 / 51	48 / 52	47 / 53
Rate Change Percent ⁽⁴⁾	0.00%	2.0%	1.75%	3.5%	3.5%	3.5%	3.5%	3.5%
Single Family Rate (\$)	54.53	56.12	57.10	59.10	61.17	63.31	65.53	67.82
Statistical/Performance Trends								
Number of Accounts	56,663	56,759	56,856	56,952	57,049	57,146	57,243	57,341
Average Treatment (MGD)	23.1	23.2	23.2	23.3	23.3	23.4	23.4	23.5
Miles of Water Lines	849	851	853	855	858	860	862	864
Number of Public Hydrants	6,088	6,103	6,118	6,134	6,149	6,164	6,180	6,195

⁽¹⁾ Expenses shown include all transfers to General Government and all non-cash items: depreciation (including depreciation on assets purchased with grant funds) and amortization activities.

⁽²⁾ Included in total expenses calculated in Net Income.

⁽³⁾ 2022 Bond Issue will pay off existing short-term borrowing program debt, no new proceeds are anticipated

⁽⁴⁾ 2021 rate increase effective date was requested to be 4/1/2021 to minimize impacts during COVID

Millions Gallons/Day (MGD)

Anchorage Water Utility Statement of Revenues and Expenses

	2020 Actuals *Unaudited	2021 Proforma	\$ Change	2021 Revised	\$ Change	2022 Approved	22 v 21 % Change
Operating Revenue							
Residential Sales	45,618,625	46,188,000	800,000	46,300,000	900,000	47,200,000	1.94%
Commercial Sales	11,609,613	13,154,000	1,500,000	12,600,000	200,000	12,800,000	1.59%
Public Authority Sales	5,228,727	5,305,000	73,360	5,300,000	100,000	5,400,000	1.89%
Miscellaneous	1,158,325	1,275,000	293,399	1,293,550	-	1,293,550	0.00%
Total Operating Revenue	63,615,290	65,922,000	2,666,759	65,493,550	1,200,000	66,693,550	1.83%
Non Operating Revenue							
Investment Income	1,967,598	1,646	(85,822)	500,078	(159,028)	341,050	-31.80%
Other Income	8,100	5,000	4,400	5,000	-	5,000	0.00%
Total Non Operating Revenue	1,975,699	6,646	(81,422)	505,078	(159,028)	346,050	-31.49%
Total Revenue	65,590,989	65,928,646	2,585,337	65,998,628	1,040,972	67,039,600	1.58%
Operating Expense							
Salaries and Benefits	17,513,166	17,942,791	944,410	18,892,181	(28,315)	18,863,866	-0.15%
Overtime	817,002	719,010	(483,803)	453,000	-	453,000	0.00%
Total Labor	18,330,168	18,661,801	460,608	19,345,181	(28,315)	19,316,866	-0.15%
Supplies	1,817,084	1,987,961	130,749	2,077,911	169,995	2,247,906	8.18%
Travel	4,063	7,280	22,040	28,900	67,800	96,700	234.60%
Contractual/Other Services	5,932,680	6,870,960	162,927	7,764,248	(132,828)	7,631,420	-1.71%
Dividend to General Government	1,630,000	-	(1,630,000)	-	300,000	300,000	0.00%
Manageable Direct Cost Total	9,383,826	8,866,201	(1,314,284)	9,871,059	404,967	10,276,026	4.10%
Municipal Enterprise/Utility Service Assessment	9,073,946	9,754,552	629,846	9,703,792	419,208	10,123,000	4.32%
Depreciation/Amortization	11,440,800	12,852,367	(827,633)	12,852,367	167,633	13,020,000	1.30%
Non-Manageable Direct Cost Total	20,514,746	22,606,919	(197,787)	22,556,159	586,841	23,143,000	2.60%
Charges by/to Other Departments	2,156,556	2,420,650	319,752	2,650,159	(9,569)	2,640,590	-0.36%
Intradepartmental Overheads	(1,345,096)	(721,338)	(8,869)	(613,123)	16,813	(596,310)	-2.74%
Total Operating Expense	49,040,200	51,834,233	(740,581)	53,809,435	970,737	54,780,172	1.80%
Non Operating Expense							
Amortization of Debt Expense	(843,930)	(864,000)	(90,941)	(864,000)	-	(864,000)	0.00%
Debt Issuance Costs	25,000	309,000	200,000	300,000	-	300,000	0.00%
Interest on Bonded Debt	4,642,620	4,570,500	(1,271,022)	4,652,000	548,000	5,200,000	11.78%
Interest on Loans	1,463,952	2,543,577	(49,000)	2,351,000	(351,000)	2,000,000	-14.93%
Interest During Construction (AFUDC)	(925,919)	(580,000)	261,581	(580,000)	(120,000)	(700,000)	20.69%
Total Non Operating Expense	4,361,724	5,979,077	(949,382)	5,859,000	77,000	5,936,000	1.31%
Total Expense	53,401,924	57,813,310	(1,689,963)	59,668,435	1,047,737	60,716,172	1.76%
Net Income (Loss)	12,189,065	8,115,336	4,275,299	6,330,193	(6,765)	6,323,428	-0.11%
Appropriation:							
Total Expense		57,813,310	59,668,435	59,668,435	(642,226)	60,716,172	1.76%
Less: Non Cash Items							
Depreciation/Amortization		12,852,367	(827,633)	12,852,367	167,633	13,020,000	1.30%
Amortization of Debt Expense		(864,000)	(90,941)	(864,000)	-	(864,000)	0.00%
Interest During Construction (AFUDC)		(580,000)	261,581	(580,000)	(120,000)	(700,000)	20.69%
Total Non-Cash		11,408,367	(656,993)	11,408,367	47,633	11,456,000	0.42%
Amount to be Appropriated (Function Cost/Cash Expense)		46,404,943	(1,032,970)	48,260,068	1,000,104	49,260,172	2.07%

Anchorage Water Utility Reconciliation from 2021 Revised Budget to 2022 Approved Budget

	Expenses	Positions		
		FT	PT	Temp/ Seas
2021 Revised Budget (Appropriation)	48,260,068	284	1	9
Transfers by/to Other Departments				
- Charges by Other Departments	(9,569)	-	-	-
- Municipal Utility Service Assessment (MUSA)	419,208	-	-	-
- Dividend	300,000	-	-	-
2021 One-Time Requirements				
- REVERSE - 2021 - ONE-TIME - Approved Reduction Travel	63,000	-	-	-
- REVERSE - 2021 - ONE-TIME - supplies/contractual/other services	640,103	-	-	-
Changes in Existing Programs/Funding for 2022				
- Salaries and Benefits Adjustments	457,020	-	-	-
- Depreciation	167,633	-	-	-
- Non-Operating Expense - Debt Expense	196,157	-	-	-
- Non-Operating Expense - Interest During Construction	(120,000)	-	-	-
2022 Continuation Level	50,373,620	284	1	9
2022 Approved Budget Changes				
- Salaries and Benefits Upgrades: 2 Plant Accountants, 1 Administrative Officer	13,400	-	-	-
- Temporary Accounting Manager - Backfill for Retiree (5 months)	34,150	-	-	1
- Reduced (11) Vacant Positions: (6) Temp, (5) Full Time	(532,885)	(5)	-	(6)
- Reimbursement for Damages Briggs Bridge	(302,000)	-	-	-
- Travel	4,800	-	-	-
- Utilities	(308,280)	-	-	-
2022 Assembly Amendments				
- Amendment #3 - Perez-Verdia, Quinn-Davidson, Weddleton, Constant, Dunbar, LaFrance, Petersen, Rivera, and Zaletel - Restore Contribution to Anchorage Economic Development Corporation (AEDC)	42,000	-	-	-
- Amendment #4 - Dunbar and Quinn-Davidson - Director of Enterprise Services position allocated to utilities.	25,000	-	-	-
2022 Mayor Vetoes				
- Veto Amendment #3 - Perez-Verdia, Quinn-Davidson, Weddleton, Constant, Dunbar, LaFrance, Petersen, Rivera, and Zaletel - Restore Contribution to Anchorage Economic Development Corporation (AEDC)	(17,000)	-	-	-
- Veto Amendment #4 - Dunbar and Quinn-Davidson - Director of Enterprise Services position allocated to utilities.	(25,000)	-	-	-
2022 Approved Budget	49,307,805	279	1	4
2022 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation and Amortization	(167,633)	-	-	-
- Interest During Construction	120,000	-	-	-
2022 Approved Budget (Appropriation)	49,260,172	279	1	4

	FTEs		
Position count is for both Water and Wastewater utilities, FTE shows allocation of the positions to this utility.	141.54	0.25	1.57

Anchorage Water Utility
2022 Capital Improvement Budget
(\$ in thousands)

Projects	Debt	State Grants	Federal Grants	Equity	Total
475 Loop Conversion	-	-	-	1,100	1,100
Alaska Department of Transportation-MOA Emergency	-	-	-	1,000	1,000
Anchorage Townsite 5th 8th Avenue Water Upgrade	1,615	-	-	1,385	3,000
Customer Information System Enhancements	-	-	-	50	50
Depreciation Study	-	-	-	50	50
Eileen Street Water Main	-	-	-	100	100
Eklutna Water Transmission Main Arctic Valley Valve Vault Backflow Prevention	-	-	-	125	125
Eklutna Water Transmission Main Valve Vault Rehabilitation	-	-	-	2,000	2,000
Eklutna Water Treatment Facility Process Improvements	-	-	-	165	165
Facility Equipment	-	-	-	500	500
Facility Plant	-	-	-	500	500
Geographic Information System Application Development	-	-	-	45	45
Heavy Rolling Stock	-	-	-	600	600
Hydraulic Model Upgrades	-	-	-	50	50
Information Technology Infrastructure	-	-	-	300	300
Miscellaneous Information Technology Systems	-	-	-	15	15
Plant Oversize & Betterments	-	-	-	10	10
Pressure Regulating Valve Replacement	-	-	-	150	150
Ship Creek Water Treatment Facility Security Gate	-	-	-	300	300
Supervisory Control and Data Acquisition Equipment	-	-	-	100	100
Tudor - Wright Water Upgrades	-	-	-	900	900
Vehicles	-	-	-	250	250
Water Meter Upgrades	-	-	-	290	290
Work Management Software	-	-	-	15	15
Total	1,615	-	-	10,000	11,615

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
ADOT-MOA Emergency						
Alaska Department of Transportation- MOA Emergency	2022	-	-	-	1,000	1,000
	2023	-	-	-	1,000	1,000
	2024	-	-	-	1,000	1,000
	2025	-	-	-	1,000	1,000
	2026	-	-	-	1,000	1,000
	2027	-	-	-	400	400
		-	-	-	5,400	5,400
Equipment						
Facility Equipment	2022	-	-	-	500	500
	2023	-	-	-	500	500
	2024	-	-	-	500	500
	2025	-	-	-	500	500
	2026	-	-	-	500	500
	2027	-	-	-	1,500	1,500
		-	-	-	4,000	4,000
Facility Plant	2022	-	-	-	500	500
	2023	-	-	-	500	500
	2024	-	-	-	500	500
	2025	-	-	-	500	500
	2026	-	-	-	500	500
	2027	810	-	-	690	1,500
		810	-	-	3,190	4,000
Information Technology Infrastructure	2022	-	-	-	300	300
	2023	-	-	-	300	300
	2024	-	-	-	300	300
	2025	-	-	-	300	300
	2026	-	-	-	300	300
	2027	-	-	-	300	300
		-	-	-	1,800	1,800

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Supervisory Control and Data Acquisition Equipment	2022	-	-	-	100	100
	2023	-	-	-	100	100
	2024	-	-	-	100	100
	2025	-	-	-	100	100
	2026	-	-	-	100	100
	2027	-	-	-	80	80
			-	-	-	580
Supervisory Control and Data Acquisition Master Plan Recommendations	2024	-	-	-	500	500
	2025	-	-	-	500	500
			-	-	-	1,000
Water Meter Upgrades	2022	-	-	-	290	290
	2023	-	-	-	290	290
	2024	-	-	-	290	290
			-	-	-	870
Facilities						
Eklutna Water Treatment Facility Architectural Structural Improvements	2024	660	-	-	190	850
Eklutna Water Treatment Facility Building Improvements	2023	-	-	-	360	360
	2024	-	-	-	360	360
			-	-	-	720
Eklutna Water Treatment Facility Fluoride Improvements	2026	-	-	-	1,000	1,000
Eklutna Water Treatment Facility Motor Control Center Upgrade	2024	4,000	-	-	-	4,000
Eklutna Water Treatment Facility Process Improvements	2022	-	-	-	165	165
	2023	-	-	-	165	165
			-	-	-	330

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Eklutna Water Treatment Facility Supervisory Control and Data Acquisition Backbone/Fire Improvements						
	2023	-	-	-	1,700	1,700
	2024	-	-	-	700	700
		-	-	-	2,400	2,400
Headquarters Lighting Upgrades						
	2025	-	-	-	120	120
Ship Creek Water Treatment Facility Plan						
	2024	-	-	-	350	350
Management Information Systems						
Customer Information System Enhancements						
	2022	-	-	-	50	50
	2023	-	-	-	50	50
	2024	-	-	-	50	50
	2025	-	-	-	50	50
	2026	-	-	-	50	50
	2027	-	-	-	50	50
		-	-	-	300	300
Customer Information System Upgrade						
	2024	-	-	-	500	500
	2025	-	-	-	1,500	1,500
		-	-	-	2,000	2,000
Depreciation Study						
	2022	-	-	-	50	50
Geographic Information System Application Development						
	2022	-	-	-	45	45
	2024	-	-	-	45	45
	2026	-	-	-	45	45
		-	-	-	135	135
Hydraulic Model Upgrades						
	2022	-	-	-	50	50
	2023	-	-	-	50	50
	2024	-	-	-	50	50
	2025	-	-	-	50	50
	2026	-	-	-	50	50
	2027	-	-	-	50	50
		-	-	-	300	300

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Miscellaneous Information Technology Systems	2022	-	-	-	15	15
	2023	-	-	-	15	15
	2024	-	-	-	15	15
	2025	-	-	-	15	15
	2026	-	-	-	15	15
	2027	-	-	-	15	15
			-	-	-	90
Work Management Software	2022	-	-	-	15	15
	2023	-	-	-	15	15
	2024	-	-	-	15	15
	2025	-	-	-	15	15
	2026	-	-	-	15	15
	2027	-	-	-	15	15
			-	-	-	90
Plant						
475 Loop Conversion	2022	-	-	-	1,100	1,100
484 520 Zone Conversion	2023	-	-	-	1,500	1,500
520 440 Zone Conversion	2025	-	-	-	750	750
520 Reservoir & Transmission Main	2026	-	-	-	180	180
	2027	-	-	-	480	480
		-	-	-	660	660
570 600 Zone Conversion	2025	-	-	-	350	350
Anchorage Townsite 5th 8th Avenue Water Upgrade	2022	1,615	-	-	1,385	3,000
Bragaw 16th Debarr Water Upgrade	2026	-	-	-	1,400	1,400
Chlorine Analyzer Upgrade	2024	-	-	-	830	830
East 42nd Lake Otis to Piper Water Rehabilitation	2024	1,900	-	-	-	1,900

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
East 7th Lane Pine Water Rehabilitation	2026	1,425	-	-	575	2,000
Eileen Street Water Main	2022	-	-	-	100	100
Eklutna Water Transmission Main Arctic Valley Valve Vault Backflow Prevention	2022	-	-	-	125	125
Eklutna Water Transmission Main Valve Vault Rehabilitation	2022	-	-	-	2,000	2,000
	2024	-	-	-	2,250	2,250
		-	-	-	4,250	4,250
Girdwood Well Rehabilitation	2023	3,055	-	-	745	3,800
Kincaid Reservoir Expansion	2024	1,000	-	-	-	1,000
	2025	8,250	-	-	-	8,250
		9,250	-	-	-	9,250
Mockingbird Drive Water Rehabilitation	2023	-	-	-	110	110
Park Down Estates Water Upgrade	2023	-	-	-	1,600	1,600
Plant Oversize & Betterments	2022	-	-	-	10	10
	2024	-	-	-	10	10
	2026	-	-	-	10	10
		-	-	-	30	30
Pressure Regulating Valve Replacement	2022	-	-	-	150	150
	2023	-	-	-	150	150
	2024	-	-	-	150	150
	2025	-	-	-	150	150
	2026	-	-	-	150	150
	2027	-	-	-	150	150
		-	-	-	900	900
Transmission Distribution System Upgrades	2025	-	-	-	280	280
	2026	-	-	-	560	560
	2027	-	-	-	1,000	1,000
		-	-	-	1,840	1,840

Anchorage Water Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Tudor - Wright Water Upgrades	2022	-	-	-	900	900
	2025	590	-	-	1,410	2,000
		590	-	-	2,310	2,900
Upper Eagle River Fire Flow	2025	2,400	-	-	-	2,400
Water Master Plan Recommendations	2024	-	-	-	280	280
	2025	-	-	-	560	560
	2026	-	-	-	700	700
	2027	-	-	-	420	420
			-	-	-	1,960
Well 4 Upgrade	2024	-	-	-	165	165
Security						
Ship Creek Water Treatment Facility Security Gate	2022	-	-	-	300	300
Vehicles/Fleet						
Heavy Rolling Stock	2022	-	-	-	600	600
	2023	-	-	-	600	600
	2024	-	-	-	600	600
	2025	-	-	-	600	600
	2026	-	-	-	600	600
	2027	-	-	-	600	600
			-	-	-	3,600
Vehicles	2022	-	-	-	250	250
	2023	-	-	-	250	250
	2024	-	-	-	250	250
	2025	-	-	-	250	250
	2026	-	-	-	250	250
	2027	-	-	-	250	250
			-	-	-	1,500
Total		25,705	-	-	53,000	78,705

475 Loop Conversion

Project ID	AWU2018007	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	October 2013
District		End Date	July 2026
Community Council			

Description

The 475 loop conversion project will change the operating hydraulic grade line (HGL) within the Anchorage loop transmission main from 630 HGL to 475 HGL between the Ship Creek Energy Recovery Station to Abbot Valve vault.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	1,100	-	-	-	-	-	1,100
Total (\$ in thousands)		1,100	-	-	-	-	-	1,100

484 520 Zone Conversion

Project ID	AWU2017002	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	January 2015
District		End Date	July 2024
Community Council			

Description

Reconfigure the Lower Eagle River Water System to operate as one cohesive system connected to the proposed 520 Reservoir.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	1,500	-	-	-	-	1,500
Total (\$ in thousands)		-	1,500	-	-	-	-	1,500

520 Reservoir & Transmission Main

Project ID AWU2017006 **Department** Anchorage Water Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Construct 5 million gallons of storage in the 520 zone in Eagle River to increase resiliency and meet minimum emergency water demands.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	-	180	480	660
Total (\$ in thousands)		-	-	-	-	180	480	660

Anchorage Townsite 5th 8th Avenue Water Upgrade

Project ID	AWU2018020	Department	Anchorage Water Utility
Project Type	Upgrade	Start Date	January 2019
District		End Date	April 2024
Community Council			

Description

The project is rehabilitating water main in Downtown Anchorage in the Original Townsite and Bootleggers Cove Subdivisions. We are rehabilitating approximately 4,200 Linear Feet of water main.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	1,385	-	-	-	-	-	1,385
Bond Sale Proceeds	540200 - Water Utility CIP	1,615	-	-	-	-	-	1,615
Total (\$ in thousands)		3,000	-	-	-	-	-	3,000

Bragaw 16th Debar Water Upgrade

Project ID	AWU2017005	Department	Anchorage Water Utility
Project Type	Replacement	Start Date	February 2018
District		End Date	April 2024
Community Council			

Description
 Failure modeling and condition assessment results indicate these 8,000 plus feet of water main are at the end of their useful lives. The pipes will be rehabilitated.

Comments
 Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	-	1,400	-	1,400
Total (\$ in thousands)		-	-	-	-	1,400	-	1,400

Chlorine Analyzer Upgrade

Project ID	AWU2016012	Department	Anchorage Water Utility
Project Type	Upgrade	Start Date	February 2018
District		End Date	November 2023
Community Council			

Description

Replace chlorine analyzers, pumps, and associated appurtenances at nine well sites throughout Anchorage.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	830	-	-	-	830
Total (\$ in thousands)		-	-	830	-	-	-	830

East 42nd Lake Otis to Piper Water Rehabilitation

Project ID AWU2016010 **Department** Anchorage Water Utility
Project Type Rehabilitation **Start Date** February 2018
District **End Date** July 2024
Community Council

Description

Rehabilitate approximately 2,700 linear feet of 8-inch cast iron and ductile water main on E 42nd Avenue between Lake Otis and Piper in conjunction with the PM&E road project. The water main was identified as structurally weakened through use of condition assessment.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	1,900	-	-	-	1,900
Total (\$ in thousands)		-	-	1,900	-	-	-	1,900

East 7th Lane Pine Water Rehabilitation

Project ID AWU2016003 **Department** Anchorage Water Utility
Project Type Rehabilitation **Start Date** February 2018
District **End Date** October 2023
Community Council

Description
 Replace approximately 2,600 feet of 1968 6 inch cast iron water mains on East 6th and East 7th Avenues with a high rate of failure.

Comments
 Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	-	575	-	575
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	-	-	1,425	-	1,425
Total (\$ in thousands)		-	-	-	-	2,000	-	2,000

Eklutna Water Transmission Main Valve Vault Rehabilitation

Project ID AWU2021016 **Department** Anchorage Water Utility
Project Type Rehabilitation **Start Date**
District **End Date**
Community Council

Description

This project involves the design and rehabilitation of various failures and deficiencies that have been identified by AWWU staff during external visual condition assessment of the Eklutna Water Transmission Main.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	2,000	-	2,250	-	-	-	4,250
Total (\$ in thousands)		2,000	-	2,250	-	-	-	4,250

Eklutna Water Treatment Facility Fluoride Improvements

Project ID AWU2018001 **Department** Anchorage Water Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

This project involves replacing the existing 30-year-old dry fluoride system with a new dry fluoride system. Updated equipment would provide increased operator safety and higher fluoride feed accuracy.

Comments

Active project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	-	1,000	-	1,000
Total (\$ in thousands)		-	-	-	-	1,000	-	1,000

Eklutna Water Treatment Facility Motor Control Center Upgrade

Project ID	AWU2018003	Department	Anchorage Water Utility
Project Type	Upgrade	Start Date	December 2020
District		End Date	May 2024
Community Council			

Description

The objective of this project is to perform upgrades to the motor control center and uninterruptible power supplies as provided in the 2018 Eklutna Water Treatment Facility Plan.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	4,000	-	-	-	4,000
Total (\$ in thousands)		-	-	4,000	-	-	-	4,000

Eklutna Water Treatment Facility Supervisory Control and Data Acquisition Backbone/Fire Improvements

Project ID	AWU2018004	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	January 2019
District		End Date	December 2024
Community Council			

Description

Upgrade Eklutna Water Treatment Facility communications system. Replace communication wiring in multiple Eklutna Water Treatment Facility buildings, between devices and process logic controller, and complete new programming to achieve system integration.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	1,700	700	-	-	-	2,400
Total (\$ in thousands)		-	1,700	700	-	-	-	2,400

Girdwood Well Rehabilitation

Project ID	AWU2018026	Department	Anchorage Water Utility
Project Type	Rehabilitation	Start Date	January 2019
District		End Date	August 2024
Community Council			

Description

The Girdwood Well is the sole source of water supply that AWWU serves the Girdwood Community. The well house is in need of rehabilitation as the assets have failed and/or maintenance has been recently completed.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	3,055	-	-	-	-	3,055
Net Assets	540200 - Water Utility CIP	-	745	-	-	-	-	745
Total (\$ in thousands)		-	3,800	-	-	-	-	3,800

Headquarters Lighting Upgrades

Project ID	AWU2019011	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	January 2015
District		End Date	March 2023
Community Council			

Description

Upgrade lighting at 3000 Arctic Blvd in accordance with the Lighting Assessment and Recommendations report prepared by PDC Engineers. Work includes replacement of existing interior fluorescent and metal halide lighting, interior exit and emergency lighting,

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	120	-	-	120
Total (\$ in thousands)		-	-	-	120	-	-	120

Heavy Rolling Stock

Project ID AWU2021010 **Department** Anchorage Water Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

For the acquisition, rehabilitation, or replacement of heavy rolling stock vehicles. Includes vactors, loaders, etc.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	600	600	600	600	600	600	3,600
Total (\$ in thousands)		600	600	600	600	600	600	3,600

Information Technology Infrastructure

Project ID AWU2021003 **Department** Anchorage Water Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description
 Installation, upgrade and replacement of Information Technology infrastructure including servers, network, storage, and security.

Comments
 Annual Funding Pool - has related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	300	300	300	300	300	300	1,800
Total (\$ in thousands)		300	300	300	300	300	300	1,800

Kincaid Reservoir Expansion

Project ID AWU2017007 **Department** Anchorage Water Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Construct 5 million gallons or more of storage to serve the 260 pressure zone in Anchorage to meet operational and emergency needs while increasing fire flows.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	1,000	8,250	-	-	9,250
Total (\$ in thousands)		-	-	1,000	8,250	-	-	9,250

Miscellaneous Information Technology Systems

Project ID AWU2021004 **Department** Anchorage Water Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description
 Installation, acquisition, and upgrade of Information Technology systems related to the Business Intelligence, Enterprise Resource Planning, Geographic Information System, Mobile, Parcel, Project Management, Supervisory Control and Data Acquisition, and Treatment Information Technology Master Plan System Categories. Systems include Work Information Management System, LabWorks, Mobile Dispatch, Linko, Special Assessment Receivable System, Assessment Management System, Land Parcel, and many more.

Comments
 Annual Funding Pool - has a related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	15	15	15	15	15	15	90
Total (\$ in thousands)		15	15	15	15	15	15	90

Mockingbird Drive Water Rehabilitation

Project ID	AWU2016011	Department	Anchorage Water Utility
Project Type	Rehabilitation	Start Date	January 2019
District		End Date	November 2023
Community Council			

Description

Upgrade approximately 332 feet of 1975 12-inch Ductile Iron Pipe along Mockingbird Drive and install a new mainline valve to minimize outages during a mainline break.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	110	-	-	-	-	110
Total (\$ in thousands)		-	110	-	-	-	-	110

Park Down Estates Water Upgrade

Project ID	AWU2020003	Department	Anchorage Water Utility
Project Type	Replacement	Start Date	December 2020
District		End Date	May 2024
Community Council			

Description

Rehabilitate or replace water mains and water services as needed in the Parkdown Estates Cul-de-Sacs off E6th Ave and Boniface Parkway.

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	1,600	-	-	-	-	1,600
Total (\$ in thousands)		-	1,600	-	-	-	-	1,600

Plant Oversize & Betterments

Project ID AWU2021015 **Department** Anchorage Water Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description
 This funding is required to compensate private developers for AWWU requested betterments to AWWU's existing infrastructure or for AWWU requested oversizing of water mains installed by the developers.

Comments
 Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	10	-	10	-	10	-	30
Total (\$ in thousands)		10	-	10	-	10	-	30

Pressure Regulating Valve Replacement

Project ID	AWU2020004	Department	Anchorage Water Utility
Project Type	Replacement	Start Date	
District		End Date	
Community Council			

Description

Replace failing and nonstandard pressure regulating valve components and appurtenances throughout the AWU Distribution System.

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	150	150	150	150	150	150	900
Total (\$ in thousands)		150	150	150	150	150	150	900

Ship Creek Water Treatment Facility Plan

Project ID	AWU2018023	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	
District		End Date	
Community Council			

Description

Prepare a Facility Plan for the Ship Creek Water Treatment Facility. The Facility Plan will forecast projects and upgrades to the overall plant.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	350	-	-	-	350
Total (\$ in thousands)		-	-	350	-	-	-	350

Ship Creek Water Treatment Facility Security Gate

Project ID	AWU2021018	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	
District		End Date	
Community Council			

Description

This project involves the assessment, design, and installation of a secured gate to prevent vehicle access to the Ship Creek Energy Recovery Station and Starview Drive east and south of the Ship Creek Energy Recovery Station.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	300	-	-	-	-	-	300
Total (\$ in thousands)		300	-	-	-	-	-	300

Supervisory Control and Data Acquisition Equipment

Project ID AWU2021008 **Department** Anchorage Water Utility
Project Type Upgrade **Start Date**
District **End Date**
Community Council

Description

Equipment upgrades and/or additions as services are added and technology ages. These may include, but are not limited to, upgrades to logic controllers, software replacement, and intelligence upgrades.

Comments

Annual Funding Pool - has related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	100	100	100	100	100	80	580
Total (\$ in thousands)		100	100	100	100	100	80	580

Supervisory Control and Data Acquisition Master Plan Recommendations

Project ID AWU2019004 **Department** Anchorage Water Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Reserved funding for projects resulting from the Systems Control and Data Acquisition Master Plan.

Comments

Project has related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	500	500	-	-	1,000
Total (\$ in thousands)		-	-	500	500	-	-	1,000

Transmission Distribution System Upgrades

Project ID	AWU2021022	Department	Anchorage Water Utility
Project Type	Improvement	Start Date	
District		End Date	
Community Council			

Description
 This project reserves funding for anticipated projects in the water distribution system.

Comments
 New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	-	280	560	1,000	1,840
Total (\$ in thousands)		-	-	-	280	560	1,000	1,840

Tudor - Wright Water Upgrades

Project ID	AWU2019001	Department	Anchorage Water Utility
Project Type	Replacement	Start Date	December 2020
District		End Date	March 2023
Community Council			

Description

Phase I of this project will reconstruct and/or relocate a portion of 8 inch distribution main crossing under 36 inch transmission main at the Tudor/Wright intersection. Phase II will extend water main in the neighborhood to limit outage size when performing maintenance on the aging infrastructure.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	-	590	-	-	590
Net Assets	540200 - Water Utility CIP	900	-	-	1,410	-	-	2,310
Total (\$ in thousands)		900	-	-	2,000	-	-	2,900

Upper Eagle River Fire Flow

Project ID AWU2016001 **Department** Anchorage Water Utility
Project Type Improvement **Start Date** March 2017
District **End Date** August 2022
Community Council

Description

Improve peak flows to upper Eagle River zones through upgrades to two existing booster stations as well as the installation of interies and associated appurtenances for zone consolidation resulting in a more robust distribution system.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	540200 - Water Utility CIP	-	-	-	2,400	-	-	2,400
Total (\$ in thousands)		-	-	-	2,400	-	-	2,400

Vehicles

Project ID AWU2021011 **Department** Anchorage Water Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

Funding required for replacement of existing AWWU fleet vehicles to be retired. Vehicle replacements are identified as appropriate during each budget year. Criterion for vehicle replacement is 100K miles and/or 10+ years of service.

Comments

Annual Funding Pool - has related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	250	250	250	250	250	250	1,500
Total (\$ in thousands)		250	250	250	250	250	250	1,500

Water Master Plan Recommendations

Project ID AWU2021021 **Department** Anchorage Water Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

This project will institute recommendations from the forthcoming Water Master Plan.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	280	560	700	420	1,960
Total (\$ in thousands)		-	-	280	560	700	420	1,960

Water Meter Upgrades

Project ID	AWU2021017	Department	Anchorage Water Utility
Project Type	Replacement	Start Date	
District		End Date	
Community Council			

Description
 This project will replace approximately 8,000 water meter interface units near failure to provide accurate customer billing.

Comments
 New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	290	290	290	-	-	-	870
Total (\$ in thousands)		290	290	290	-	-	-	870

Well 4 Upgrade

Project ID	AWU2019012	Department	Anchorage Water Utility
Project Type	Upgrade	Start Date	May 2018
District		End Date	August 2023
Community Council			

Description

Replace chlorine analyzer and pump, install new outfall line for drainage from well discharge during startup.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	-	-	165	-	-	-	165
Total (\$ in thousands)		-	-	165	-	-	-	165

Work Management Software

Project ID AWU2021006 **Department** Anchorage Water Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Installation, acquisition, and upgrade of IT systems related to the WMS IT Master Plan System Category. Systems include Maximo, Fuel Management, and DataSplice.

Comments

Annual Funding Pool - has a related Sewer Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	540200 - Water Utility CIP	15	15	15	15	15	15	90
Total (\$ in thousands)		15	15	15	15	15	15	90

Anchorage Wastewater Utility 8 Year Summary

(\$ in thousands)

Financial Overview	2020 Actuals	2021	2022	2023	2024	2025	2026	2027
	*Unaudited	Proforma	Approved	Forecast				
Revenues	59,434	62,666	64,810	70,335	74,885	77,005	79,035	81,005
Expenses and Transfers ⁽¹⁾	52,760	56,753	61,881	63,182	64,782	66,030	67,710	69,560
Net Income (Loss)	6,674	5,913	2,929	7,153	10,103	10,975	11,325	11,445
Charges by/to Other Departments	2,131	2,383	2,604	2,760	2,926	3,101	3,287	3,485
Municipal Enterprise/Utility Service Assessment	7,056	7,494	7,801	8,370	8,780	9,220	9,680	10,180
Dividend to General Government	-	-	-	-	-	-	-	-
Transfers to General Government ⁽²⁾	9,187	9,877	10,405	11,130	11,706	12,321	12,967	13,665
Operating Cash	33,315	25,328	20,678	17,590	18,202	22,265	24,194	24,249
Construction Cash Pool	5,440	17,440	20,440	20,778	21,433	22,371	22,556	28,450
Restricted Cash	-	3,438	2,291	4,763	5,414	2,044	1,802	1,773
Total Cash	38,755	46,206	43,409	43,131	45,049	46,680	48,552	54,472
Net Position/Equity 12/31	118,426	123,004	125,958	133,112	143,215	154,190	165,515	176,960
Capital Assets Beginning Balance	446,984	452,604	446,244	442,147	438,150	436,720	435,723	435,108
Asset Additions Placed in Service	21,963	11,748	14,373	14,823	17,680	18,433	19,225	25,057
Assets Retired	(11,274)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)	(3,800)
Change Depreciation (Increase)/Decrease	(5,069)	(14,308)	(14,670)	(15,020)	(15,310)	(15,630)	(16,040)	(16,430)
Net Capital Assets (12/31)	452,604	446,244	442,147	438,150	436,720	435,723	435,108	439,935
Equity Funding Available for Capital	10,000	10,000	10,000	8,000	9,000	10,000	9,000	11,000
Debt								
New Debt - Bonds ⁽³⁾	-	-	29,505	-	-	-	-	-
New Debt - Loans or Other	11,000	20,000	8,000	6,000	6,000	6,000	7,000	11,500
Total Outstanding LT Debt	200,533	208,239	203,284	194,788	185,965	176,781	168,064	163,697
Total Annual Debt Service Payment	11,053	16,836	18,247	19,845	19,971	20,125	20,561	20,586
Debt Service Requirement	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Debt Service Coverage (Bond)	3.46	3.44	3.00	2.80	3.08	3.16	3.15	3.17
Debt Service Coverage (Total)	1.97	1.28	1.20	1.30	1.44	1.46	1.45	1.46
Debt/Equity Ratio	63 / 37	63 / 37	62 / 38	59 / 41	56 / 44	53 / 47	50 / 50	48 / 52
Rate Change Percent ⁽⁴⁾	0.00%	8.0%	3.75%	7.50%	6.60%	2.80%	2.40%	2.3%
Single Family Rate (\$)	48.11	52.43	54.40	58.48	62.34	64.08	65.62	67.13
Statistical/Performance Trends								
Number of Accounts	57,472	57,570	57,668	57,766	57,864	57,962	58,061	58,159
Average Treatment (MGD)	28.7	28.8	28.8	28.9	29.0	29.1	29.1	29.2
Miles of Wastewater Lines	764	766	768	770	772	774	776	777

⁽¹⁾ Expenses shown include all transfers to General Government and all non-cash items: depreciation (including depreciation on assets purchased with grant funds) and amortization activities.

⁽²⁾ Included in total expenses calculated in Net Income.

⁽³⁾ 2022 Bond Issue will pay off existing short-term borrowing program debt, no new proceeds are anticipated

⁽⁴⁾ 2021 rate increase effective date was requested to be 4/1/2021 to minimize impacts during COVID

Millions Gallons/Day (MGD)

Anchorage Wastewater Utility Statement of Revenues and Expenses

	2020 Actuals *Unaudited	2021 Proforma	\$ Change	2021 Revised	\$ Change	2022 Approved	22 v 21 % Change
Operating Revenue							
Residential Sales	43,840,919	46,402,000	2,700,000	46,300,000	1,800,000	48,100,000	3.89%
Commercial Sales	10,918,152	12,813,000	1,750,000	12,200,000	500,000	12,700,000	4.10%
Public Authority Sales	2,540,581	2,548,000	100,000	2,600,000	100,000	2,700,000	3.85%
Miscellaneous	731,211	892,000	275,000	975,000	-	975,000	0.00%
Total Operating Revenue	58,030,864	62,655,000	4,825,000	62,075,000	2,400,000	64,475,000	3.87%
Non Operating Revenue							
Investment Income	1,402,202	4,135	2,670	436,270	(111,220)	325,050	-25.49%
Other Income	821	6,950	9,950	10,000	-	10,000	0.00%
Total Non Operating Revenue	1,403,023	11,085	12,620	446,270	(111,220)	335,050	-24.92%
Total Revenue	59,433,887	62,666,085	4,837,620	62,521,270	2,288,780	64,810,050	3.66%
Operating Expense							
Salaries and Benefits	17,294,766	17,476,850	781,361	18,488,923	(165,204)	18,323,719	-0.89%
Overtime	560,507	425,057	(143,635)	419,500	-	419,500	0.00%
Total Labor	17,855,273	17,901,907	637,726	18,908,423	(165,204)	18,743,219	-0.87%
Supplies	2,495,158	2,200,414	(297,085)	2,615,894	(154,041)	2,461,853	-5.89%
Travel	4,063	10,280	24,470	28,900	73,200	102,100	253.29%
Contractual/Other Services	9,308,897	10,627,996	1,290,215	11,810,813	336,640	12,147,453	2.85%
Dividend to General Government	-	-	-	-	-	-	0.00%
Manageable Direct Cost Total	11,808,118	12,838,690	1,017,601	14,455,607	255,799	14,711,406	1.77%
Municipal Enterprise/Utility Service Assessment	7,055,969	7,494,379	569,134	7,625,103	175,897	7,801,000	2.31%
Depreciation/Amortization	11,941,722	12,327,957	(952,043)	12,327,957	1,052,043	13,380,000	8.53%
Non-Manageable Direct Cost Total	18,997,691	19,822,336	(382,909)	19,953,060	1,227,940	21,181,000	6.15%
Charges by/to Other Departments	2,130,821	2,382,844	321,479	2,618,625	(14,737)	2,603,888	-0.56%
Intradepartmental Overheads	(697,391)	(651,003)	(352,875)	(643,269)	(3,245)	(646,514)	0.50%
Total Operating Expense	50,094,512	52,294,774	1,241,021	55,292,446	1,300,553	56,592,999	2.35%
Non Operating Expense							
Amortization of Debt Expense	(729,780)	(720,000)	9,780	(720,000)	20,000	(700,000)	-2.78%
Debt Issuance Costs	25,000	309,000	200,000	300,000	-	300,000	0.00%
Interest on Bonded Debt	3,426,497	3,520,500	(163,397)	3,550,000	950,000	4,500,000	26.76%
Interest on Loans	1,195,514	2,188,324	(122,000)	2,128,000	(40,000)	2,088,000	-1.88%
Interest During Construction (AFUDC)	(1,251,906)	(840,000)	389,380	(840,000)	(60,000)	(900,000)	7.14%
Total Non Operating Expense	2,665,325	4,457,824	313,764	4,418,000	870,000	5,288,000	19.69%
Total Expense	52,759,836	56,752,598	1,554,785	59,710,446	2,170,553	61,880,999	3.64%
Net Income (Loss)	6,674,050	5,913,487	3,282,835	2,810,824	118,227	2,929,051	4.21%
Appropriation:							
Total Expense	52,759,836	56,752,598	1,554,785	59,710,446	2,170,553	61,880,999	3.64%
Less: Non Cash Items							
Depreciation/Amortization	11,941,722	12,327,957	(952,043)	12,327,957	1,052,043	13,380,000	8.53%
Amortization of Debt Expense	(729,780)	(720,000)	9,780	(720,000)	20,000	(700,000)	-2.78%
Interest During Construction (AFUDC)	(1,251,906)	(840,000)	389,380	(840,000)	(60,000)	(900,000)	7.14%
Total Non-Cash	9,960,036	10,767,957	(552,882)	10,767,957	1,012,043	11,780,000	9.40%
Amount to be Appropriated (Function Cost/Cas)	42,799,800	45,984,641	2,107,667	48,942,489	1,158,510	50,100,999	2.37%

Anchorage Wastewater Utility Reconciliation from 2021 Revised Budget to 2022 Approved Budget

	Expenses	Positions		
		FT	PT	Temp/ Seas
2021 Revised Budget (Appropriation)	48,942,489	284	1	9
Transfers by/to Other Departments				
- Charges by Other Departments	(14,737)	-	-	-
- Municipal Utility Service Assessment (MUSA)	175,897	-	-	-
2021 One-Time Requirements				
- REVERSE - 2021 - ONE-TIME - Reduction Travel	68,400	-	-	-
- REVERSE - 2021 - ONE-TIME - Reduction supplies/contractual	2,051,772	-	-	-
Changes in Existing Programs/Funding for 2022				
- Salaries and Benefits Adjustments	322,287	-	-	-
- Depreciation	1,052,043	-	-	-
- Non-Operating Expense - Debt Expense	930,000	-	-	-
- Non-Operating Expense - Interest During Construction	(60,000)	-	-	-
2022 Continuation Level	53,468,151	284	1	9
2022 Approved Budget Changes				
- Salaries and Benefits Upgrades: 2 Plant Accountants, 1 Administrative Officer	13,400	-	-	-
- Temporary Accounting Manager - Backfill for Retiree (5 months)	34,150	-	-	1
- Reduced (11) Vacant Positions: (6) Temp, (5) Full Time	(535,041)	(5)	-	(6)
- Chemicals	(728,429)	-	-	-
- Lab Supplies	(10,000)	-	-	-
- Misc Vehicle Expense	(50,000)	-	-	-
- Operating Supplies	(51,000)	-	-	-
- Other Professional Services	(452,464)	-	-	-
- Other Services and Charges	(52,000)	-	-	-
- Repair & Maintenance Supplies	(10,000)	-	-	-
- Sludge Hauling	(31,100)	-	-	-
- SWS Disposal Charges	(75,000)	-	-	-
- Travel	4,800	-	-	-
- Utilities	(437,425)	-	-	-
2022 Assembly Amendments				
- Amendment #3 - Perez-Verdia, Quinn-Davidson, Weddleton, Constant, Dunbar, LaFrance, Petersen, Rivera, and Zaletel - Restore Contribution to Anchorage Economic Development Corporation (AEDC)	42,000	-	-	-
- Amendment #4 - Dunbar and Quinn-Davidson - Director of Enterprise Services position allocated to utilities.	25,000	-	-	-
2022 Mayor Vetoes				
- Veto Amendment #3 - Perez-Verdia, Quinn-Davidson, Weddleton, Constant, Dunbar, LaFrance, Petersen, Rivera, and Zaletel - Restore Contribution to Anchorage Economic Development Corporation (AEDC)	(17,000)	-	-	-
- Veto Amendment #4 - Dunbar and Quinn-Davidson - Director of Enterprise Services position allocated to utilities.	(25,000)	-	-	-
2022 Approved Budget	51,113,042	279	1	4

Anchorage Wastewater Utility Reconciliation from 2021 Revised Budget to 2022 Approved Budget

	Expenses	Positions		
		FT	PT	Temp/ Seas
2022 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation and Amortization	(1,052,043)	-	-	-
- Amortization of Debt Expense	(20,000)	-	-	-
- Interest During Construction	60,000	-	-	-
2022 Approved Budget (Appropriation)	50,100,999	279	1	4

	FTEs		
Position count is for both Water and Wastewater utilities, FTE shows allocation of the positions to this utility.	137.46	0.25	0.43

Anchorage Wastewater Utility
2022 Capital Improvement Budget
(\$ in thousands)

Projects	Debt	State Grants	Federal Grants	Equity	Total
Alaska Department of Transportation-MOA Emergency	-	-	-	1,000	1,000
Customer Information System Enhancements	-	-	-	50	50
Depreciation Study	-	-	-	50	50
Eagle River Wastewater Treatment Facility Plan	-	-	-	1,000	1,000
Facility Equipment	-	-	-	500	500
Facility Plant	-	-	-	500	500
Geographic Information System Application Development	-	-	-	45	45
Girdwood Sewer Rehabilitation & Replacement	-	-	-	1,000	1,000
Girdwood Wastewater Treatment Facility Site Development	-	-	-	510	510
Heavy Rolling Stock	-	-	-	600	600
Hydraulic Model Upgrades	-	-	-	50	50
Information Technology Infrastructure	-	-	-	300	300
King Street Main Building Improvements	695	-	-	2,805	3,500
Miscellaneous Information Technology Systems	-	-	-	15	15
Plant Oversize & Betterments	-	-	-	10	10
Supervisory Control and Data Acquisition Equipment	-	-	-	100	100
Vehicles	-	-	-	250	250
Wastewater Master Plan	-	-	-	1,200	1,200
Work Management Software	-	-	-	15	15
Total	695	-	-	10,000	10,695

Anchorage Wastewater Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
ADOT-MOA Emergency						
Alaska Department of Transportation- MOA Emergency	2022	-	-	-	1,000	1,000
	2023	-	-	-	1,000	1,000
	2024	-	-	-	1,000	1,000
	2025	-	-	-	1,000	1,000
	2026	-	-	-	1,000	1,000
	2027	-	-	-	1,000	1,000
		-	-	-	6,000	6,000
Equipment						
Facility Equipment	2022	-	-	-	500	500
	2023	-	-	-	500	500
	2024	-	-	-	500	500
	2025	-	-	-	500	500
	2026	-	-	-	500	500
	2027	-	-	-	500	500
		-	-	-	3,000	3,000
Facility Plant	2022	-	-	-	500	500
	2023	-	-	-	500	500
	2024	-	-	-	500	500
	2025	-	-	-	500	500
	2026	-	-	-	500	500
	2027	-	-	-	500	500
		-	-	-	3,000	3,000
Information Technology Infrastructure	2022	-	-	-	300	300
	2023	-	-	-	300	300
	2024	-	-	-	300	300
	2025	-	-	-	300	300
	2026	-	-	-	300	300
	2027	-	-	-	300	300
		-	-	-	1,800	1,800

Anchorage Wastewater Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Supervisory Control and Data Acquisition Equipment						
	2022	-	-	-	100	100
	2023	-	-	-	100	100
	2024	-	-	-	100	100
	2025	-	-	-	100	100
	2026	-	-	-	100	100
	2027	-	-	-	100	100
		-	-	-	600	600
Supervisory Control and Data Acquisition Master Plan Recommendations						
	2024	-	-	-	500	500
	2025	-	-	-	500	500
		-	-	-	1,000	1,000
Facilities						
Eagle River Wastewater Treatment Facility Plan Recommendations						
	2022	-	-	-	1,000	1,000
	2023	-	-	-	2,000	2,000
	2024	1,635	-	-	365	2,000
	2025	-	-	-	2,000	2,000
	2026	935	-	-	65	1,000
	2027	-	-	-	1,000	1,000
		2,570	-	-	6,430	9,000
Girdwood Wastewater Treatment Facility Blower Upgrade						
	2023	-	-	-	540	540
Girdwood Wastewater Treatment Facility Site Development						
	2022	-	-	-	510	510
King Street Campus Expansion						
	2026	-	-	-	1,700	1,700
King Street Main Building Improvements						
	2022	695	-	-	2,805	3,500
	2023	3,500	-	-	-	3,500
		4,195	-	-	2,805	7,000

Anchorage Wastewater Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Management Information Systems						
Customer Information System Enhancements	2022	-	-	-	50	50
	2023	-	-	-	50	50
	2024	-	-	-	50	50
	2025	-	-	-	50	50
	2026	-	-	-	50	50
	2027	-	-	-	50	50
			-	-	-	300
Customer Information System Upgrade	2024	-	-	-	500	500
	2025	-	-	-	1,500	1,500
			-	-	-	2,000
Depreciation Study	2022	-	-	-	50	50
Geographic Information System Application Development	2022	-	-	-	45	45
	2024	-	-	-	45	45
	2026	-	-	-	45	45
			-	-	-	135
Hydraulic Model Upgrades	2022	-	-	-	50	50
	2023	-	-	-	50	50
	2024	-	-	-	50	50
	2025	-	-	-	50	50
	2026	-	-	-	50	50
	2027	-	-	-	50	50
			-	-	-	300
Miscellaneous Information Technology Systems	2022	-	-	-	15	15
	2023	-	-	-	15	15
	2024	-	-	-	15	15
	2025	-	-	-	15	15
	2026	-	-	-	15	15
	2027	-	-	-	15	15
			-	-	-	90

Anchorage Wastewater Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Work Management Software	2022	-	-	-	15	15
	2023	-	-	-	15	15
	2024	-	-	-	15	15
	2025	-	-	-	15	15
	2026	-	-	-	15	15
	2027	-	-	-	15	15
			-	-	-	90
Plant						
Collection System Upgrades	2025	-	-	-	200	200
	2026	-	-	-	400	400
	2027	-	-	-	500	500
			-	-	-	1,100
D-2-4 Trunk Improvements	2023	2,370	-	-	180	2,550
Girdwood Sewer Rehabilitation & Replacement	2022	-	-	-	1,000	1,000
	2023	-	-	-	1,000	1,000
	2024	-	-	-	1,000	1,000
	2025	-	-	-	1,000	1,000
	2026	-	-	-	1,000	1,000
	2027	-	-	-	1,000	1,000
			-	-	-	6,000
King Street Combined Heat and Power Conversion	2023	-	-	-	900	900
	2024	-	-	-	1,000	1,000
			-	-	-	1,900
Large Diameter Sewer Manholes	2024	-	-	-	2,200	2,200
Plant Oversize & Betterments	2022	-	-	-	10	10
	2024	-	-	-	10	10
	2026	-	-	-	10	10
			-	-	-	30
Pump Station 55 Abandonment	2026	-	-	-	2,000	2,000

Anchorage Wastewater Utility 2022 - 2027 Capital Improvement Program

(\$ in thousands)

Projects	Year	Debt	State Grants	Federal Grants	Equity	Total
Wastewater Master Plan	2022	-	-	-	1,200	1,200
Wastewater Master Plan Recommendations	2025	-	-	-	200	200
	2026	-	-	-	400	400
	2027	-	-	-	500	500
		-	-	-	1,100	1,100
Vehicles/Fleet						
Heavy Rolling Stock	2022	-	-	-	600	600
	2023	-	-	-	600	600
	2024	-	-	-	600	600
	2025	-	-	-	600	600
	2026	-	-	-	600	600
	2027	-	-	-	600	600
		-	-	-	3,600	3,600
Vehicles	2022	-	-	-	250	250
	2023	-	-	-	250	250
	2024	-	-	-	250	250
	2025	-	-	-	250	250
	2026	-	-	-	250	250
	2027	-	-	-	250	250
		-	-	-	1,500	1,500
	Total	9,135	-	-	51,160	60,295

Alaska Department of Transportation-MOA Emergency

Project ID ASU2021012 **Department** Anchorage Wastewater Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

Provides funding for AWWU projects of an emergency nature or done in conjunction with road agencies. These projects are developed as needed for emergency repairs to the collection system and/or through coordination with the State of Alaska Department of Transportation & Public Facilities, Municipality of Anchorage Project Management & Engineering as well as other local/state agencies.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	1,000	1,000	1,000	1,000	1,000	1,000	6,000
Total (\$ in thousands)		1,000	1,000	1,000	1,000	1,000	1,000	6,000

Collection System Upgrades

Project ID ASU2021017 **Department** Anchorage Wastewater Utility
Project Type Upgrade **Start Date**
District **End Date**
Community Council

Description
 This project reserves funding for anticipated projects in the sewer collection system.

Comments
 New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	-	200	400	500	1,100
Total (\$ in thousands)		-	-	-	200	400	500	1,100

Customer Information System Enhancements

Project ID ASU2021001 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Installation, acquisition, and upgrade of IT systems related to the Customer Service IT Master Plan System Category. Systems include Banner CIS, Neptune Meter Reading, Cash Register, Bill Payment and Presentment, Infor Permitting, Backflow, Teldig, and Outage Notification.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	50	50	50	50	50	50	300
Total (\$ in thousands)		50	50	50	50	50	50	300

Customer Information System Upgrade

Project ID	ASU2021018	Department	Anchorage Wastewater Utility
Project Type	Upgrade	Start Date	
District		End Date	
Community Council			

Description

This project provides funding needed to rehabilitate or replace the Utility's aging Customer Information System.

Comments

New project - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	500	1,500	-	-	2,000
Total (\$ in thousands)		-	-	500	1,500	-	-	2,000

D-2-4 Trunk Improvements

Project ID ASU2016009 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date** April 2017
District **End Date** January 2025
Community Council

Description

Project location bound by Chester Creek to the North, Joint Base Elmendorf-Richardson land to the West, Parks and Recreation land to the East and 17th Avenue to the south. The existing 12-inch and 18-inch sewer line is built underneath and directly adjacent to structures making access for maintenance activities difficult.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	550200 - Sewer Utility CIP	-	2,370	-	-	-	-	2,370
Net Assets	550200 - Sewer Utility CIP	-	180	-	-	-	-	180
Total (\$ in thousands)		-	2,550	-	-	-	-	2,550

Depreciation Study

Project ID ASU2016004 **Department** Anchorage Wastewater Utility
Project Type New **Start Date**
District **End Date**
Community Council

Description

Conduct a depreciation study of Sewer Utility assets for use in rate making and other Regulatory needs.

Comments

New project - has related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	50	-	-	-	-	-	50
Total (\$ in thousands)		50	-	-	-	-	-	50

Eagle River Wastewater Treatment Facility Plan Recommendations

Project ID ASU2016001 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date** January 2019
District **End Date** June 2023
Community Council

Description

Reserved funding for projects resulting from the Facility Plan for the Eagle River Wastewater Treatment Facility.

Comments

Active project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	550200 - Sewer Utility CIP	-	-	1,635	-	935	-	2,570
Net Assets	550200 - Sewer Utility CIP	1,000	2,000	365	2,000	65	1,000	6,430
Total (\$ in thousands)		1,000	2,000	2,000	2,000	1,000	1,000	9,000

Facility Equipment

Project ID ASU2021007 **Department** Anchorage Wastewater Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

This pool will provide for the purchase of new equipment for the replacement of worn equipment within the sewer collection system. Examples of such equipment include pumps, electric motors, instruments, air conditioning equipment, electrical switch gear, etc.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	500	500	500	500	500	500	3,000
Total (\$ in thousands)		500	500	500	500	500	500	3,000

Facility Plant

Project ID ASU2021011 **Department** Anchorage Wastewater Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

This pool will provide for the purchase of new equipment for the replacement of worn equipment in the sewer treatment system. Examples of such equipment include pumps, electric motors, instruments, air conditioning equipment, electrical switch gear, etc.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	500	500	500	500	500	500	3,000
Total (\$ in thousands)		500	500	500	500	500	500	3,000

Geographic Information System Application Development

Project ID ASU2021002 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Geographic Information Systems work to perform work associated with development of applications for essential business functions on an annual basis. The Utility relies heavily on Geographic Information Systems and mapping based on self-service to meet business needs.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	45	-	45	-	45	-	135
Total (\$ in thousands)		45	-	45	-	45	-	135

Girdwood Sewer Rehabilitation & Replacement

Project ID ASU2020003 **Department** Anchorage Wastewater Utility
Project Type Rehabilitation **Start Date**
District **End Date**
Community Council

Description

This project programs annual funding for collection system improvements based on the priorities set forth by the prececedant Girdwood groundwater inflow and infiltration study. Groundwater inflow and infiltration into the Girdwood collection system burdens the treatment processes at the Girdwood Wastewater Treatment Facility.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	1,000	1,000	1,000	1,000	1,000	1,000	6,000
Total (\$ in thousands)		1,000	1,000	1,000	1,000	1,000	1,000	6,000

Girdwood Wastewater Treatment Facility Blower Upgrade

Project ID	ASU2021015	Department	Anchorage Wastewater Utility
Project Type	Upgrade	Start Date	January 2015
District		End Date	April 2023
Community Council			

Description

Install an alternative configuration of the existing aeration and a new blower system to achieve operational cost savings and increase reliability at the Girdwood Wastewater Treatment Facility.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	540	-	-	-	-	540
Total (\$ in thousands)		-	540	-	-	-	-	540

Girdwood Wastewater Treatment Facility Site Development

Project ID ASU2020006 **Department** Anchorage Wastewater Utility
Project Type Upgrade **Start Date**
District **End Date**
Community Council

Description

This project shares cost of municipal upgrades benefiting the Girdwood Wastewater Treatment Facility site.

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	510	-	-	-	-	-	510
Total (\$ in thousands)		510	-	-	-	-	-	510

Heavy Rolling Stock

Project ID ASU2021009 **Department** Anchorage Wastewater Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

For the acquisitions, rehabilitation, or replacement of heavy rolling stock vehicles. Includes vectors, loaders, etc.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	600	600	600	600	600	600	3,600
Total (\$ in thousands)		600	600	600	600	600	600	3,600

Hydraulic Model Upgrades

Project ID ASU2021005 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Development of upgrades to the sewer hydraulic model for essential business functions on annual basis. AWWU relies heavily on hydraulic models to meet business needs.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	50	50	50	50	50	50	300
Total (\$ in thousands)		50	50	50	50	50	50	300

Information Technology Infrastructure

Project ID ASU2021003 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Installation, upgrade and replacement of Information Technology infrastructure including servers, network, storage, and security.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	300	300	300	300	300	300	1,800
Total (\$ in thousands)		300	300	300	300	300	300	1,800

King Street Campus Expansion

Project ID	ASU2018008	Department	Anchorage Wastewater Utility
Project Type	Extension	Start Date	August 2018
District		End Date	December 2023
Community Council			

Description

The Operations and Maintenance Facility at King Street is in need of additional land for operations including but not limited to material storage and soil disposal for planned and emergency response events.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	-	-	1,700	-	1,700
Total (\$ in thousands)		-	-	-	-	1,700	-	1,700

King Street Combined Heat and Power Conversion

Project ID ASU2018007 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Purchase and install Combined Heat and Power System at King Street Operations and Maintenance Facility, which will provide 100% of electricity and 85% of heating needs while simultaneously reducing carbon emissions.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	900	1,000	-	-	-	1,900
Total (\$ in thousands)		-	900	1,000	-	-	-	1,900

King Street Main Building Improvements

Project ID ASU2018001 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date** January 2014
District **End Date** December 2025
Community Council

Description

The project shall complete upgrades to resolve issues to the existing building which is failing, including life support systems, structure, and other code violations. The associated site is also failing, including the paved areas, and site drainage.

Comments

Project is in design phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Bond Sale Proceeds	550200 - Sewer Utility CIP	695	3,500	-	-	-	-	4,195
Net Assets	550200 - Sewer Utility CIP	2,805	-	-	-	-	-	2,805
Total (\$ in thousands)		3,500	3,500	-	-	-	-	7,000

Large Diameter Sewer Manholes

Project ID ASU2017001 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date** February 2018
District **End Date** July 2023
Community Council

Description

Strategically install new manholes on large diameter sewer mains to allow access for cleaning equipment.

Comments

Project is in construction phase

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	2,200	-	-	-	2,200
Total (\$ in thousands)		-	-	2,200	-	-	-	2,200

Miscellaneous Information Technology Systems

Project ID ASU2021004 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Installation, acquisition, and upgrade of Information Technology systems related to the Business Intelligence, Enterprise Resource Planning, Geographic Information System, Mobile, Parcel, Project Management, Supervisory Control and Data Acquisition, and Treatment Information Technology Master Plan System Categories. Systems include Work Information Management System, LabWorks, Mobile Dispatch, Linko, Special Assessment Receivable System, Assessment Management System, Land Parcel, and many more.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	15	15	15	15	15	15	90
Total (\$ in thousands)		15	15	15	15	15	15	90

Plant Oversize & Betterments

Project ID ASU2021013 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

This funding is required to compensate private developers for AWWU requested betterments to AWWU's existing infrastructure or for AWWU requested oversizing of mains installed by the developers.

Comments

Annual Funding Pool

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	10	-	10	-	10	-	30
Total (\$ in thousands)		10	-	10	-	10	-	30

Pump Station 55 Abandonment

Project ID ASU2019006 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

The project will evaluate alternatives as to the disposition of Pump Station 55 and institute the chosen alternative. Currently, the wet well components and pumps are near failure and will require replacement upon failure.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	-	-	2,000	-	2,000
Total (\$ in thousands)		-	-	-	-	2,000	-	2,000

Supervisory Control and Data Acquisition Equipment

Project ID ASU2021008 **Department** Anchorage Wastewater Utility
Project Type Upgrade **Start Date**
District **End Date**
Community Council

Description

Equipment upgrades and/or additions as services are added and technology ages. These may include, but are not limited to, upgrades to logic controllers, software replacement, and intelligence upgrades.

Comments

Annual Funding Pool - has related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	100	100	100	100	100	100	600
Total (\$ in thousands)		100	100	100	100	100	100	600

Supervisory Control and Data Acquisition Master Plan Recommendations

Project ID ASU2019003 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Reserved funding for projects resulting from the Systems Control and Data Acquisition Master Plan.

Comments

New project - has related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	500	500	-	-	1,000
Total (\$ in thousands)		-	-	500	500	-	-	1,000

Vehicles

Project ID ASU2021010 **Department** Anchorage Wastewater Utility
Project Type Replacement **Start Date**
District **End Date**
Community Council

Description

Funding required for replacement of existing AWWU fleet vehicles to be retired. Vehicle replacements are identified as appropriate during each budget year. Criterion for vehicle replacement is 100K miles and/or 10+ years of service.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	250	250	250	250	250	250	1,500
Total (\$ in thousands)		250	250	250	250	250	250	1,500

Wastewater Master Plan

Project ID ASU2016002 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

Update the Wastewater Master Plan and include an Asset Management Plan for Lift/Pump Stations and other collection facilities.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	1,200	-	-	-	-	-	1,200
Total (\$ in thousands)		1,200	-	-	-	-	-	1,200

Wastewater Master Plan Recommendations

Project ID ASU2021016 **Department** Anchorage Wastewater Utility
Project Type Improvement **Start Date**
District **End Date**
Community Council

Description

This project will institute recommendations from the forthcoming Wastewater Master Plan.

Comments

New project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	-	-	-	200	400	500	1,100
Total (\$ in thousands)		-	-	-	200	400	500	1,100

Work Management Software

Project ID ASU2021006 **Department** Anchorage Wastewater Utility
Project Type IT **Start Date**
District **End Date**
Community Council

Description

Installation, acquisition, and upgrade of IT systems related to the WMS IT Master Plan System Category. Systems include Maximo, Fuel Management, and DataSplice.

Comments

Annual Funding Pool - has a related Water Utility project

Version 2022 Approved

		2022	2023	2024	2025	2026	2027	Total
Revenue Sources	Fund							
Net Assets	550200 - Sewer Utility CIP	15	15	15	15	15	15	90
Total (\$ in thousands)		15	15	15	15	15	15	90