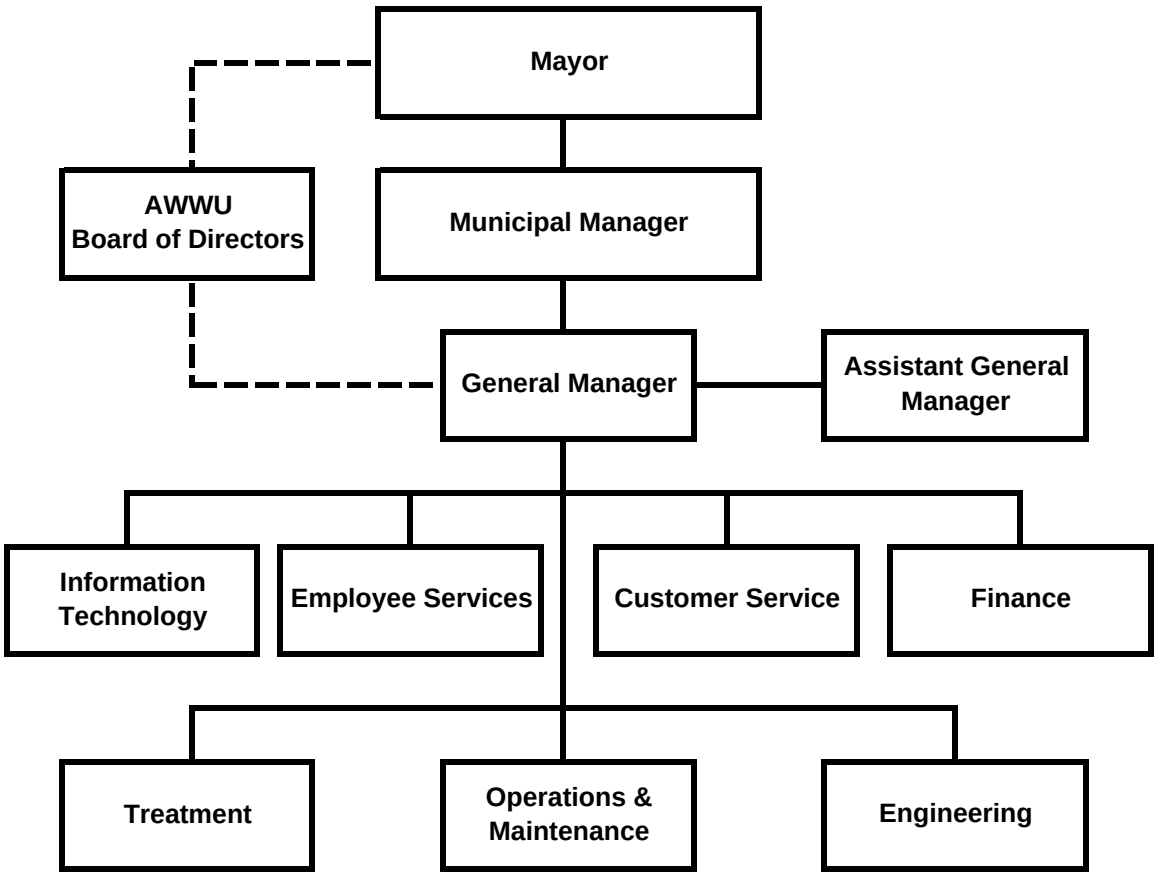
Anchorage Water & Wastewater Utility



Anchorage Water & Wastewater
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).

System Description
To provide water and sewer services, AWWU owns and operates five Treatment Facilities (2 water and 3 wastewater), over 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 240,000 people via nearly 55,000 customer accounts. The certificated sewer service area is larger, encompassing nearly all of the Municipality. ASU currently provides sewer service to approximately 250,000 people via approximately 56,000 customer accounts. Additionally, AWWU receives septage pumped from on-site wastewater systems on lots in areas not directly connected to the sewer system.

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 (WTF) 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 90% 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 to treat wastewater collected in three geographically separate but commonly managed sewer systems. The largest of these is the John M. Asplund Wastewater Treatment Facility (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. Currently, work is underway to replace the aging chlorine gas disinfection system with the modern technology of on-site hypochlorite generation for disinfection. 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 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 in accordance with a permit recently reauthorized by the Alaska Department of Environmental Conservation (ADEC), which has assumed primacy from EPA over permits for wastewater discharge to fresh water.

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 two decades, investments in physical infrastructure have resulted in an increase in the value of AWU. From 1990 to present, plant in service has increased by 118% from $355.2 million to $776 million. This growth is primarily a result of an increasing amount of investment in transmission and distribution assets (pipelines), with lesser investments in general plant assets (e.g., structures and intangible assets).

From 1990 to present, ASU's plant in service has increased by 104% from $301.5 million to $615.7 million. This growth is primarily a result of an increasing investment in sewer collection pipeline network, followed by upgrades in sewer treatment facilities, and modest investment in pumping plant (sewage lift or pump stations), general plant (structures), and intangible assets.

Organization

AWWU is organized into 7 divisions. The General Manager's office is responsible for overall operation of AWWU. The Engineering Division is responsible for development and execution of AWWU's capital program and for system planning. The 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. The 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 SCADA system. The Customer Service Division is responsible for responding to customer inquiries, billing and collections for both utilities, issuing of permits, and field service functions. The Information Technology Division provides support for all of AWWU's computers, network, and software systems. The Administrative Services Division provides for training, safety, and internal and external communications. The Finance Division is responsible for all general ledger and plant accounting, preparation of utility budgets and financial statements, and regulatory filings.

Anchorage Water & Wastewater Utility
Business Plan

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.

Services
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).

Business Goals
AWWU's strategic plan for 2014-2016, as recommended by the Utility Board of Directors on August 6, 2014, calls for the focus on the following goals:

- Build a customer relationship that recognizes and advocates for our core purpose.
- Enhance focus on environmental compliance.
- Provide robust infrastructure that meets customer needs.
- Maintain fair and affordable rates.
- Make sound business decisions.
- Improve human capital management.
- Develop a knowledge management strategy plan.
- Become hazard response ready.
- Ensure effective organizational communication.

Commitments to Customers
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 air standards.
2. Number of planned and unplanned water outages.
3. Sanitary sewer overflows.
4. Recordable incident rate (of lost-time injuries and accidents).
5. Execution of capital improvement budget.

6. Debt to equity ratio.
7. Manage workers' compensation claims.

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

	Goal	Q2	Q1	2014	2013	2012	2011	2010
Safe Drinking Water Act Compliance	100%	100%	100%	100%	100%	100%	100%	100%
Clean Water Act (NPDES permit) Compliance	100%						100%	99.99%
-Asplund		100%	100%	100%	99.8%	100%		
-Eagle River		100%	100%	100%	100%	99.5%		
-Girdwood		98.9%	100%	99.8%	99.3%	97.5%		
Clean Air Act Compliance (Asplund Incinerator)	100%	100%	100%	100%	99.998%	99.99%	99.99%	99.99%

Measure #2: Number of planned and unplanned water outages (customers per month).

Measure 2: Number of planned and unplanned water outages (customers per month)	Goal (Affected customers per month)	2015 (monthly average)	4th Q 2015 (monthly average)	3rd Q 2015 (monthly average)	2nd Q 2015 (monthly average)	1st Q 2015 (monthly average)	Historical monthly average			
							2014	2013	2012	2011
Planned Outages										
<4 hours	<20	**22**			44	0	27	25	18	12
4-12 hours	<20	**10**			19	0	37	86	47	23
>12 hours	0	**0.4**			0.7	0	0.6	0.3	0.2	0.1
Unplanned Outages										
<4 hours	<20	**41**			31	51	40	27	46	23
4-12 hours	<50	**48**			39	57	44	33	38	51
>12 hours	0	**0.4**			0	0.7	3	8	4	9

Measure #3: Sanitary Sewer Overflows (monthly)

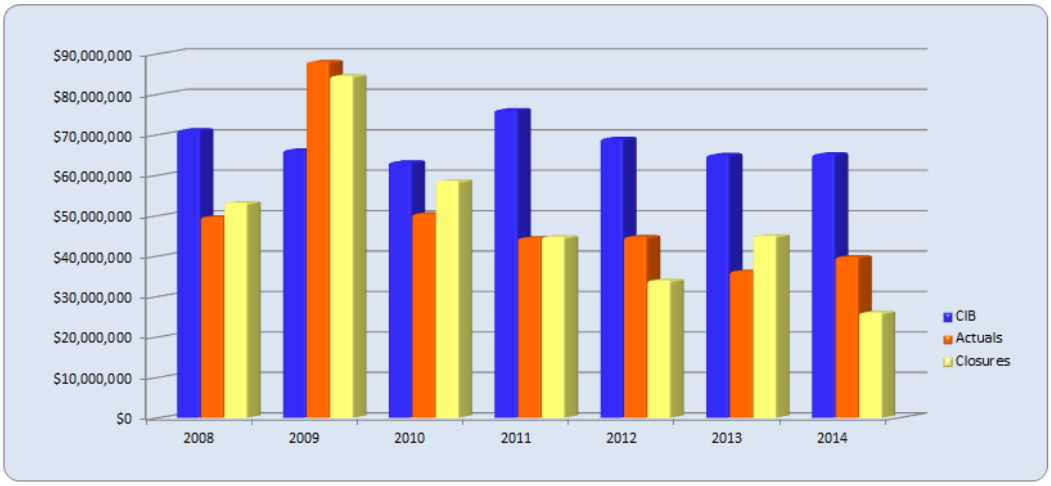
	Historical monthly average								
Goal	Q2	Q1	2014	2013	2012	2011	2010	2009	2008
<1.5	1.33	1.00	1.75	2.25	1.83	1.91	1.33	1.58	1

Measure #4: Number of reportable injuries and accidents (annual)

Goal	2014	Historical Information					
		2013	2012	2011	2010	2009	2008
<4.60	5.91	4.47	5.2	4.4	1.72	4.10	4.00

Measure #5: Execution of Capital Improvement Budget (annual)

Goal	2015	Historical Information						
		2014	2013	2012	2011	2010	2009	2008
75%	TBD	61%	56%	65%	61%	66%	129%	67%



Budget, Expenditures, and Closures Through End of Calendar Year 2014

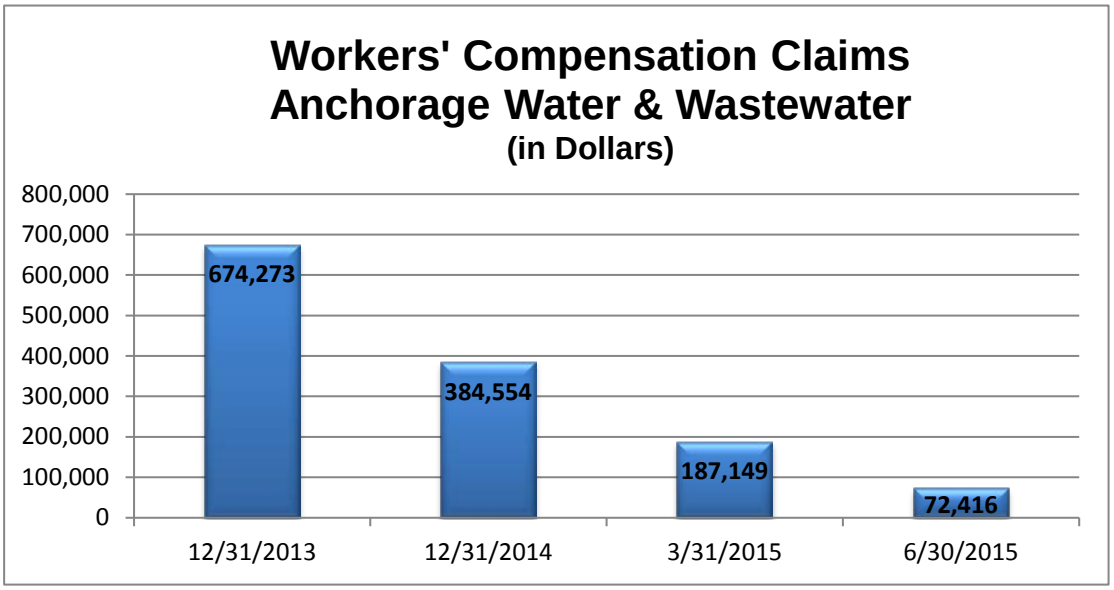
Measure #6: Debt to Equity Ratio (annual)

	Goal	2014	Historical Information					
			2013	2012	2011	2010	2009	2008
Water Utility	67/33	62/38	65/35	67/33	70/30	70/30	71/29	72/28
Wastewater Utility	67/33	65/35	67/33	66/34	68/32	69/31	68/32	66/34

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.



Anchorage Water & Wastewater
Highlights and Future Events

Aging Infrastructure
At the current time, AWWU provides best-in-class service as measured against industry benchmarks such as drinking water compliance rate, water quality complaints, water pipeline breaks, unplanned service disruptions, compliance with discharge permits, collection system failures, and sewer overflows. However, the infrastructure required to provide water and sewer service is aging and will require significant annual capital investments to maintain service levels.

In aggregate, AWU's physical assets are considered to have about one-half of their useful lives consumed. The water transmission and distribution system pipe network consists of 839.7 miles of pipe, has a weighted average age of over 35 years. Other AWU assets including treatment facilities, reservoirs, wells, booster stations, and major valve vaults are of varying age, but in aggregate, have reached just over one-half of their useful lives and have undergone or have been scheduled for major re-investment over the next 5-10 years.

ASU's sewer pipe network consists of 754 miles of pipe and has a weighted average age of 36 years, again reflecting just over one-half of the estimated useful lives of pipe and approximately three-fifths of the estimated useful lives of other sewer plant. Unlike the water system however, some treatment facility assets are new. Within the Anchorage Bowl, more than $40 million of treatment plant investment occurred over the past decade, much of that for new assets (e.g., new headworks, solids handling, building improvements and liquid process improvements) at the Asplund WWTF. In Eagle River, new process improvements and support systems (UV disinfection, mechanical and HVAC systems) worth over $3 million were built over the last five years. The exception is the Girdwood WWTF, which is now over 30 years old and reaching the end of its useful life as documented by multiple studies performed since 2006.

AWWU has advanced its asset management program to manage the Utility's aging infrastructure. The primary components of AWWU's asset management program include:

- Risk based approach that categorizes AWWU's assets and evaluates each asset's class on the basis of consequence and likelihood of failure.
- Robust analysis of system performance and maintenance data to predict service lives of different asset classes.
- Business case analysis of major projects to determine solutions yielding lowest overall lifecycle costs.
- Use of state-of-the-art repair and rehabilitation technologies to reduce service disruption and reduce costs.
- Condition assessment monitoring and evaluation using both AWWU staff and specialized contractors.

Limited Customer Growth
The Anchorage economy and land-use development patterns and restrictions are such that AWWU does not anticipate significant customer growth rate for the foreseeable future. Limited customer growth represents a significant challenge for AWWU because there are few new customers to help cover the cost of maintaining infrastructure. Exacerbating the lack of customer growth is the repair and replacement of contributed plant. In the 1990's, over 70% of the plant in-service was contributed (i.e., given to AWWU or paid for by grants). Today that percentage is about 50% and decreasing steadily. Contributed plant is not included in rates for calculating depreciation costs and earning a return. However, repair and replacement of this considerable portion of our plant-in-service must be borne wholly by customers. With a very slow growth of the customer base, cost of this repair and replacement will increase over time for each customer.

There is very little AWWU can do to encourage significant customer growth without major changes in policy and community desires. Most of AWWU's customer growth will come from redevelopment of existing properties in the MOA, expansion in outlying areas (which require significant expenditures to extend infrastructure) and limited infill. Redevelopment and infill must comply with current codes and utility tariffs, which may require upgrades to existing utility service.

Aging Workforce
AWWU is typical of the industry in that we have an aging workforce. Over half of AWWU's workforce is 45 years old or more. Many of these individuals can be expected to retire in the next few years. Many of these individuals are the experienced and licensed professionals required to operate AWWU's facilities in compliance with Alaska regulations. Alaska's oil industry and the boom in oil and gas development in the lower 48 represents a significant threat to retaining water and wastewater professionals. The oil industry typically pays significantly higher wages than AWWU.

Debt
At the end of 2014, AWWU was carrying approximately $375.5 million in total net debt. AWWU can easily service this debt and the Utility maintains healthy operating margins and debt service coverage ratios. However, compared to peer utilities, AWWU has a significant amount of debt and finances much less of its capital program with equity.

Two major factors have contributed to AWWU's current debt/equity position. First, during the 1990's, AWWU did not have rate increases and had a very modest capital improvement budget (CIB). During these years, reductions in workforce levels and improvements in worker productivity as a result of investments in appropriate technology allowed the Utility to operate effectively, but not accumulate equity.

Rate Increases Calculated, Requested and Approved
AWWU 2004 - 2015

	Calculated Rate Increase in RRS		Requested Permanent Rate Increase		Approved/Stipulated Permanent Rate Increase		
Rate Year	AWU	ASU	AWU	ASU	AWU	ASU	Reason For Requesting Increases Less Than The Calculated Increases
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%	2.26%	4.34%	Policy direction to limit rate increases requested to reduce impact on customers. AWWU stipulated to permanent rates lower than the rates requested.
2015	-	-	-	-	-	-	Rate changes were not requested by AWWU for 2015.

To improve its debt position, AWWU must continue to request reasonable rates and at the same time control expenses. The budget provided in this package provides just such a balance.

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 Eagle River WWTF permit was reissued reissuance by ADEC in 2014. The Girdwood WWTF permit is administratively extended pending reissuance by ADEC. The Utility is working closely with ADEC to ensure that a proposed upgrade to the Girdwood WWTF is consistent with terms and conditions of the new permit, when it is reissued.

Authorization of discharge into marine waters from the Asplund WWTF under the provisions of Section 301(h) of the Clean Water Act remains under the auspices of the U.S. Environmental Protection Agency (EPA). EPA is currently evaluating the Utility's application for reauthorization of the permit. The renewal process includes an evaluation by EPA to determine whether Asplund continues to meet the Clean Water Act criteria necessary to reissue a permit with a 301(h) modification allowing only primary treatment. Subsequent to a positive determination, EPA is required to 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. Discussions with federal agencies to-date suggest that such a finding is unlikely.

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 Eagle River WWTF permit was reissued by ADEC in 2014, and will be valid for at least five years. The Girdwood WWTF permit is administratively extended pending reissuance by ADEC. The Utility is working closely with ADEC to ensure that a proposed upgrade to the Girdwood WWTF is consistent with terms and conditions of the new permit, when it is reissued.

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. Discussions with federal agencies to-date suggest that such a finding is unlikely.

Aging Infrastructure
At the current time, AWWU provides best-in-class service as measured against industry benchmarks. However, the infrastructure required to provide water and sewer service is aging and will require significant annual capital investments to maintain service levels.

AWWU has advanced its asset management program to optimize spending on the Utility's aging infrastructure. We are performing business case analyses of major issues to determine solutions that lead to lowest overall life cycle costs, as well as extensive condition assessment monitoring and evaluation using both AWWU staff and specialized contractors. This work is expected to provide best value to ratepayers in the long term.

Anchorage Water & Wastewater Utility
Workforce Projections

Division	2014	2015	2016	2017	2018	2019	2020	2021
General Manager	2	2	2	2	2	2	2	2
Information Technology	18	18	18	18	18	18	18	18
Operations and Maintenance	87	87	91	91	91	91	91	91
Treatment	62	63	63	63	63	63	63	63
Finance	21	21	21	21	21	21	21	21
Employee Services	0	0	0	0	0	0	0	0
Administrative Services	6	6	6	6	6	6	6	6
Customer Service	39	39	41	41	41	41	41	41
Engineering	41	41	40	40	40	40	40	40
Total full time	**275**	**276**	**282**	**282**	**282**	**282**	**282**	**282**
Temporary	2	2	2	2	2	2	2	2
Total Positions	**277**	**278**	**284**	**284**	**284**	**284**	**284**	**284**
Total FTE	**277**	**278**	**284**	**284**	**284**	**284**	**284**	**284**
Interns	7	7	7	7	7	7	7	7

Anchorage Water Utility
8 Year Summary
($ in thousands)

Financial Overview	2014 Actuals	2015 Proforma	2016 Approved	2017	2018	2019	2020	2021
				Forecast				
Revenues	62,157	61,249	61,021	64,131	65,821	69,031	72,441	74,301
Expenses	47,530	50,629	52,334	55,007	57,704	60,544	63,326	64,649
Net Income (Loss) - Regulatory	**14,627**	**10,620**	**8,687**	**9,124**	**8,117**	**8,487**	**9,115**	**9,652**
Dividend to General Government	-	-	-	-	3,184	3,269	3,429	3,594
Increase in Net Assets	**14,627**	**10,620**	**8,687**	**9,124**	**4,933**	**5,218**	**5,686**	**6,058**
Budgeted Positions*	277	278	284	284	284	284	284	284
Capital Improvement Program	33,399	31,700	32,226	33,080	32,218	33,000	34,000	35,000
New Debt	10,797	21,400	17,900	28,374	2,900	76,000	3,100	3,200
Net Plant (12/31)	502,319	519,824	536,638	553,545	569,338	584,823	600,563	616,593
Net Assets (12/31)	130,002	140,623	149,359	158,483	163,415	168,633	174,320	180,377
Operating Cash	28,007	34,285	32,542	33,561	29,531	26,021	24,285	23,255
Construction Cash Pool	993	268	74	7,582	-	43,244	20,594	-
Restricted Cash	396	395	395	395	395	395	395	395
Total Cash	**29,396**	**34,948**	**33,011**	**41,538**	**29,926**	**69,660**	**45,274**	**23,650**
IGCs - General Government	1,153	1,255	1,159	1,159	1,159	1,159	1,159	1,159
MUSA	7,138	7,114	7,280	7,510	7,750	7,970	8,190	8,410
CCP Borrowings from Gen'l Govt.	-	-	-	-	10,952	-	-	2,956
Total Outstanding LT Debt	211,628	221,929	230,123	248,235	238,395	301,369	289,015	276,460
Total Annual Debt Service	19,447	16,031	17,146	18,806	21,520	22,950	26,423	26,269
Debt Service Coverage (Bond)	3.15	3.17	3.07	2.84	2.18	2.12	1.85	1.91
Debt Service Coverage (Total)	1.74	1.77	1.60	1.57	1.40	1.40	1.31	1.34
Debt/Equity Ratio	62 / 38	61 / 39	61 / 39	61 / 39	59 / 41	64 / 36	62 / 38	61 / 39
Rate Change Percent	4.0%	0.0%	0.0%	5.0%	2.5%	4.7%	4.7%	2.5%
Single Family Rate	50.54	49.89	49.89	52.38	53.69	56.22	58.86	60.33
Statistical/Performance Trends								
Number of Accounts	55,854	55,994	56,134	56,274	56,415	56,556	56,697	56,839
Average Treatment (GPD) (000)	22,900	22,200	22,256	22,311	22,367	22,423	22,479	22,535
Miles of Water Lines	839	840	842	844	846	848	851	853
Number of Public Hydrants	5,949	5,964	5,979	5,994	6,009	6,024	6,039	6,054

* Workforce Authorized per Budget is for both Water and Wastewater utilities.

Anchorage Water Utility
Statement of Revenues and Expenses

	2014 Actuals	2015 Proforma	2015 Revised	16 v 15 $ Change	2016 Approved	16 v 15 % Change
Operating Revenue						
Charges for services	59,384,894	59,537,000	60,250,000	(650,000)	59,600,000	-1.1%
Miscellaneous	1,137,674	1,185,000	981,000		981,000	0.0%
Total Operating Revenue	**60,522,568**	**60,722,000**	**61,231,000**	**(650,000)**	**60,581,000**	**-1.1%**
Non Operating Revenue						
Investment Income	433,930	397,000	287,000	23,000	310,000	8.0%
Other Income	1,201,119	130,000	130,000		130,000	0.0%
Total Non Operating Revenue	**1,635,049**	**527,000**	**417,000**	**23,000**	**440,000**	**5.5%**
Total Revenue	**62,157,617**	**61,249,000**	**61,648,000**	**(627,000)**	**61,021,000**	**-1.0%**
Operating Expenses						
Labor						
Labor and Benefits	13,882,842	15,253,000	15,048,916	601,644	15,650,560	4.0%
Overtime	552,524	480,000	362,500	85,500	448,000	23.6%
Total Labor	14,435,366	15,733,000	15,411,416	687,144	16,098,560	4.5%
Non Labor						
Non Labor	7,957,838	9,100,000	9,091,283	235,564	9,326,847	2.6%
Travel	43,848	54,000	82,000		82,000	0.0%
Transfers (MUSA and gross receipts)	7,138,099	7,113,584	7,084,470	195,530	7,280,000	2.8%
Depreciation and Amortization	10,233,693	10,758,000	10,400,000	1,027,000	11,427,000	9.9%
Total Non Labor	25,373,478	27,025,584	26,657,753	1,458,094	28,115,847	5.5%
Total Direct Cost	**39,808,844**	**42,758,584**	**42,069,169**	**2,145,238**	**44,214,407**	**5.1%**
Charges from other departments	1,244,683	1,475,000	1,629,693	(95,553)	1,534,140	-5.9%
Charges to other departments	(91,392)	(375,000)	(375,000)		(375,000)	0.0%
Total Operating Expense	**40,962,135**	**43,858,584**	**43,323,862**	**2,049,685**	**45,373,547**	**4.7%**
Non Operating Expense						
Interest on bonded debt	5,547,876	5,270,000	6,155,000	(790,000)	5,365,000	-12.8%
Amortization of debt expense	261,439	350,000	320,000	(25,000)	295,000	-7.8%
Other interest expense	1,554,856	1,500,000	1,800,000		1,800,000	0.0%
Interest during construction	(795,916)	(350,000)	(280,000)	(220,000)	(500,000)	78.6%
Total Non Operating Expense	**6,568,255**	**6,770,000**	**7,995,000**	**(1,035,000)**	**6,960,000**	**-12.9%**
Total Expenses (Function Cost)	**47,530,390**	**50,628,584**	**51,318,862**	**1,014,685**	**52,333,547**	**2.0%**
Net Income	**14,627,227**	**10,620,416**	**10,329,138**	**(1,641,685)**	**8,687,453**	**-15.9%**
Appropriation:						
Total Expenses			**51,318,862**	**1,014,685**	**52,333,547**	
Less: Non Cash items						
Depreciation and amortization			10,400,000	1,027,000	11,427,000	
Amortization of debt expense			320,000	(25,000)	295,000	
Interest during construction			(280,000)	(220,000)	(500,000)	
Total Non-Cash			10,440,000	782,000	11,222,000	
Amount to be Appropriated (Cash Expenses)			**40,878,862**	**232,685**	**41,111,547**	

Anchorage Water Utility
Reconciliation from 2015 Revised Budget to 2016 Approved Budget

	Appropriation	Positions FT	PT	T
2015 Revised Budget	51,318,862	276	2	7
Transfers (to)/from Other Agencies				
- Charges to other departments	-	-	-	-
- Charges from other departments	(95,553)	-	-	-
Debt Service Charges				
- Interest	(1,035,000)	-	-	-
Changes in Existing Programs/Funding for 2016				
- Salary and benefits adjustments	478,400	-	-	-
- Software Maintenance	18,288	-	-	-
- Materials	29,000	-	-	-
- Merchant Fees	68,000	-	-	-
- Depreciation	1,027,000	-	-	-
- MUSA	195,530			
2016 Continuation Level	**52,004,527**	**276**	**2**	**7**
2016 Proposed Budget Changes				
- Remove 1/2 Time Permit Coordinator Position, never filled	(37,278)	(1)	-	-
- Adjustment to capital labor for 2016.	24,326	-	-	-
- Adjust Overtime to Current pay rates	85,500	-	-	-
- Adjust Capital Overhead	70,000	-	-	-
- Add 2 Call Center Representatives	86,196	2	-	-
- Remove AWU portion of 2015 aerial imagery capture.	(125,000)	-	-	-
- Remove 1 Time GIS Grant.	(87,500)	-	-	-
- GIS licensing.	158,500	-	-	-
- GIS Professional Services	36,100	-	-	-
- GIS Remove MOA portion of 2015 aerial imagery capture.	(100,000)	-	-	-
- GIS Labor	50,000	-	-	-
- Miscellaneous (rounding)	3,176			
- Increase funding for water line inspection and condition assessment.	165,000	-	-	-
2016 Approved Budget	**52,333,547**	**278**	**2**	**7**
2016 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation and amortization	(11,427,000)	-	-	-
- Amortization of debt expense	(295,000)	-	-	-
- Interest during construction	500,000	-	-	-
- Anchorage Wastewater Utility; add line cleaning crew.	-	4	-	-
2016 Approved Budget (Appropriation)	**41,111,547**	**282**	**2**	**7**

Anchorage Water Utility
2016 - 2021 Capital Improvement Program
(in thousands)

Project Category	2016	2017	2018	2019	2020	2021	Total
Equipment	4,680	3,853	3,810	2,813	3,286	3,020	21,462
Plant	5,800	9,323	7,225	4,205	8,875	14,239	49,667
Pipe	21,746	19,904	21,183	25,982	21,839	17,741	128,395
Total	**32,226**	**33,080**	**32,218**	**33,000**	**34,000**	**35,000**	**199,524**

Funding Source	2016	2017	2018	2019	2020	2021	Total
Debt	18,226	21,080	21,218	22,000	26,000	27,000	135,524
Grants	2,000	2,000	2,000	2,000	2,000	2,000	12,000
Equity/Operations	12,000	10,000	9,000	9,000	6,000	6,000	52,000
Total	**32,226**	**33,080**	**32,218**	**33,000**	**34,000**	**35,000**	**199,524**

Anchorage Water Utility
2016 Capital Improvement Budget
(in thousands)

Project Title	Debt	State/Fed Grant	Equity/ Operations	Total
347 Zone Conversion	975	-	-	975
ADOT-MOA-Emergency-Water	-	-	3,670	3,670
Customer Information System Enhancements	-	-	360	360
Downtown to Kincaid Water Transmission Main	-	2,000	-	2,000
Engineering Project Management Tools -Water	-	-	45	45
Facility Equipment - Water	-	-	100	100
Facility Plant - Water	-	-	1,500	1,500
Geographic Information Systems Application Development	-	-	160	160
Hydraulic Model Upgrades	-	-	50	50
Information Technology Infrastructure	-	-	685	685
Information Technology Master Plan Update-Water	-	-	52	52
Line Trucks (94216, 94217)	-	-	480	480
Miscellaneous Information Technology Systems	-	-	713	713
Northern Lights Wesleyan to Bragaw	6,000	-	-	6,000
Plant Oversize Improvement-Water	25	-	-	25
Railroad Yard Water 16" Rehabilitation	3,463	-	-	3,463
Reservoir 3 & 4 Circulation Line	900	-	-	900
Rosemary Street to ARCA Water Line Rehabilitation	2,400	-	-	2,400
SCADA Equipment	-	-	750	750
Ship Creek Water Treatment Facility Rehabilitation.	2,250	-	-	2,250
Storage Facility--Emergency Water Trailers	150	-	-	150
Terminal Road Water Rehabilitation 16"	1,063	-	1,000	2,063
Transmission Main Extension	300	-	1,000	1,300
Vactor Truck (94950) Line Truck (94856)	-	-	480	480
Vehicles-Water	-	-	360	360
Water Quality Management and Environmental Compliance Monitoring Reporting	-	-	45	45
Water Upgrades Preliminary Engineering	-	-	150	150
West 8th at L Street Upgrades	700	-	-	700
Work Management Software	-	-	400	400
Total	**18,226**	**2,000**	**12,000**	**32,226**

Anchorage Water Utility
Statement of Cash Sources and Uses

	2014 Actual	2015 Proforma	2016 Approved
Sources of Cash Funds			
Operating Income	26,901,480	23,977,000	22,632,000
Depreciation, net of amortization	10,233,693	10,758,000	11,427,000
Transfer from Escrow Account	-	1,881,616	-
Grant Proceeds	-	2,000,000	2,000,000
Special Assessment Proceeds	471,667	300,000	300,000
State of Alaska Loan Proceeds	3,097,215	2,900,000	2,900,000
Bond/Other Loan Proceeds	7,700,000	18,500,000	15,000,000
Miscellaneous Non-Operating Revenues	1,201,124	130,000	130,000
Interest Received	461,717	397,000	310,000
Changes in Assets and Liabilities	1,775,261	296,569	197,500
Total Sources of Cash Funds	**51,842,157**	**61,140,185**	**54,896,500**
Uses of Cash Funds			
Capital Construction	21,123,389	32,124,750	32,095,000
Debt Principal Payment	12,232,610	8,982,338	10,002,000
Debt Interest Payments	7,140,754	7,367,479	7,457,000
Transfer to Escrow Account	1,881,616	-	-
MUSA	7,138,099	7,113,584	7,280,000
Total Uses of Cash Funds	**49,516,468**	**55,588,151**	**56,834,000**
Net Increase (Decrease) in Cash Funds	2,325,689	5,552,034	(1,937,500)
Cash Balance, January 1	27,070,477	29,396,166	34,948,200
Cash Balance, December 31	**29,396,166**	**34,948,200**	**33,010,700**
Detail of Cash and Investment Funds			
General Cash Less Customer Deposits	28,007,205	34,285,000	32,542,000
Construction Cash	992,930	268,200	73,700
Operating Fund Investment & Customer Deposits	396,031	395,000	395,000
Cash Balance, December 31	**29,396,166**	**34,948,200**	**33,010,700**

Anchorage Wastewater Utility
8 Year Summary
($ in thousands)

Financial Overview	2014 Actuals	2015 Proforma	2016 Approved	2017	2018	2019	2020	2021
				Forecast				
Revenues	51,741	51,651	51,675	55,085	60,485	66,525	70,805	76,965
Expenses	43,026	45,985	48,947	52,670	57,590	62,750	64,450	67,990
Net Income (Loss) - Regulatory	**8,715**	**5,666**	**2,728**	**2,415**	**2,895**	**3,775**	**6,355**	**8,975**
Dividend to General Government	-	-	-	-	-	-	-	-
Increase in Net Assets	**8,715**	**5,666**	**2,728**	**2,415**	**2,895**	**3,775**	**6,355**	**8,975**
Budgeted Positions*	277	278	284	284	284	284	284	284
Capital Improvement Program	31,863	33,345	34,200	35,150	36,000	37,000	38,000	39,000
New Debt	7,373	20,500	22,000	33,349	123,000	5,000	5,000	93,000
Net Plant (12/31)	370,799	385,980	404,408	419,040	485,000	507,580	528,330	554,210
Net Assets (12/31)	87,299	92,966	95,801	98,216	101,111	104,886	111,241	120,216
Operating Cash	22,105	25,207	24,825	25,310	24,502	22,161	23,147	24,261
Construction Cash Pool	2,312	4,197	859	9,478	99,658	44,908	3,158	64,558
Restricted Cash	1,531	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Total Cash	**25,948**	**30,904**	**27,184**	**36,288**	**125,660**	**68,569**	**27,805**	**90,319**
IGCs - General Government	1,226	1,405	1,545	1,545	1,545	1,545	1,545	1,545
MUSA	5,387	5,286	5,440	5,700	5,910	6,840	7,160	7,450
CCP Borrowings from Gen'l Govt.	-	-	-	-	-	-	-	-
Total Outstanding LT Debt	163,288	177,826	192,999	280,820	393,689	384,916	375,857	454,416
Total Annual Debt Service	9,865	10,851	12,027	14,294	19,993	25,663	25,588	27,381
Debt Service Coverage (Bond)	5.52	5.04	4.63	3.52	1.94	1.56	1.76	1.87
Debt Service Coverage (Total)	2.13	1.77	1.47	1.38	1.20	1.10	1.22	1.32
Debt/Equity Ratio	65 / 35	66 / 34	58 / 42	69 / 31	77 / 23	76 / 24	74 / 26	77 / 23
Rate Change Percent	5.50%	0.00%	0.00%	6.00%	9.50%	9.50%	6.50%	8.80%
Single Family Rate	41.18	40.87	40.87	43.32	47.44	51.94	55.32	60.19
Statistical/Performance Trends								
Number of Accounts	56,711	56,853	56,995	57,137	56,816	56,958	57,100	57,243
Average Treatment (GPD) (000)	30,800	28,700	28,772	28,844	28,916	28,988	29,061	29,133
Miles of Wastewater Lines	755	755	757	759	761	763	764	766

* Workforce Authorized per Budget is for both Water and Wastewater utilities.

Anchorage Wastewater Utility
Statement of Revenues and Expenses

	2014 Actuals	2015 Proforma	2015 Revised	16 v 15 $ Change	2016 Approved	16 v 15 % Change
Operating Revenue						
Charges for Services	50,415,326	50,200,000	50,600,000	(200,000)	50,400,000	-0.4%
Miscellaneous	1,011,197	977,000	970,000		970,000	0.0%
Total Operating Revenue	**51,426,523**	**51,177,000**	**51,570,000**	**(200,000)**	**51,370,000**	**-0.4%**
Non Operating Revenue						
Investment Income	295,068	459,000	228,000	62,000	290,000	27.2%
Other Income	19,433	15,000	15,000		15,000	0.0%
Total Non Operating Revenue	**314,501**	**474,000**	**243,000**	**62,000**	**305,000**	**25.5%**
Total Revenue	**51,741,024**	**51,651,000**	**51,813,000**	**(138,000)**	**51,675,000**	**-0.3%**
Operating Expenses						
Labor						
Labor and Benefits	14,348,429	15,650,000	15,728,754	777,507	16,506,261	4.9%
Overtime	357,046	390,000	378,000	36,500	414,500	9.7%
Total Labor	14,705,475	16,040,000	16,106,754	814,007	16,920,761	5.1%
Non Labor						
Non Labor	9,654,032	10,000,000	9,989,384	483,564	10,472,948	4.8%
Travel	46,532	42,000	68,000		68,000	0.0%
Transfers (MUSA and gross receipts)	5,386,761	5,285,575	5,265,071	174,929	5,440,000	3.3%
Depreciation and Amortization	7,843,888	9,112,000	8,500,000	1,250,000	9,750,000	14.7%
Total Non Labor	22,931,213	24,439,575	23,822,455	1,908,493	25,730,948	8.0%
Total Direct Cost	**37,636,688**	**40,479,575**	**39,929,209**	**2,722,500**	**42,651,709**	**6.8%**
Charges from other departments	1,225,922	1,405,000	1,638,291	(92,687)	1,545,604	-5.7%
Total Operating Expense	**38,862,610**	**41,884,575**	**41,567,500**	**2,629,813**	**44,197,313**	**6.3%**
Non Operating Expense						
Interest on bonded debt	3,064,779	2,970,000	3,500,000	(432,000)	3,068,000	-12.3%
Amortization of debt expense	33,120	32,000	40,000	(8,000)	32,000	-20.0%
Other interest expense	1,393,372	1,548,000	1,450,000	650,000	2,100,000	44.8%
Interest during construction	(328,333)	(450,000)	(680,000)	230,000	(450,000)	-33.8%
Total Non Operating Expense	**4,162,938**	**4,100,000**	**4,310,000**	**440,000**	**4,750,000**	**10.2%**
Total Expenses (Function Cost)	**43,025,548**	**45,984,575**	**45,877,500**	**3,069,813**	**48,947,313**	**6.7%**
Net Income	**8,715,476**	**5,666,425**	**5,935,500**	**(3,207,813)**	**2,727,687**	**-54.0%**
Appropriation						
Total Expenses			**45,877,500**	**3,069,813**	**48,947,313**	
Less: Non Cash items						
Depreciation and amortization			8,500,000	1,250,000	9,750,000	
Amortization of debt expense			40,000	(8,000)	32,000	
Interest during construction			(680,000)	230,000	(450,000)	
Total Non-Cash			7,860,000	1,472,000	9,332,000	
Amount to be Appropriated (Cash Expenses)			**38,017,500**	**1,597,813**	**39,615,313**	

Anchorage Wastewater Utility
Reconciliation from 2015 Revised Budget to 2016 Approved Budget

	Appropriation	Positions FT	PT	T
2015 Revised Budget	45,877,500	276	2	7
Transfers (to)/from Other Agencies				
- Charges from other departments	(92,687)	-	-	-
Debt Service Charges				
- Interest	440,000	-	-	-
Changes in Existing Programs/Funding for 2016				
- Salary and benefits adjustments	573,232	-	-	-
- Software Maintenance	16,393	-	-	-
- Chemicals	100,000	-	-	-
- Utilities	211,500	-	-	-
- Merchant Fees	68,000	-	-	-
- Bad Debt Expense	75,000	-	-	-
- Depreciation	1,250,000	-	-	-
- MUSA	174,929	-	-	-
2016 Continuation Level	**48,693,867**	**276**	**2**	**7**
2016 Proposed Budget Changes				
- Remove 1/2 Time Permit Coordinator Position, never filled	(37,278)	(1)	-	-
- Adjustment to capital labor for 2016.	57,272	-	-	-
- Adjust Overtime to Current pay rates	36,500	-	-	-
- Adjust Capital Overhead	100,000	-	-	-
- Add 2 Call Center Representatives	86,196	2	-	-
- Remove AWU portion of 2015 aerial imagery capture.	(125,000)	-	-	-
- Remove 1 Time GIS Grant.	(87,500)	-	-	-
- Air permit SSI Compliance	125,000	-	-	-
- Add 4 person line cleaning crew for large diameter pipe cleaning, positions would be filled 4th quarter 2016.	98,085	4	-	-
- Miscellaneous (rounding)	171	-	-	-
2016 Approved Budget	**48,947,313**	**282**	**2**	**7**
2016 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation and amortization	(9,750,000)	-	-	-
- Amortization of debt expense	(32,000)	-	-	-
- Interest during construction	450,000	-	-	-
2016 Approved Budget (Appropriation)	**39,615,313**	**282**	**2**	**7**

Workforce Authorized per Budget is for both Water and Wastewater utilities.

Anchorage Wastewater Utility
2016 - 2021 Capital Improvement Program
(in thousands)

Project Category	2016	2017	2018	2019	2020	2021	Total
Equipment	5,975	4,418	3,671	3,303	3,301	3,255	23,923
Plant	17,205	7,618	5,441	13,872	2,604	6,580	53,320
Pipe	11,020	23,114	26,888	19,825	32,095	29,165	142,107
Total	**34,200**	**35,150**	**36,000**	**37,000**	**38,000**	**39,000**	**219,350**

Funding Source	2016	2017	2018	2019	2020	2021	Total
Debt	27,200	29,150	30,000	31,000	32,000	30,000	179,350
Grants	1,000	1,000	1,000	1,000	1,000	1,000	6,000
Equity/Operations	6,000	5,000	5,000	5,000	5,000	8,000	34,000
Total	**34,200**	**35,150**	**36,000**	**37,000**	**38,000**	**39,000**	**219,350**

Anchorage Wastewater Utility
2016 Capital Improvement Budget
(in thousands)

Project Title	Debt	State/Fed Grant	Equity/ Operations	Total
2nd Avenue and Post Road Sewer Rehabilitation	496	-	-	496
7th-9th Avenue I Street-LM Alley Sewer Upgrades	874	-	-	874
ADOT-MOA-Emergency-Sewer	1,500	-	-	1,500
Asplund Clarifiers Upgrades	1,000	-	-	1,000
Asplund Gravity Thickener Rehabilitation	400	-	-	400
Asplund Grit Facility Improvements	700	-	-	700
Asplund Process Water Supply Rehabilitation	-	1,000	-	1,000
Blueberry Sewer Rehabilitation	470	-	-	470
Customer Information System Enhancements	-	-	360	360
Eagle River Wastewater Treatment Facility Rehabilitation	6,400	-	-	6,400
East 42nd Avenue Sewer Rehabilitation	239	-	-	239
Engineering Project Management Tools - Sewer	-	-	45	45
Facility Equipment - Sewer	-	-	100	100
Facility Plant - Sewer	-	-	500	500
Fish Creek Interceptor Phase II	1,000	-	-	1,000
Flower-Park Glenn to 4th Sewer Upgrade	133	-	-	133
Geographic Information Systems Application Development	-	-	160	160
Hydraulic Model Upgrades	-	-	50	50
Information technology Infrastructure	-	-	685	685
Information Technology Master Plan Study - Sewer	-	-	52	52
Interceptor and Trunk Rehabilitation	353	-	-	353
Interceptor C: Force Main Gravity Junction Rehabilitation	750	-	-	750
King Street Backup Power Upgrades	1,300	-	-	1,300
King Street Main Building 1st Floor Office Improvements	270	-	-	270
King Street Main Building Exterior Upgrades	385	-	-	385
King Street Main Building Mechanical Upgrades	400	-	-	400
King Street Septage Receiving Station	100	-	-	100
King Street Shop Improvements	650	-	-	650
King Street Warm Storage Building Upgrades	4,110	-	-	4,110
Large Diameter Sewer Cleaning Equipment	-	-	1,670	1,670
Line Truck (94218) Combination Cleaner (94940)	-	-	560	560
Miscellaneous Information Technology Systems	-	-	738	738
ML&P - Starview Drive Sewer Upgrades	190	-	-	190
Plant Oversize and Betterments-Sewer	-	-	25	25
PS 30/31 Force Main and Facility Upgrades	2,200	-	-	2,200
SCADA Equipment	500	-	250	750
Security Improvements-Sewer	250	-	-	250
Sewer Rehabilitation Preliminary Engineering	430	-	-	430
Trunk Interceptor Extension	2,000	-	-	2,000
Turpin Septage Receiving Station	100	-	-	100
Vehicles-Sewer	-	-	360	360
Water Quality Management and Environmental Compliance Monitoring Reporting	-	-	45	45
Work Management System	-	-	400	400
Total	**27,200**	**1,000**	**6,000**	**34,200**

Anchorage Wastewater Utility
Statement of Cash Sources and Uses

	2014 Actual	2015 Proforma	2016 Approved
Sources of Cash Funds			
Operating Income	18,152,084	14,578,000	12,613,000
Depreciation, net of amortization	7,843,888	9,112,000	9,750,000
Transfer from Escrow Account	-	2,317,531	-
Grant Proceeds	560,460	1,000,000	1,000,000
Special Assessment Proceeds	351,374	300,000	300,000
State of Alaska Loan Proceeds	1,672,810	5,000,000	5,000,000
Bond/Other Loan Proceeds	5,700,000	15,500,000	17,000,000
Miscellaneous Non-Operating Revenues	19,433	15,000	15,000
Interest Received	299,535	459,000	290,000
Changes in Assets and Liabilities	211,717	425,574	111,000
Total Sources of Cash Funds	**34,811,301**	**48,707,105**	**46,079,000**
Uses of Cash Funds			
Capital Construction	13,657,447	27,620,400	32,338,000
Debt Principal Payment	5,402,093	5,994,258	6,859,000
Debt Interest Payments	4,302,913	4,850,950	5,162,000
Interfund Loan from Water Utility	-	-	-
Transfer to Escrow Account	2,317,531	-	-
MUSA	5,386,761	5,285,575	5,440,000
Total Uses of Cash Funds	**31,066,745**	**43,751,183**	**49,799,000**
Net Increase (Decrease) in Cash Funds	3,744,556	4,955,922	(3,720,000)
Cash Balance, January 1	22,203,522	25,948,078	30,904,000
Cash Balance, December 31	**25,948,078**	**30,904,000**	**27,184,000**
Detail of Cash and Investment Funds			
General Cash Less Customer Deposits	22,104,938	25,207,000	24,825,000
Construction Cash	2,311,949	4,197,000	859,000
Operating Fund Investment & Customer Deposits	1,531,191	1,500,000	1,500,000
Cash Balance, December 31	**25,948,078**	**30,904,000**	**27,184,000**

About Anchorage Water & Wastewater

Anchorage Water Utility History
From the first intake of water at Lower Ship Creek, and a few miles of woodstave water lines downtown more than 90 years ago, Anchorage's public water utility has grown into an enterprise with a net plant in service of approximately $502 million that delivers nearly 27 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. In 1929, 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, AWWU tapped this aqueduct and connected a 7.8 mile long transmission main (intake portal) to provide water from the Lake to the Eklutna Water Treatment Facility. 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).

Anchorage Wastewater 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 to much of the area between Ship Creek and Chester Creek, west of Cordova Street. 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. The wastewater utility is now owned and governed by the Municipality of Anchorage as a result of unification of the City of Anchorage and the GAAB on September 15, 1975. Anchorage’s public wastewater utility has grown into an enterprise with a net plant in service of approximately $371 million.

Service
Anchorage's enjoyment of drinking water is just one part of the AWWU system. After the day's water is used, it must be treated before it is returned to the environment. The 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.

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 Assembly approval. 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, 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 (APUC), 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. This commission 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 be 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 (GASB) 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 (NARUC). 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.

Environmental Regulation
AWWU's activities are dictated by a wide variety of environmental regulations administered by the EPA and the 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 Wastewater Treatment Facility 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 45% of the BOD 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 and Girdwood Wastewater Treatment facilities 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 2014, the Asplund Wastewater Treatment Facility treated an average of 26.9 million gallons per day (mgd). The Eagle River Wastewater Treatment Facility treated an average 1.4 mgd and the Girdwood Wastewater Treatment Facility treated 0.4 mgd. The three facilities have a combined design capacity of 61.1 mgd. The wastewater collection system has approximately 755 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 was upgraded in 1982, and expanded and upgraded again in 1989.

In conjunction with the permit renewal process, a facilities plan update was prepared in 1999. The 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 a cumulative $40 million worth of improvements to the solids handling, headworks, administration, laboratory, incineration, and thickening processes and control and power systems. These projects, along with careful operation, have made Asplund a modern, state-of-the-art treatment facility. ASU continues to maintain its treatment plants. Additional projects at Asplund, 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 Water Treatment Facility (WTF) now provides, on average,90 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’s 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.