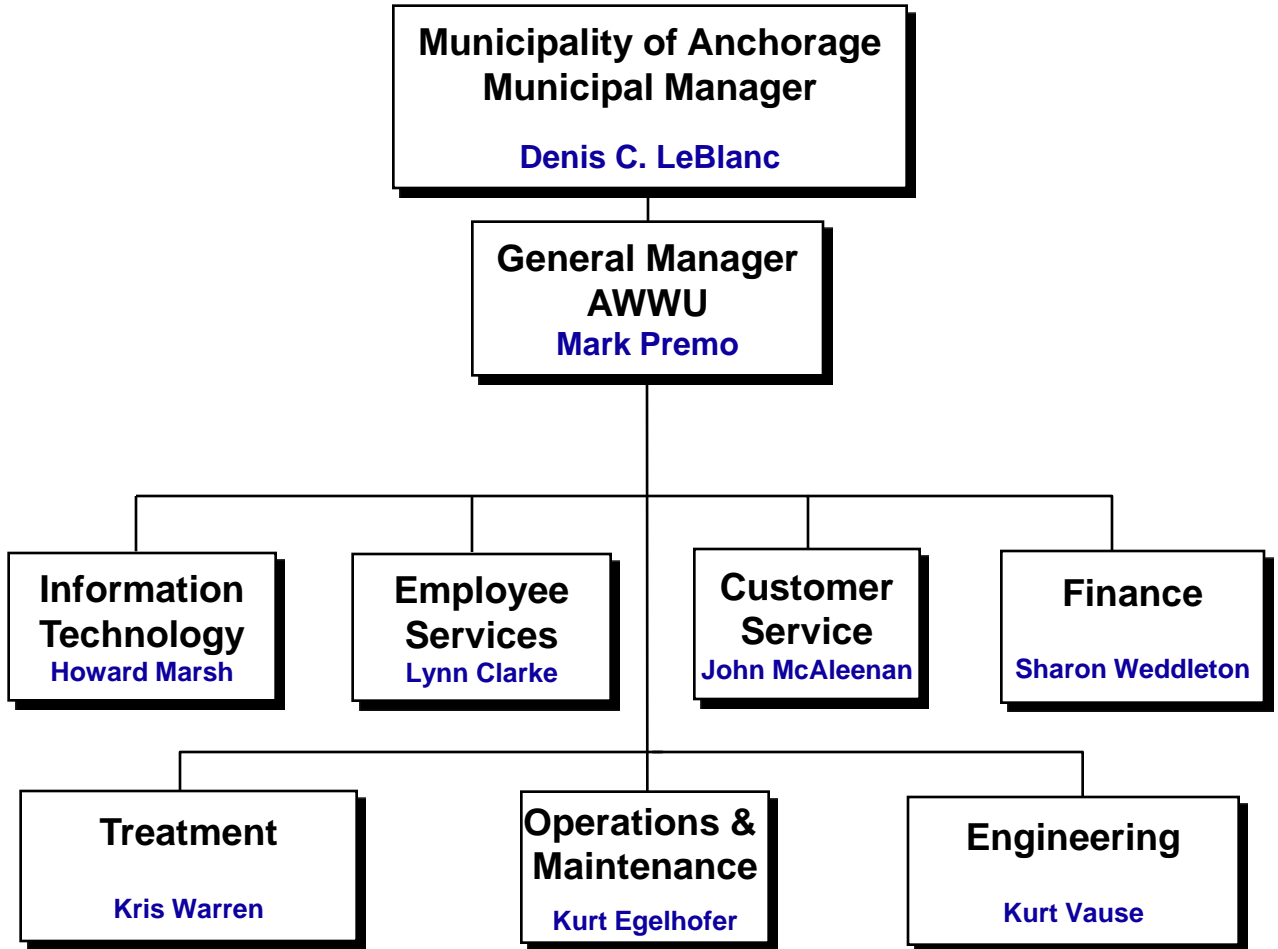


**ANCHORAGE WATER AND  
WASTEWATER UTILITY**

# ANCHORAGE WATER & WASTEWATER UTILITY

## ORGANIZATION CHART



## **ANCHORAGE WATER & WASTEWATER UTILITY PROFILE**

**ORGANIZATION:** Anchorage Water and Wastewater Utility (AWWU) is the largest water and wastewater utility in the State of Alaska. The service area equals 125 square miles of metropolitan Anchorage, from Eklutna to Girdwood. The Utility collects water from two major surface watersheds and many deep underground wells. The Utility treats and distributes water to approximately 53,800 residential, commercial, military, and industrial accounts throughout the urban areas of Anchorage. The Utility's wastewater facilities serve approximately 53,700 residential, commercial and military accounts. This represents an estimated population base of 220,600 residents who receive water service and 236,120 residents who receive sewer service.

AWWU's wastewater treatment plants operate 24 hours per day, discharging treated wastewater into Cook Inlet, Eagle River and Glacier Creek. The public investment in these systems, treatment plants, mains and sewers, laboratories, and reservoirs, totals approximately \$906 million. AWWU employs 270 people and spends approximately \$68 million annually to operate the water and wastewater systems. Through education, training, certification programs, field experience and longevity of service, AWWU's employees are a dedicated team. Treatment plant operators, engineers, laboratory technicians, maintenance craftsmen, accountants, customer service representatives and field personnel all working together to ensure Anchorage's water and wastewater systems perform efficiently.

Although they share one workforce, the utilities are separate economic and regulated entities. A profile of each utility is shown below:

### **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 75 years ago, Anchorage's public water utility has grown into a third-of-a-billion-dollar enterprise that delivers nearly 27 million gallons of water to customers each day, for less than \$1 per household. 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. The entire service area is now governed by the Municipality of Anchorage as a result of unification of the City of Anchorage and the Greater Anchorage Area Borough on September 15, 1975.

**SERVICE:** Anchorage's water supply is dominated by two surface watersheds, Eklutna Lake and Ship Creek. Several deep wells provide the Utility with supplementary sources of water. Until 2000, Ship Creek Water Treatment Plant was the main water production facility. With the shift of 24-hour operations to the Eklutna Water Treatment Facility, AWWU has made better use of its higher-pressure water and more effective use of personnel. The Eklutna water supply originates at Eklutna Lake, a drought-resistant natural reservoir. Fed by runoff from Eklutna Glacier and snow-pack from the Chugach Mountains, the eight-mile

long lake can supply up to 300 million gallons of water each day. The Eklutna Water Treatment Facility is capable of treating up to 35 million gallons per day.

Ship Creek remains an important water source for Anchorage with the Ship Creek Water Treatment Facility in standby mode. From spring through fall, the waters of Ship Creek and the treatment facility are able to provide as much as 9 million gallons of water per day.

AWWU also operates 17 wells that can provide up to 15 million gallons per day.

The Girdwood community is served by a stand-alone system which includes two AWWU wells.

AWWU's construction program continues to emphasize repair and rehabilitation of its existing system and resources, and continues plans to deliver greater quantities of water to South and West Anchorage. The Utility's largest ongoing project is the construction of the Anchorage Loop Water Transmission Main. Completion of Phase IV will connect the Loop to the new Service High Reservoir and represent the final phase of the Loop project. This project began in 2001 with the formation of a Mayor appointed Task Force to gather public input and select a final route. AWWU also completed an \$8 million expansion of the water system in Eagle River. This new three million gallon reservoir, two new booster stations, and new transmission main provide improved water service and fire protection to the residents of lower Eagle River Valley.

AWWU also plans to expand its service area in Girdwood Valley and is in the process of filing an application to expand the Utility's service throughout Girdwood Valley, including the Old Girdwood Townsite.

REGULATION: Since December 1970, AWU has been regulated by the Alaska Public Utilities Commission (APUC), which was renamed the Regulatory Commission of Alaska (RCA) on July 1, 1999. AWU holds a Certificate of Convenience and Necessity for serving portions of the Anchorage Bowl, Eagle River and Girdwood. This commission, prior to implementation, must approve all rates and tariffs. 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.

In addition to the RCA, the Anchorage Water and Wastewater Utility Advisory Commission acts as an oversight body to advise the Mayor and Assembly on Utility matters. The seven members of this Commission are appointed to staggered three-year terms by the Mayor and approved by the Assembly. Commission members annually elect a Chair and Vice-Chair. AWWU's General Manager serves as the Commission's Executive Secretary.

The Commission meets once a month to review service policies and practices and reviews the budgets and operations of AWWU and reports to the Mayor on an annual basis.

ENVIRONMENTAL MANDATES: In recent years, several federally mandated programs have directly impacted the Utility's water operating costs. The Safe Drinking Water Act, Americans with Disabilities Act, and Community Right-to-Know are some of the current and ongoing laws that impact the Utility.

PHYSICAL PLANT: AWU operates two treatment plants and operates 17 wells on an as needed basis. Average daily water production in 2003 was 25,873,427 gallons per day (gpd). AWU has the capacity to provide up to 59 million gpd. Average 2003 well production is 3,564,366 gpd. The distribution transmission system equals approximately 840 miles of waterline and 6,271 fire hydrants. Plant in Service, at cost as of December 2003: \$509 million.

## 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 too 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. The Utility is now owned and governed by the Municipality of Anchorage as a result of unification of the City of Anchorage and the Greater Anchorage Area Borough on September 15, 1975.

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.

REGULATION: Since 1971, the Anchorage Wastewater Utility has been regulated by the Alaska Public Utilities Commission (APUC), which was renamed the Regulatory Commission of Alaska (RCA) on July 1, 1999. The Utility holds a Certificate of Convenience and Necessity for serving the Anchorage Bowl, Eagle River, and Girdwood. This commission, prior to implementation, must approve all rates and tariffs. They also regulate service areas and service quality. The RCA is composed of five members appointed to six-year staggered terms by the Governor and confirmed by the State Legislature.

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The Committee meets once a month to review service policies and practices and reviews the budgets and operations of AWWU and reports to the Mayor on an annual basis.

ENVIRONMENTAL MANDATES: The three of AWWU's wastewater treatment facilities are subject to discharge limits imposed by individual National Pollutant Discharge Elimination System (NPDES) permits issued by the EPA. Each permit is good for a period of 5 years after which they may be renewed. All three permits expire in 2005. AWWU is currently preparing renewal applications which must be submitted 6 months in advance of the expiration date. During the permit renewal process, AWWU, EPA and the Alaska Department of Environmental Conservation will meet frequently to discuss changes to the permits and their monitoring requirements. The renewed permits will likely impose new monitoring requirements on AWWU and may also delete some of the existing requirements that have proven to be unnecessary.

Because the Asplund Wastewater Treatment Facility operates under a secondary treatment waiver, considerable effluent and receiving water monitoring is required to assure the discharge is safe for Cook Inlet. This monitoring program, which has been conducted since 1986, has thoroughly documented that the Asplund facility's effluent has caused no adverse effects to the marine environment. Cook Inlet is home to the second highest tides in North America. Additionally the numerous glacial rivers that flow into Cook Inlet contribute to extremely high silt content in the receiving water. The silt blocks sunlight prohibiting the growth of indigenous marine life making the inlet a virtually sterile environment which is suitable for a primary effluent discharge.

PHYSICAL PLANT: The John M. Asplund Wastewater Treatment Facility is one of the few facilities in the nation operating under an Environmental Protection Agency (EPA) waiver from secondary treatment. The primary treatment provided by this facility removes up to 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 2003, the Asplund Wastewater Treatment Facility treated an average 28.3 million gallons per day (mgd). The Eagle River Wastewater Treatment Facility treated an average 1.44 mgd and the Girdwood Wastewater Treatment Facility treated .44 mgd. The three facilities have a design capacity of 61.5 mgd. Plant in Service, at cost as of December 2003: \$398 million.

The collection system has approximately 713 miles of lines. With its expansion in 1991, the Eagle River Plant has the capacity to provide for growth to the year 2010. The Girdwood Plant upgrades were completed in 1998, which provide an additional 10 years of sufficient capacity for the resort community.

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.

Ingenuity and vigilant maintenance have consistently enabled the Utility to operate this facility at its optimum level.

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 \$15 million worth of improvements to the solids handling, headworks, administration, incineration, and thickening process areas of the facility. Construction of new solids handling improvements including sludge dewatering, storage and load out facilities was completed in 2001. Design of headworks improvements began in September 2002. Construction commenced in 2004. Future projects to complete the work identified in the 1999 Facilities Plan are listed in AWWU's 6-year Capital Improvement Program.

# **ANCHORAGE WATER & WASTEWATER 2005 OPERATING & CAPITAL BUDGET ASSUMPTIONS**

Below are the general budget assumptions provided by the Office of Management and Budget, plus specific AWWU assumptions, used in the preparation of the Anchorage Water Utility and Anchorage Wastewater Utility 2005 Operating and Capital Budgets.

## **REGULATION**

Assume continued economic regulation by the Regulatory Commission of Alaska (RCA) for AWWU. AWWU status may change in 2005.

## **UTILITY OWNERSHIP**

Assume continued Municipal ownership in 2005.

## **MUNICIPAL UTILITY SERVICE ASSESSMENT (MUSA)**

Assume mill rates for MUSA/MESA (in lieu of taxes) will be the same as 2004 and continued gross revenue assessment.

## **REVENUE DISTRIBUTIONS**

Assume 5% of net income will be paid unless prohibited by Regulatory Commission of Alaska or FAA grant terms.

Dividends should be budgeted at 5% of gross receipts budget (operating and non-operating), unless prohibited by Regulatory Commission of Alaska or Federal Aviation Administration.

Dividends are not an operating expense but, rather, an equity transfer.

## **INTEREST**

Assume debt service for new insured 20-year GO bonds as well as new insured revenue bonds to be 5.25% - 5.75%. Short-term interest income should be calculated assuming a rate of 1.00% - 1.50%. Short-term interfund borrowing should be assumed to the 1.50% to 2.00%.

## **INTRAGOVERNMENTAL CHARGES (IGCs)**

Use a preliminary estimate of 10% over 2004 budgeted IGCs. Utilities will be allowed to adjust budgets prior to official submission to Assembly once better estimates are known.

## **RATE INCREASES**

Utilities should not expect the above-referenced budget assumptions to be used as the sole basis for proposing rate increases.



## **POPULATION**

Assume that Anchorage's population will be approximately 278,000 in 2004 and 282,000 in 2005

## **INFLATION**

Utilities should consider appropriate inflationary increases in developing their 2005 Budget.

## **COMPENSATION COSTS (Salaries and Benefits)**

For budgetary purposes assume increases in accordance with current or soon-to-be negotiated labor agreements for Plumbers & Pipefitters, Laborers, Teamsters, Machinists, Operating Engineers, and IBEW. For AMEA, assume 3.3%, for NON-REPS, 3.3% increase.

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## **2005 BUDGET IMPACTS/ASSUMPTIONS SPECIFIC TO AWWU**

- The Utility was not successful in 2004 in obtaining self regulation status. This is still a stated goal of the Utility and will be discussed with the Administration 3<sup>rd</sup> quarter 2004, in anticipation of the State's 2005 Legislative session. With the self regulation strategy undefined for 2005 the Utility did not project any revenue distributions.
- AWU and ASU were granted an interim, refundable rate increase in 1<sup>st</sup> quarter of 2004. This was the first of a two stage rate increase. The expectation was the Regulatory Commission of Alaska (RCA) would act on the filing in 2004 and make the two stage rate increase permanent. The RCA has not acted and is not expected to grant permanent rates until 2<sup>nd</sup> quarter 2005. As such, AWU will request 7.76% and ASU will request 6.83% as interim refundable rate increase effective January 1, 2005.

## **ANCHORAGE WATER and WASTEWATER UTILITY HIGHLIGHTS AND FUTURE EVENTS**

### **AWWU Continuous Improvement and Leaders of Change**

AWWU has a mature continuous improvement program that was initiated in 1998 as the Excellence Adventure. A twelve member employee team guides the process under the vision of the AWWU Leadership Team. Working together successfully through a combination of Utility-wide reengineering teams and Division teams, the employees and managers of AWWU are developing a more efficient and competitive business operation. This success enabled rate increases to be deferred for a number of years by holding expenses down.

The Leaders of Change was formed in 2001 to leverage the energy and expertise of the strong AWWU supervisor group in moving continuous improvement into the day to day business of AWWU. This group has defined a process to help hire to the culture and is now developing a knowledge retention program for the entire Utility to help mitigate the impact of many impending retirements.

### **Anchorage Loop Water Transmission Main**

The “Loop” will supply water from the Eklutna Water Treatment Facility through a system of large diameter, high-pressure water transmission mains constructed in the Anchorage Bowl. When complete, the Loop will virtually eliminate areas without water or with low water pressure during extended periods of high water demand within the bowl. The Loop is an eight phase project, with all phases complete except one, Phase IV. The need to complete this phase is critical for AWWU to meet its customer’s water supply needs in southeast and southwest Anchorage. With necessary permits now in hand, the final phase is moving forward.

Phase IV will extend from Tudor Reservoir Tanks, near Campbell Airstrip Road, west along in south side of Tudor Road to Bragaw Street. Construction is planned to begin late in 2004 after contracts have been awarded and material purchased with completion in 2005. From Tudor and Bragaw south, the 48-inch water line will be built in combination with the State of Alaska Department of Transportation Bragaw Street extension, Tudor Road to Abbott Loop Road. Phase IV will most likely be completed in sections, as it parallels the road project, and will cost an estimated \$30 million when complete.

The Loop Project began prior to 1996 when Phase VIII was completed. A transmission main was extended along the eastern boundary of International Airport Road from west Turnagain to Sand Lake, where the 5 million gallon Kincaid Reservoir was built. The project cost for Phase VIII was \$9 million.

Phases I – III, from the Ship Creek Water Treatment Facility to the Tudor Reservoir Tanks, was completed in 1997 at a cost of \$21 million. Approximately 60% of the financing for these phases came from State of Alaska grants.

Phase V, from Abbott Loop Road to 88<sup>th</sup> Avenue and the 10 million gallon Service Reservoir, was completed and placed on-line in October 2001. The total project cost for Phase V and the reservoir was approximately \$10 million.

Phase VII connects new water lines in Sand Lake to the existing system. Surface restoration was finished in summer 2000. Total project cost for Phase VII was \$7 million.

Phase VI of the Loop, connects Phase VII to a transmission main at Dimond Boulevard. Total cost of this phase was \$5 million and it was completed in the fall of 2001.

## **SCADA**

Replacement of AWWU's aged supervisory control and data acquisition system (SCADA) has been underway since 2001. This 5 year effort is projected to be complete in 2006 at a cost about \$24 million. The program includes construction of a new Wide Area Network (WAN); improvements to each of AWWU's water and wastewater treatment plants; new SCADA equipment and controls in over 100 remote sites (reservoirs, booster stations, pressure reducing vaults, well houses and other vaults) throughout the water distribution network; and new SCADA and controls for the wastewater collection system lift stations. Part of the program is to bring all sites into compliance with current electric building codes. When complete, AWWU will have improved supervision and control of all its facilities spread throughout its service areas.

## **System Expansion – Northern Communities and Girdwood**

Expansion of the existing AWWU water system in the South Chugiak area is underway, with route selection and preliminary design already initiated. Sewer improvements are also planned for portions of North Eagle River, north of Fire Lake, and South Chugiak.

These improvements will be coordinated with large water and sewer improvement districts created in 2003 to serve a portion of South Chugiak between the New and Old Glenn Highways. This project also includes coordination of sewer improvements to Chugiak High and Birchwood Elementary Schools. Construction is anticipated to start in 2004, which will include multiple construction projects, and is anticipated to be complete by the end of 2005.

In Eagle River, AWWU will be working cooperatively with the Anchorage school District to extend public facilities to the new Eagle River High School. AWWU will be involved in extending water transmission and sewer mains so the new school is afforded public services when needed. This project was started in 2003 and will be complete by 2005.

In addition, water system improvements in Girdwood are underway and include expansion of a transmission main to extend service to the New Girdwood Townsite area. This project began with design in 2001. Construction to the new Townsite area and Girdwood School is anticipated to be complete by 2004. Subsequent phases of the water system expansion beyond the school are to be performed in later years to complete a looped water system for the upper Girdwood Valley.

Inclusive of local match, total funding for these projects is nearly \$11 million for the Northern Communities projects, \$1.9 million for the extensions near Eagle River High School, and

over \$8 million in Girdwood Valley. Federal Grants, ASD funds and assessments to benefited property owners provide a majority of these projects' funds.

### **Asplund Wastewater Treatment Facility Modifications**

Working to implement the results of an earlier Wastewater Facilities Plan effort, AWWU is undertaking a phased upgrade to the J. M. Asplund Wastewater Treatment Facility. The Asplund facility is the wastewater plant serving the Anchorage Bowl and also processes concentrated wastewater solids trucked from AWWU's other treatment facilities in Eagle River and Girdwood. The current phases of work include renovation of the Headworks area, and will be followed by process improvements to its sludge and scum handling and disinfection systems. In addition, AWWU will undertake instrumentation and control improvements to its multiple-hearth incinerator. Work started in 2003 will result in the construction of headworks improvements in 2004-2005. In addition, AWWU is planning to begin design of the sludge, scum and chemical feed systems in 2004, leading to construction in 2005-06. Finally, incinerator controls will be upgraded in 2004 and work will begin on modifications and upgrades to the incinerator shell.

### **Information Technology**

The IT Division will continue to integrate the implementation of the Utility's Relational Database Management System (RDBMS) and other relational databases with the MOA PeopleSoft modules in 2004/2005. The RDBMS conceptual design model is being used to provide a basic data structure and document the actual implementation of integrated systems.

The IT Division continues to promote the use of internet technology within the Utility in the continued development and implementation of Intranet/Internet applications along with Geospatial enabling technologies through 2005. These applications and data are used to enhance communication and electronic reporting by allowing real-time access to dynamic data through the use of browser technology, creating an Intranet/Internet portal to the Utility's electronic information. This will reduce training time due to the ability to access data from different systems and present it in a straightforward manner through easy to use browser screens.

The AWWU IT Master Plan is updated annually to reassess priorities and evaluate the applicability of technological advances to AWWU's business. In 2004/2005 AWWU will perform a major reassessment and update to the IT plan using the services of an outside consulting firm. The purpose of the Utility's information technology strategic plan is to provide a long-range strategy and a six-year planning horizon to incorporate information technologies into the Utility's business processes in a cost-effective manner. The objective is to provide a strategy to transform AWWU into a Utility whose information technologies are seamlessly integrated and maintain the most appropriate level of information technology utilization. The ultimate goal is to provide effective information management services and facilities that provide a long-term benefit to our customers at the most reasonable cost.

### **Utility Network Enhancements**

AWWU will upgrade its network services to better serve the rate-payer. The AWWU network connections to the Internet and to the remote offices of Girdwood and Asplund will be upgraded to provide faster access to network services to those employees who are not working at the 3000 Arctic site. Rate-payers will benefit by having faster access to the enriched set of services that include bill presentment and payment, the ability to publicly participate in capital projects, and otherwise communicate with the Utility in an interactive electronic manner.

### **Software Application Services**

The Utility will initiate a professional services contract with one or more vendors to provide the necessary support to implement the Utility's various IT related projects. This contract vehicle will provide the necessary contract skills to implement the Utility's IT Master Plan initiatives in the next twelve months. Projects include major upgrades, enhancements and new interfaces to AWWU's automated tools such as; Locates, Connections, Geospatial Portal, Complaint Tracking, Customer Information System, and Intranet/Internet Websites. These have been planned through the IT planning effort and are expenditures of capital funds to implement new systems or enhance and upgrade existing applications.

### **Maximo Software Upgrade**

The Operations & Maintenance Division is the primary sponsor for the Utility's Work Management System (WMS) from MRO with the product name of Maximo. Maximo is a full-featured maintenance management software product, and a major AWWU system that became fully operational in the year 2001. In 2004 AWWU initiated professional services contract with a vendor to support the upgrade of Maximo to its new version. This is a major upgrade that must be accomplished in an orderly and timely manner to maintain and retain the service license and support. This project has a completion date of 2005. The current Client/Server system will be upgraded to a Java based Web Client that will require reconfiguring screens, some updating of report tools and a moderate amount of database work.

### **Customer Information Systems (CIS)**

The Customer Service Division began the process to replace its Customer Information and Billing System (CIS) in June, 2003, by awarding a \$2.7 million contract to Indus Utility Systems, Inc. The current system and the technology used to administer and maintain it is old and out of date. Not only is the existing system using older technology that is not compatible with the Utility's other systems, it has become expensive to operate with regard to service charges, contract support and internal labor. AWWU is working with Indus Utility Systems, Inc. implementing this new billing system. The new CIS is due to "go live" in January, 2005. The new billing system will provide the customer access to their account over the Internet, bill presentment/payment on the Internet, and integration with other Utility applications, interactive voice response, and interfaces to other MOA and Utility applications.

## **Human Resources Delegation**

In January 2003, a conceptual intent to move Employee Services towards full delegation of authority for human resources functions was agreed upon between the AWWU General Manager and the former Mayor, George Wuerch. The delegation of authority was to encompass the areas of Position Classification, OEO/AA Investigations, Recruitment and Certification, and the PeopleSoft Database Maintenance. Employee Services was tasked to hire train and perform the aforementioned functions.

In April 2003, Employee Services began its reorganization efforts and added the following staff to develop the new human resources (HR) section: Human Resources Supervisor, Personnel Analyst, and a Personnel Technician. In November 2003, Employee Services was given the opportunity to job share a Job Classification Analyst with Municipal Light and Power (ML&P), with ML&P as the "home" base.

AWWU has developed new performance measures and is incorporating them into our fiscal planning with the expectation of achieving cost savings for the Utility and the Municipality of Anchorage. Some of our examples can be found through our Leadership Team, Continuous Improvement Team, Strategic Planning Committee, and our Employee Communications Committee. Our staff has trained diligently with the Municipality of Anchorage's Employee Relations Department. Our working relationship has strengthened into a business partnership. On January 1, 2004, AWWU was given full delegation of authority and continues its hard work by strengthening excellence in customer service, and moving toward our new vision of community, security, and prosperity.

# ANCHORAGE WATER UTILITY

## 11-YEAR SUMMARY

UTILITY FORMAT - 2005 OPERATING BUDGET (\$ in Thousands)											
	Actual				Proforma	Budget	Forecast				
Financial Overview	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Revenues	31,068	30,725	31,159	30,602	34,318	<b>37,954</b>	40,028	44,306	45,283	49,091	50,178
Expenses	25,097	25,489	27,237	27,382	32,670	<b>37,885</b>	39,703	41,604	43,388	45,113	46,674
Net Income (Loss)	5,971	5,236	3,922	3,220	1,648	<b>69</b>	325	2,702	1,895	3,978	3,504
Dividend to General Government	0	0	0	0	0	<b>0</b>	0	0	0	0	0
Increase in Net Assets	5,971	5,236	3,922	3,220	1,648	<b>69</b>	325	2,702	1,895	3,978	3,504
Workforce Authorized per Budget	265.5	265.5	266.5	267.0	270.5	<b>268.5</b>	268.5	268.5	268.5	268.5	268.5
Capital Improvement Program *	17,661	12,593	12,629	15,374	27,518	<b>22,255</b>	19,035	18,869	32,734	28,069	29,004
New Debt	8,402	5,007	1,603	964	19,595	<b>27,000</b>	23,000	17,000	18,000	16,000	17,000
New Plant (12/31)	332,615	347,685	351,458	349,197	368,140	<b>377,000</b>	390,700	403,930	416,700	428,900	440,640
New Assests (12/31)	47,216	52,453	56,374	59,594	61,242	<b>61,311</b>	61,636	64,338	66,233	70,211	73,715
Operating Cash	9,778	10,109	12,613	9,341	7,357	<b>6,732</b>	6,392	5,612	5,752	7,432	6,342
Construction Cash Pool	296	158	0	0	0	<b>0</b>	2,560	4,910	4,660	3,490	4,390
Restricted Cash	10,000	10,913	7,880	8,245	8,000	<b>7,740</b>	7,480	7,220	6,960	6,700	6,440
Total Cash	20,074	21,180	20,493	17,586	15,357	<b>14,472</b>	16,432	17,742	17,372	17,622	17,172
IGC's - General Government	1,447	1,487	1,717	1,634	1,909	<b>2,093</b>	2,114	2,146	2,178	2,210	2,244
MUSA	1,568	1,644	1,912	1,893	3,262	<b>5,803</b>	5,981	6,194	6,400	6,597	6,786
CCP Borrowing from Gen Govt	0	0	7,992	7,934	9,090	<b>1,240</b>	0	0	0	0	0
Total Outstanding LT Debt	112,098	112,903	109,606	105,470	119,780	<b>140,894</b>	157,810	170,115	181,218	190,463	198,951
Toatal Annual Debt Service	19,464	9,859	10,666	10,522	10,676	<b>11,932</b>	13,259	12,895	15,797	16,415	18,790
Debt Service Coverage (overall)	1.00	1.70	1.42	1.21	1.55	<b>1.58</b>	1.53	1.87	1.56	1.71	1.54
Debt/Equity Ratio	70 / 30	68 / 32	66 / 34	64 / 36	66 / 34	<b>70 / 30</b>	72 / 28	73 / 27	73 / 27	73 / 27	73 / 27
Rate Change Percent	0.00%	0.00%	0.00%	0.00%	13.61%	<b>7.76%</b>	3.00%	9.50%	0.00%	7.50%	0.00%
Single Family Rate	\$25.80	\$25.80	\$25.80	\$25.80	\$29.45	<b>\$31.32</b>	\$32.26	\$35.32	\$35.32	\$37.97	\$37.97
Statistical/Performance Trends:											
Number of Customers	50,952	51,847	52,628	53,404	54,205	<b>55,289</b>	56,671	57,238	58,669	59,256	60,737
Average Treatment (GPD) (000)	25,900	26,608	27,000	27,500	28,000	<b>28,500</b>	29,000	29,500	30,000	30,500	31,000
Miles of Water Lines	802	811	815	830	836	<b>844</b>	850	856	860	865	870
Number of Hydrants	5,963	6,024	6,087	6,162	6,209	<b>6,271</b>	6,319	6,370	6,404	6,438	6,479
* 2000-2004 reflect actual capital expenditures. 2005-10 is Capital Improvement Program.											
**Rate increase of 7.76% is an interim refundable request effective 1/1/05. This rate increase is the second part of a two part rate increase filed in 2004.											
NOTE: Rate uncreases are shown in the future years for purposes of projections only and have not been approved for implementation. It is intended that they be reviewed closely each year in conjunction with establishing operating budgets. Utilities will continue to strive to find ways to avoid projected rate increases.											

# ANCHORAGE WASTEWATER UTILITY

## 11-YEAR SUMMARY

UTILITY FORMAT - 2005 OPERATING BUDGET (\$ in Thousands)

Financial Overview	Actual				Proforma	Budget	Forecast				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Revenues	25,720	24,848	25,594	25,318	27,421	<b>29,971</b>	32,429	36,037	36,922	40,158	41,087
Expenses	21,012	21,285	20,190	21,251	24,581	<b>29,810</b>	31,021	32,993	34,993	36,485	37,957
Net Income (Loss)	4,708	3,563	5,404	4,067	2,840	<b>161</b>	1,408	3,044	1,929	3,673	3,130
Dividend to General Government	0	0	0	0	0	<b>0</b>	0	0	0	0	0
Increase in Net Assets	4,708	3,563	5,404	4,067	2,840	<b>161</b>	1,408	3,044	1,929	3,673	3,130
Workforce Authorized per Budget	265.5	265.5	266.5	267.0	270.5	<b>268.5</b>	268.5	268.5	268.5	268.5	268.5
Capital Improvement Program *	7,143	10,451	12,152	12,816	22,343	<b>19,988</b>	21,597	18,454	15,844	23,009	24,059
New Debt (Bonds, Loan Fund)	1,138	6,044	1,850	5,127	23,954	<b>3,000</b>	22,500	22,500	17,500	12,500	13,500
New Plant (12/31)	238,306	244,535	244,781	246,376	256,420	<b>265,040</b>	276,140	286,940	297,440	307,540	317,340
New Assests (12/31)	27,513	31,076	36,480	40,546	43,386	<b>43,547</b>	44,955	47,999	49,928	53,601	56,731
Operating Cash	7,164	9,629	11,184	6,469	5,270	<b>2,921</b>	3,827	4,803	5,159	5,055	5,096
Construction Cash Pool	152	0	0	0	0	<b>0</b>	0	0	0	497	1,482
Restricted Cash	386	744	460	366	350	<b>350</b>	350	350	350	350	350
Total Cash	7,702	10,373	11,644	6,835	5,620	<b>3,271</b>	4,177	5,153	5,509	5,902	6,928
IGC's - General Government	998	1,532	1,673	1,684	2,118	<b>2,336</b>	2,359	2,395	2,431	2,467	2,504
MUSA	1,085	1,113	1,191	1,175	2,285	<b>3,800</b>	3,944	4,105	4,261	4,412	4,558
CCP Borrowing from Gen Govt	0	4,183	13,042	11,892	3,103	<b>18,203</b>	13,803	4,443	473	0	0
Total Outstanding LT Debt	52,203	52,188	47,828	45,982	62,912	<b>58,837</b>	75,670	95,728	110,721	120,245	130,250
Toatal Annual Debt Service	9,293	8,669	8,911	8,739	8,864	<b>9,473</b>	8,116	5,958	7,094	8,352	9,429
Debt Service Coverage (overall)	1.37	1.35	1.31	1.31	1.37	<b>1.19</b>	1.65	2.78	2.39	2.38	2.17
Debt/Equity Ratio	60 / 40	58 / 42	52 / 48	49 / 51	56 / 44	<b>54 / 46</b>	59 / 41	64 / 36	66 / 34	67 / 33	67 / 33
Rate Change Percent	-2.75%	0.00%	0.00%	0.00%	8.06%	<b>6.83%</b>	6.00%	9.50%	0.00%	7.50%	0.00%
Single Family Rate	\$21.20	\$21.20	\$21.20	\$21.20	\$22.90	<b>\$24.35</b>	\$25.81	\$28.26	\$28.26	\$30.38	\$30.38
Statistical/Performance Trends:											
Number of Customers	51,343	52,087	52,869	53,639	54,175	<b>55,259</b>	56,640	57,207	58,637	59,223	60,704
Average Treatment (GPD) (000)	31,350	29,800	31,500	32,000	32,500	<b>33,000</b>	33,500	34,000	34,500	35,000	35,500
Miles of Wastewater Lines	702	707	713	719	724	<b>731</b>	737	742	746	751	755
* 2000-2004 reflect actual capital expenditures. 2005-10 is Capital Improvement Program.											
**Rate increase of 7.76% is an interim refundable request effective 1/1/05. This rate increase is the second part of a two part rate increase filed in 2004.											
NOTE: Rate uncreases are shown in the future years for purposes of projections only and have not been approved for implementation. It is intended that they be reviewed closely each year in conjunction with establishing operating budgets. Utilities will continue to strive to find ways to avoid projected rate increases.											



## Anchorage Water and Wastewater Utility Work Force Projections

Divisions	2002	2003	2004	2005	2006	2007	2008	2009
Manager	5	5	5	5	5	5	5	5
Employee Services	7	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Information Technology	16	16	16	17	17	17	17	17
Ops & Maintenance	82	82	81.5	81.5	81.5	81.5	81.5	81.5
Treatment	59	59	59	59	59	59	59	59
Finance	18	18	18	18	18	18	18	18
Engineering	31	31	31	32	32	32	32	32
Customer Services	43	43	47 *	42	42	42	42	42
Total Full Time	261	261.5	265	262	262.0	262	262	262
Temporary FTE'S	5.5	5.5	5.5	6.5	6.5	6.5	6.5	6.5
Total FTE'S	266.5	267	270.5	268.5	268.5	268.5	268.5	268.5

\* 4 Positions to backfill staff working on CIS project

## Anchorage Water Utility Statement of Revenues and Expenses

	<b>2003 Actual</b>	<b>2004 Proforma</b>	<b>2005 Budget</b>
<b>Operating Revenue</b>			
Residential Sales	20,495,250	23,137,000	25,747,000
Commercial Sales	6,139,039	6,922,000	7,703,000
Public Fire Protection	2,475,000	2,766,000	3,018,000
Hydrant Use Charge	199,750	229,000	250,000
Miscellaneous	1,025,455	1,085,000	1,157,000
<b>Total Operating Revenue</b>	30,334,494	34,139,000	37,875,000
<b>Operating Expense</b>			
Source of Supply	2,316,923	2,747,000	2,581,000
Treatment	2,769,428	3,278,000	3,136,000
Transmission	3,663,371	4,290,000	4,680,000
Customer Accounts	1,811,646	2,198,000	2,026,000
General & Administrative	4,888,466	5,800,000	7,389,000
Depreciation*	4,552,518	5,300,000	5,600,000
MUSA	1,893,335	3,262,000	5,803,000
<b>Total Operating Expense</b>	21,895,687	26,875,000	31,215,000
<b>Operating Income</b>	8,438,807	7,264,000	6,660,000

\* Depreciation of contributed plant not included.

## Anchorage Water Utility Statement of Revenues and Expenses

	<b>2003 Actual</b>	<b>2004 Proforma</b>	<b>2005 Budget</b>
<b>Non-Operating Revenue</b>			
Rental Income	29,403	29,000	29,000
Interest Income, Net	237,349	150,000	50,000
Miscellaneous Income	0	0	0
Total Non-Operating Revenue	266,752	179,000	79,000
<b>Non-Operating Expense</b>			
Amort Deffered Debit/Discounts	799,978	825,000	850,000
Interest - Bond	5,107,932	5,350,000	6,180,000
Interest - SRF Loans	372,101	370,000	390,000
Capitalized Interest	(793,372)	(750,000)	(750,000)
Total Non-Operating Expense	5,486,639	5,795,000	6,670,000
Net Non-Operating Income	(5,219,887)	(5,616,000)	(6,591,000)
<b>Net Income</b>	<b>3,219,920</b>	<b>1,648,000</b>	<b>69,000</b>

# Anchorage Water Utility

## Statement of Cash Sources and Cash Uses

	2003 Actual	2004 Proforma	2005 Budget
<b>Sources of Cash Funds</b>			
Net Income (Loss)	3,219,920	1,648,000	69,000
Depreciation	4,552,518	5,300,000	5,600,000
Bond Proceeds	0	18,595,000	25,000,000
State Loans	964,009	1,000,000	2,000,000
Amorti/Deferred Debit Discounts	799,978	825,000	850,000
Grants	1,593,796	0	0
Contributions From Others	452,608	490,000	490,000
Other	(755,339)	(258,000)	136,000
Total Sources of Cash Funds	10,827,490	27,600,000	34,145,000
<b>Uses of Cash Funds</b>			
Additions to Plant	11,714,209	25,693,000	21,300,000
Debt Principal Payment	5,099,888	5,290,000	5,880,000
Total Uses of Cash Funds	16,814,097	30,983,000	27,180,000
Net Increase (Decrease) in Cash	(5,986,607)	(3,383,001)	6,965,000
Cash Balance, January 1	15,638,618	9,650,000	6,267,000
Cash Balance, December 31	9,652,011	6,266,999	13,232,000
<b>Detail of Cash Balance</b>			
Equity in Capital Acquisition Acct	(7,933,945)	(\$9,090,000)	(1,240,000)
Restricted Cash Accounts	8,244,535	8,000,000	7,740,000
Equity in General Cash Pool	9,341,421	7,357,000	6,732,000
Total Cash December 31	9,652,011	6,267,000	13,232,000

## Anchorage Water Utility 2005 Operating Budget Detail

	2003 Actual	2004 Proforma	2005 Budget
<b>Labor</b>			
Wages	6,448,000	7,640,000	7,917,000
Benefits	2,260,000	2,826,000	3,557,000
Subtotal	8,708,000	10,466,000	11,474,000
<b>Supplies</b>			
Chemicals	248,000	230,000	275,000
Plant, Shop, & Office Expense	1,102,000	1,275,000	1,352,000
Subtotal	1,350,000	1,505,000	1,627,000
<b>Intergovernmental Charges</b>			
Finance Dept	501,000	500,000	716,000
Information Technology Dept	532,000	500,000	616,000
Employee Relations Dept	211,000	175,000	196,000
Other	390,000	734,000	565,000
Subtotal	1,634,000	1,909,000	2,093,000
<b>Other Services</b>			
Contingency	0	350,000	350,000
Professional Services	358,000	300,000	396,000
Rent/Leases	696,000	722,000	670,000
Utilities	1,947,000	1,833,000	1,990,000
Contracted Mtnc/Repair	507,000	460,000	450,000
Operating Expense Transfer to CWIP	(356,000)	(375,000)	(390,000)
Other	607,000	1,143,000	1,152,000
Subtotal	3,759,000	4,433,000	4,618,000
<b>Other Expenses</b>			
Depreciation	4,553,000	5,300,000	5,600,000
MUSA	1,893,000	3,262,000	5,803,000
Interest on Long-Term Debt	5,480,000	5,720,000	6,570,000
Capitalized Interest	(793,000)	(750,000)	(750,000)
Amort Deferred Debits/Discounts	800,000	825,000	850,000
Subtotal	11,933,000	14,357,000	18,073,000
Total Expenses	<u>27,384,000</u>	<u>32,670,000</u>	<u>37,885,000</u>

**Anchorage Water Utility  
2005 - 2010 Capital Improvement Program  
Financial Summary  
(in \$'000s)**

<b>Project Category</b>	2005	2006	2007	2008	2009	2010	<b>Six Year Total</b>
General Plant	7,798	8,462	6,159	13,474	7,804	4,754	48,451
Repair and Rehabilitation	3,482	5,273	6,860	3,830	10,215	13,550	43,210
Trans/Dist	9,600	5,100	5,650	15,230	9,850	10,500	55,930
Improvement Districts	1,525	200	200	200	200	200	2,525
<b>Total</b>	22,405	19,035	18,869	32,734	28,069	29,004	150,116

<b>Source of Funding</b>	2005	2006	2007	2008	2009	2010	<b>Six Year Total</b>
Debt	20,100	16,935	16,219	30,184	25,939	25,804	135,181
Equity	2,305	2,100	2,650	2,550	2,130	3,200	14,935
Grant	0	0	0	0	0	0	0
<b>Total</b>	22,405	19,035	18,869	32,734	28,069	29,004	150,116

\*Approximately \$1,047,000 of in-house labor will be spent on capital projects in 2005

## Anchorage Wastewater Utility Statement of Revenues and Expenses

	<b>2003 Actual</b>	<b>2004 Proforma</b>	<b>2005 Budget</b>
<b>Operating Revenue</b>			
Residential Sales	18,831,961	20,093,000	22,138,000
Commercial Sales	4,467,036	5,130,000	5,652,000
Public Authorities	830,173	861,000	930,000
Miscellaneous	1,058,818	1,287,000	1,301,000
<b>Total Operating Revenue</b>	25,187,988	27,371,000	30,021,000
<b>Operating Expense</b>			
Collection	2,709,231	2,735,000	3,156,000
Treatment	5,628,285	6,115,000	6,823,000
Customer Accounts	1,442,801	1,609,000	1,892,000
General & Administrative	4,936,808	5,632,000	7,623,000
Depreation*	3,993,579	4,300,000	4,600,000
MUSA	1,174,972	2,285,000	3,800,000
<b>Total Operating Expense</b>	19,885,676	22,676,000	27,894,000
<b>Operating Income</b>	5,302,312	4,695,000	2,127,000

\* Depreciation of contributed plant not included.

## Anchorage Wastewater Utility Statement of Revenues and Expenses

	2003 Actual	2004 Proforma	2005 Budget
<b>Non-Operating Revenue</b>			
Interest Income, Net	(5,741)	(100,000)	(200,000)
Interest & Penalty on Assessments	145,967	150,000	150,000
Miscellaneous Income	(10,165)	0	0
Total Non-Operating Revenue	130,061	50,000	(50,000)
<b>Non-Operating Expense</b>			
Amort Deffered Debit/Discounts	428,967	425,000	167,000
Interest - Long Term Debt	1,061,347	1,490,000	1,740,000
Interest - Other	487,202	600,000	619,000
Capitalized Interest	(611,800)	(610,000)	(610,000)
Total Non-Operating Expense	1,365,716	1,905,000	1,916,000
Net Non-Operating Expense	(1,235,655)	(1,855,000)	(1,966,000)
<b>Net Income</b>	4,066,657	1,648,000	161,000



# Anchorage Wastewater Utility

## Statement of Cash Sources and Cash Uses

	<b>2003 Actual</b>	<b>2004 Proforma</b>	<b>2005 Budget</b>
<b>Sources of Cash Funds</b>			
Net Income (Loss)	4,066,557	2,840,000	161,000
Depreciation	3,993,579	4,300,000	4,600,000
Bond Proceeds	0	22,620,000	0
State Loans	5,126,956	1,333,000	3,000,000
Amorti/Deferred Debit Discounts	428,967	425,000	167,000
Grants	698,090	0	0
Contributions From Others	725,096	300,000	300,000
Other	(1,933,859)	119,000	(507,000)
<b>Total Sources of Cash Funds</b>	<b>13,105,386</b>	<b>31,937,000</b>	<b>7,721,000</b>
<b>Uses of Cash</b>			
Additions to Plant	10,990,883	17,343,000	18,100,000
Debt Principal Payment	5,775,000	7,020,000	7,070,000
<b>Total Uses of Cash Funds</b>	<b>16,765,883</b>	<b>24,363,000</b>	<b>25,170,000</b>
<b>Net Increase (Decrease) in Cash</b>	<b>(3,660,497)</b>	<b>7,574,000</b>	<b>(17,449,000)</b>
Cash Balance, January 1	(1,396,976)	(5,057,000)	2,517,000
Cash Balance, December 31	(5,057,473)	2,517,000	(14,932,000)
<b>Detail of Cash Balance</b>			
Equity in Capital Acquisition Acct	(11,891,841)	(3,103,000)	(18,203,000)
Restricted Cash Accounts	365,790	350,000	350,000
Equity in General Cash Pool	6,468,578	5,270,000	2,921,000
<b>Total Cash December 31</b>	<b>(5,057,473)</b>	<b>2,517,000</b>	<b>(14,932,000)</b>

## Anchorage Wastewater Utility 2005 Operating Budget Detail

	2003 Actual	2004 Proforma	2005 Budget
<b>Labor</b>			
Wages	6,364,000	6,564,000	7,797,000
Benefits	2,192,000	2,373,000	3,502,000
Subtotal	8,556,000	8,937,000	11,299,000
<b>Supplies</b>			
Chemicals	408,000	441,000	432,000
Plant, Shop, & Office Expense	1,103,000	1,122,000	1,345,000
Subtotal	1,511,000	1,563,000	1,777,000
<b>Intergovernmental Charges</b>			
Finance Dept	364,000	441,000	716,000
Information Technology Dept	532,000	576,000	616,000
Employee Relations Dept	189,000	152,000	191,000
Other	599,000	949,000	813,000
Subtotal	1,684,000	2,118,000	2,336,000
<b>Other Services</b>			
Contingency	0	350,000	350,000
Professional Services	552,000	370,000	641,000
Rent/Leases	619,000	628,000	600,000
Utilities	1,335,000	1,500,000	1,600,000
Contracted Mtnce/Repair	394,000	300,000	300,000
Operating Expense Transfer to CWIP	(416,000)	(400,000)	(405,000)
Other	483,000	725,000	996,000
Subtotal	2,967,000	3,473,000	4,082,000
<b>Other Expenses</b>			
Depreciation	3,994,000	4,300,000	4,600,000
MUSA	1,175,000	2,285,000	3,800,000
Interest on Long-Term Debt	1,549,000	2,090,000	2,359,000
Capitalized Interest	(612,000)	(610,000)	(610,000)
Amort Deferred Debits/Discounts	429,000	425,000	167,000
Subtotal	6,535,000	8,490,000	10,316,000
Total Expenses	<u>21,253,000</u>	<u>24,581,000</u>	<u>29,810,000</u>

**Anchorage Wastewater Utility  
2005 - 2010 Capital Improvement Program  
Financial Summary  
(in \$'000s)**

<b>Project Category</b>	2005	2006	2007	2008	2009	2010	<b>Six Year Total</b>
General Plant	10,773	9,807	8,379	10,719	7,109	4,259	51,046
Repair and Rehabilitation	5,590	10,990	6,775	1,825	12,600	13,000	50,780
Truck/Int	2,000	600	3,100	3,100	3,100	6,600	18,500
Improvement Districts	1,775	200	200	200	200	200	2,775
<b>Total</b>	20,138	21,597	18,454	15,844	23,009	24,059	123,101

<b>Source of Funding</b>	2005	2006	2007	2008	2009	2010	<b>Six Year Total</b>
Debt	20,138	21,597	16,494	14,274	21,439	22,474	116,416
Equity	0	0	1,960	1,570	1,570	1,585	9,100
Grant	0	0	0	0	0	0	0
<b>Total</b>	20,138	21,597	18,454	15,844	23,009	24,059	123,101

\*Approximately \$940,000 of in-house labor will be spent on capital projects in 2005