

*AWWU*  
*Brief Utility History*

Early 1920's

- City purchase water system from Alaska Engineering Commission (\$10,893)
- Water was diverted from Ship Creek at the base of the Alaska Native Service Hospital
- Combined sewers for storm water and sewage built within Original townsite area

Late 1920's – early 1940's

- Slow expansion of water system in the downtown area to West Chester lagoon
- Slow expansion of sewers within Original Townsite

Late 1940's

- Ship Creek dam built at the base of Arctic Valley, with a 20" steel main and a 24" woodstave main constructed to bring water to the Anchorage Townsite Area
- Sewer expansion to South Addition

Mid 1950's

- City acquires Alaska railroad System on Government Hill and ARR terminal area
- Expanded water system to serve the Fairview area
- Sewer system fragmented-Owned by: City, Military, Public Districts & Private Utilities. No treatment – collection and transmission with multiple direct discharges to the Inlet of raw sewage
- Storm drain connections to sanitary sewer system removed
- Small private water systems developed using localized well sources beyond City water system service area

Early 1960's

- Water Utility Division was established in the City Public Works Dept
- City bought Kadow Water System (3000 Arctic) and the Spenard Utility District (SPUD)
- City constructed Ship Creek Water Treatment Facility (SCWTF) adjacent to City raw water supply main near the Ship Creek Dam
- Greater Anchorage Area Borough (GAAB) formed
- 1964 Earthquake – Extensive damage, all required repairs completed prior to freeze up in the fall of 64

Late 1960's

- GAAB consolidated wastewater systems consisting of multiple discharge points of raw sewage (7 outfalls) to the inlet, and took control of City and Spenard Public District
- GAAB initiated wastewater interceptor and Asplund Wastewater Treatment Facility (AWWTF) construction program
- Water Utility established as a separate Division within the City and relocated to new 3000 Arctic Headquarters building
- City of Girdwood well and small water system constructed by US Army COE to serve about 30 customers following 1964 Quake

Early 1970's

- Sewer interceptor system, pump stations, including #2 & #12 and AWWTF completed eliminating raw sewage discharges into Cook Inlet
- GAAB provides wastewater interceptor and treatment to Ft. Richardson and Elmendorf AFB
- GAAB Sewer Utility became an enterprise fund and sewer customers charged rates for first time
- Acquired Central Alaska Utilities (CAU) Wastewater Systems serving the Sand Lake area
- Eagle River Wastewater Treatment Facility (ERWWTF) (lagoons) built
- APUC started regulating AWU & GAAB Sewer Utility
- Water Master Planning for entire Anchorage bowl initiated

Mid 1970's

- Girdwood Wastewater Treatment (GWWTF) facility built
- City and GAAB unify; city water utility and GAAB Sewage Utility merged into one enterprise fund – Anchorage Water and Sewage Utility (AWSU)
- Rapid growth in water and sewer infrastructure network throughout decade

Late 1970's

- AWSU provides maintenance “assistance” to Girdwood water system
- AWSU consolidates operations at 3000 Arctic Boulevard.; rapid growth in water and sewer infrastructure network throughout decade
- Water shortages in Anchorage bowl became common

Early 1980's

- Size of operations and lack of adequate support facility infrastructure requires Utility to become fragmented
  - No central maintenance facility
  - Support maintenance at Asplund and system maintenance at Cinnabar
  - Engineering and MISD (non-IT section) moved to 3200 Arctic
- ERWWTF expanded and upgraded
- AWSU number of employees increases to high of 339 FTE's in 1986
- Facility plan for new water supply (Eklutna) completed and design/construction initiated
- Hillside Wastewater Management Plan codified by the Assembly
- Initiated Headquarters/Operations Building consolidation project
- Purchased Central Alaska Utilities (CAU) Water System (14,000 customers)

Mid to Late 1980's

- Purchased King Street Facility
- Eklutna Water Project (EWP) completed – 30 miles of 48" to 60" main, 15 mg clearwell and 35 mgd surface water treatment plant
- SCWTF upgraded and expanded from 10 to 24 mgd
- AWWTF, upgraded process controls and expanded from 28 to 58 mgd; received NPDES permit with a section 301(h) modification
- Expansion, and process control modifications (tertiary) of ERWWTF initiated
- MOA Utility Customer Service Department was disbanded; AWSU set up its own billing system and customer service department
- Initiated first SCADA system
- Initiated first Strategic Plan (management driven)
- Assembly authorizes, APUC approves, formula change with respect to MUSA payments by Utility on contributed plant
- Six General Managers (87-90)
- Anchorage Water and Sewer Utility (AWSU) name changed to Anchorage Water and Wastewater Utility (AWWU)

1990's

- AWWU Became nationally recognized through awards for management multiple times, highlighting excellence and operational efficiencies
- Volcanic eruption and resulting ash fall caused massive water shortage related to cleanup; provided catalyst for Loop Water Transmission Main
- Construction began with the Loop Phase I – VIII, to supply south and south-east bowl
- Expanded Asplund solids handling
- Purchased the Girdwood water system, and rehabilitated the majority of the distribution system
- Completed process upgrades at the Girdwood WWTF
- Completed first AWWU IT master plan, and initiated aggressive implementation of automation
- Initiated Excellence Adventure
- Strategic Planning process modified to become stakeholder (employee) driven
- Completed two Utility reorganizations, FTE count stabilized at 268
- Consolidated work force, expanded and remodeled 3000 Arctic
- Formed an IT division within the Utility
- Formed a GIS section in the Engineering division
- Developed long term plan for King Street, and constructed first warm storage for heavy equipment
- Significantly upgraded operational tools - light and heavy rolling stock
- Voted Best Water in the Nation by US Conference of Mayors
- Year 2000 preparations
- Updates to the Customer Information and Billing system to be Year 2000 Compliant
- Implemented Microsoft Servers and Desktops
- Implemented a routable network system

2000 – 2009

- Eklutna WTF becomes 24 hour call center and lead WTF
- Construction completed Anchorage Loop Water Transmission Main Phases I-VIII program (completes plans dating from early 1970's)
- Constructed EOC and Electrical/Instrumentation Shop at King Street
- Continued on 10 year upgrades at Asplund as recommended in facility plan
- SCADA system was upgraded and standardized
- New billing system was installed
- Asset Management group formed in Engineering Division and consolidated with GIS Section
- Electronic time cards implemented
- MAXIMO & PeopleSoft systems implemented
- AWWU Employee Services Division receives delegation of authority to perform a number of MOA functions at the utility
- 2005 rate case: RCA denies MUSA on contributed plant in rates, RCA decision upheld by the Superior Court of Alaska, appealed to Supreme Court of Alaska which remanded it back to the RCA for a rehearing
- AWWU moved from a MOA Department to a Board form of governance through the passage of Title 31

2010

- MUSA case to be reheard by the RCA this summer
- Title 31 rewrite to incorporate portions of Title 3 (personal rules)
- Revisit recommendation on ERP system for AWWU
- Biological Evaluation of Beluga's as part of the ESA listing in conjunction with NPDES renewal for Asplund
- Ongoing renewal process of Asplund and Girdwood NPDES permit
- Asset Management section being incorporated into capital planning decision making process
- Concentrate on minimizing Girdwood I/I with in house forces
- Preliminary design of new Girdwood WWTF
- Finalize SCADA upgrade
- Hillside District Plan (to replace/update 1980's Hillside Wastewater Management Plan) going through adoption process
- Upgrade Billing system
- Update IT plan
- Continue to enhance the governance model for AWWU

Since 2010

Eklutna Water Treatment Plant upgrades since 2010:

- Eklutna Velodyne batch/feed system for Filter-Aid Poly
- Eklutna Velodyne batch/feed system for Second Stage Poly
- Eklutna Filter to Waste Process for filter backwashes
- Eklutna ERS Breaker and Capacitor replacement
- Eklutna Primary Power upgrade
- Eklutna Hypochlorite Disinfection System replacement
- Eklutna MCC replacement (current/in progress 2022)
- Eklutna ERS Turbine Control Panel (current/in progress 2022)
- Eklutna HVAC upgrades

Ship Creek Water Treatment Facility

- roof rehab
- plant rehab

Distribution Operations at Ship Creek:

- 92<sup>nd</sup> Ave PRV & Turbine
- Heat exchanger project
- PRV Rehab
- Reservoir rehab
- Several zone conversions

Asplund Water Pollution Control Facility

- Repaired east/west utilidor road/roof
- Rehab all clarifiers and thickeners
- Replace grit system
- Replace raw scum pumps
- Replace all raw sludge pumps
- Rebuild all plate screens
- Build hypo system
- Build additional hypo storage including new building
- Replace concentrated scum pumps and piping

Eagle River Wastewater Treatment Facility

- Thickener Rehab
- Primary Clarifier Rehab
- Motor Operated Valves on Aeration Basin
- Blower Upgrade to Turbo-Compressor
- RAS Line Re-Route, RAS Pumps, WAS Pumps
- Headworks Upgrade

Girdwood Wastewater Treatment Facility

- New Administration Building
- New Influent Pump Station
- New Backup Generator

Girdwood Water

- New Mixer in Reservoir

Girdwood Distribution.

- Cortina PRV Vault Removed

Engineering Capital Projects

- Campbell Lake Sewer Trunk
- Mink Avenue Water Upgrade
- Timberline PRV Station
- Girdwood Water Distribution Upgrades
- Laurence Court Sewer Upgrade
- ArcGIS Maximo Interface
- Nathan Circle Sewer Upgrade
- N. Hoyt Bunn Alley Sewer Upgrade
- E. Northern Lights Blvd Water Rehabilitation
- Australaska Subdivision Water Rehabilitation
- Security Upgrades 3000 Arctic Blvd.
- Vail Circle Water Rehabilitation
- Hood Creek Sewer Rehabilitation

IT

- Implemented SAP Financial and HR systems
- Upgraded Maximo
- Implemented Kaba time card system
- Implemented Security Camera System
- Implemented new network and servers