## Alaska Drinking Water Fund - State Fiscal Year 2022 (SFY22) Project Priority List - 2nd Quarter

Note: The total available funding for SFY22 projects is \$73.5 million.

- (1) Principal forgiveness is subject to change depending on the readiness of projects to proceed.
- (2) Loan terms will be finalized when a loan agreement is offered. The finance rate will be based on a calculation identified in Alaska Administrative Code (18 AAC 76).
- (3) Individual Pro Fi projects are reviewed and assigned a weighted scored based on the total project cost. The overall score for the Pro Fi questionnaire is the sum of weighted scores for all of the Pro Fi projects.

| Rank | Score                              | Public Water<br>System ID#<br>(Population) | Applicant               | Project Name and Description   | Requested<br>Loan Amount | Estimated<br>Principal<br>Forgiveness <sup>(1)</sup><br>(SFY19-21) | Estimated<br>Principal<br>Forgiveness <sup>(1)</sup><br>(SFY22) | Disadvantaged<br>Community | Loan<br>Term <sup>(2)</sup><br>(years) | Green Project<br>Amount<br>(Type)               | Sustain-<br>ability<br>Policy | Estimated<br>Start Date | Quarter<br>Added to<br>PPL |
|------|------------------------------------|--|-------------------------|--|--------------------------|--|---|----------------------------|--|---|-------------------------------|-------------------------|----------------------------|
| DRIN | IKING WATER PROJECT QUESTIONNAIRES |  |                         |  |                          |  |   |                            |  |   |                               |                         |                            |
| 1    | 210                                | AK222315<br>(180)                          | Home Water,<br>LLC      | Snowshoe Subdivision Main Line Leak Detection, Repair and Stabilization - Conduct an acoustic main line condition assessment to prioritize line replacements based on pipe condition. Repair identified leaks and rehabilitate valves. Install control system to monitor flows from each well to ensure blend ratio will result in arsenic concentrations below the Maximum Contaminant Level (MCL).   | \$425,528                |  | \$212,764   | х                          |  | \$390,408<br>(Water)                            | Fix It First                  | 7/15/2021               | SFY22-Q2                   |
| 2    | 141                                | AK2310926<br>(950)                         | Valley Water<br>Company | Valley Water System Upgrade and Rehabilitation - Prepare a Water System Master Plan that will help to identify improvements needed to ensure that the system operates in compliance and enhance sustainability of the system. Improvements identified in the Master Plan may be implemented in a phased approach. Proposed improvements may include a water treatment system necessary to address high copper concentration in drinking water; rehabilitation or replacement of 50-year-old distribution system infrastructure including pumps, pipe, valves, and hydrants; installation of leak detection system; and installation of new backup generator. | \$825,000                | \$412,500  |   | x                          | 5 to 20                                | \$350,000<br>(Energy)                           | Fix It First                  | 5/1/2021                | SFY21-Q4                   |
| 3    | 125                                | AK2260197<br>(4,916)                       | Dillingham              | Water System Improvements Phase II - Upgrade and rehabilitate the water distribution system including replacement of asbestos cement pipe with ductile iron pipe, elimination of dead ends, installation of additional hydrants, and rehabilitation or replacement of main valve boxes.  | \$1,575,939              |  | \$500,000   | х                          | 20 to 30                               | na  | Fix It First                  | 5/1/2021                | SFY22-Q1                   |
| 4    | 125                                | AK2260197<br>(4,916)                       | Dillingham              | Water System Improvements Phase III - Upgrade and rehabilitate the water distribution system including replacement of asbestos cement pipe with ductile iron pipe, elimination of dead ends, installation of additional hydrants, and rehabilitation or replacement of main valve boxes.   | \$1,383,600              |  |   | х                          | 20 to 30                               | na  | Fix It First                  | 5/1/2021                | SFY22-Q1                   |
| 5    | 121                                | AK2250011<br>(9,047)                       | Kodiak                  | Aleutian Homes Phase VII Water Distribution Lines Replacement - Replace approximately 2,600 feet of 65-year-old asbestos cement water main with ductile iron pipe. Other improvements may include service lines and appurtenances. Curb/gutter, sidewalk, and pavement impacted by the water line work will be replaced.   | \$2,200,000              |  | \$500,000   | х                          | 20 to 30                               | na  | Fix It First                  | 5/10/2021               | SFY21-Q3                   |
| 6    | 110                                | AK2240456<br>(5,810)                       | Homer                   | Alder Lane Water Main Extension - This project will extend the water distribution system to provide piped public water to 9 Rural Residential zoned properties that are currently served by hauled water from City watering points or an onsite well.  | \$259,563                |  | \$112,229   | х                          | 20 to 30                               | \$26,000<br>(Water<br>Conservation -<br>meters) | Effective<br>Utility<br>Mgmt. | 5/15/2021               | SFY22-Q1                   |
| 7    | 110                                | AK2240456<br>(5,810)                       | Homer                   | <b>Mission Road Water Main Extension</b> - This project will extend the water distribution system to provide piped public water to 28 residential properties and a private school with dormitories. The residential properties are currently served by private wells with poor quality water.  | \$2,103,806              |  |   | x                          | 20 to 30                               | \$10,000<br>(Water<br>Conservation -<br>meters) | Effective<br>Utility<br>Mgmt. | 9/30/2021               | SFY22-Q2                   |
| 8    | 110                                | AK2240456<br>(5,810)                       | Homer                   | <b>West Hill Road Water Trunk Line</b> - This project will extend the water distribution system to over 95 residential properties, all of which are served by private wells with poor quality water.   | \$2,755,087              |  |   | x                          | 20 to 30                               | \$75,000<br>(Water<br>Conservation -<br>meters) | Effective<br>Utility<br>Mgmt. | 4/1/2022                | SFY22-Q2                   |
| 9    | 101                                | AK2120193<br>(1,548)                       | Craig                   | <b>Replace 5.5 miles of Raw Water Main</b> - Inspect and replace approximately 5.5 miles of aging ductile iron raw water main that transmits raw water from North Fork Lake to the Craig water treatment plant.  | \$2,900,000              |  | \$500,000   | х                          | 5 to 20                                | na  | Fix It First                  | 7/15/2021               | SFY22-Q1                   |

| Rank | Score             | Public Water<br>System ID#<br>(Population) | Applicant                       | Project Name and Description  | Requested<br>Loan Amount | Estimated Principal Forgiveness <sup>(1)</sup> (SFY19-21) | Estimated Principal Forgiveness <sup>(1)</sup> (SFY22) | Disadvantaged<br>Community | Term <sup>(2)</sup> | Green Project<br>Amount<br>(Type) | Sustain-<br>ability<br>Policy | Estimated<br>Start Date | Quarter<br>Added to<br>PPL |
|------|-------------------|--|---------------------------------|---|--------------------------|---|--|----------------------------|---------------------|-----------------------------------|-------------------------------|-------------------------|----------------------------|
| 10   | 96                | AK2240757<br>(2,528)                       | Seward                          | SMIC Water Pumphouse Addition, Hypochlorite Generator System Upgrade - This project will include an addition to a pumphouse and upgrade the hypochlorite generator system to eliminate the use of chlorine gas.   | \$476,000                |   | \$238,000  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 6/10/2021               | SFY22-Q1                   |
| 11   | 85                | AK2121510<br>(2,503)                       | Ketchikan<br>Gateway<br>Borough | South Tongass Water Utility Phase VI Ravenwood Tank - Design and construct a 100,000 gallon storage tank and booster pump station in Ketchikan including road improvements, power poles, piping and integration into existing control system.   | \$1,600,000              | \$500,000   |  | х                          | 5 to 20             | na                                | Effective<br>Utility<br>Mgmt. | 1/1/2020                | SFY21-Q3                   |
| 12   | 85                | AK2240456<br>(5,810)                       | Homer                           | <b>Bunnell-Charles Way Water Main Extension</b> - Extend the water distribution system to provide piped public water to 27 central business district zoned properties, all of which currently are served by hauled water from City watering points.   | \$509,167                |   | \$225,690  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 8/1/2021                | SFY22-Q1                   |
| 13   | 85                | AK2240456<br>(5,810)                       | Homer                           | <b>Tasmania Water Main Extension</b> - This project will extend the water distribution system to provide piped public water to 11 Rural Residential zoned properties that are currently served by hauled water from City watering points or an onsite well.   | \$469,874                |   | \$162,081  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 5/15/2021               | SFY22-Q1                   |
| 14   | 85                | AK2240456<br>(5,810)                       | Homer                           | <b>Sterling Highway Water Main Extension</b> - This project will extend the water distribution system to provide piped public water to four residential properties that are currently served by private wells with poor water quality.  | \$187,719                |   |  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 11/1/2021               | SFY22-Q2                   |
| 15   | 84 <sup>(3)</sup> | AK2210906<br>(297,483)                     | Anchorage<br>AWWU               | SFY22 Pro Fi Loan - The applicant has provided a list of eligible projects including planning, design, engineering, and construction activities for water infrastructure projects. A list of projects is attached.  | \$16,818,000             |   |  |                            | 20                  | \$3,926,000                       | Fix It First                  | 8/1/2021                | SFY22-Q1                   |
| 16   | 81                | AK2120143<br>(2,000)                       | Wrangell                        | Water Treatment Plant - Construct a dissolved air filtration with multimedia water treatment system and complete other related improvements including, but not limited to, electrical improvements, controls for fully automatic operation, pumps, standby generator, and fuel system. This loan would serve as required interim financing for a U.S. Department of Agriculture Rural Utilities Service loan.     | \$3,821,000              |   |  | x                          | < 5                 | \$1,428,000<br>(Water)            | Effective<br>Utility<br>Mgmt. | 8/2/2021                | SFY21-Q3                   |
| 17   | 80                | AK2260197<br>(4,916)                       | Dillingham                      | Waterfront Water System Upgrades (Design) - Complete design for the extension and rehabilitation of the existing water distribution system in the Dillingham waterfront area.   | \$44,125                 |   |  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 6/1/2021                | SFY22-Q1                   |
| 18   | 80                | AK2260197<br>(4,916)                       | Dillingham                      | Waterfront Water System Upgrades (Construction) - Based on the proposed design plan for the waterfront area, construct improvements including the extension of the water system as well as rehabilitation of the existing distribution system.  | \$560,050                |   |  | х                          | 20 to 30            | na                                | Effective<br>Utility<br>Mgmt. | 7/1/2021                | SFY22-Q1                   |
| 19   | 78                | AK2340010<br>(3,600)                       | Nome                            | Equipment Response / Storage / Office Facility - Construct a building to support the drinking water utility, amalgamate ancillary facilities, reduce operating costs, protect equipment, and improve health and safety of the work environment. The facility will also support the sewer utility. The cost of construction would be split between the Alaska Clean Water Fund and the Alaska Drinking Water Fund. | \$5,025,000              |   |  | х                          | 20 to 30            | \$1,000,000<br>(Energy)           | Effective<br>Utility<br>Mgmt. | 1/17/2022               | SFY22-Q2                   |
| 20   | 76                | AK2250011<br>(9,047)                       | Kodiak                          | Contact Time (CT) Water Tank Improvements - Replace interior tank coating and repair/restore exterior tank coating for two existing 2.2 million gallon CT tanks at the water plant. In addition, remove existing tank baffles and associated hardware, re-install baffles as necessary, and complete any additional work required for Alaska Department of Environmental Conservation approval.                   | \$2,500,000              |   |  | х                          | 20 to 30            | na                                | Fix It First                  | 3/1/2022                | SFY21-Q3                   |
| 21   | 46                | AK2120193<br>(1,200)                       | Craig                           | Water Plant Contact Chamber Baffles - Install baffles in the existing 35,000 gallon chlorine contact chamber and the 165,000 gallon water storage tanks to achieve chlorine contact time more efficiently. Construct an additional 30,000 gallon baffled storage tank.  | \$588,200                | \$294,100   |  | х                          | 5 to 20             | na                                | Effective<br>Utility<br>Mgmt. | 7/29/2021               | SFY22-Q1                   |

| Rank | Score  | Public Water<br>System ID#<br>(Population) | Applicant  | Project Name and Description   | Requested<br>Loan Amount | Estimated Principal Forgiveness <sup>(1)</sup> (SFY19-21) | Estimated Principal Forgiveness <sup>(1)</sup> (SFY22) | Disadvantaged<br>Community | Loan<br>Term <sup>(2)</sup><br>(years) | Green Project<br>Amount<br>(Type) | Sustain-<br>ability<br>Policy | Estimated<br>Start Date | Quarter<br>Added to<br>PPL |
|------|--------|--|--|--|--------------------------|---|--|----------------------------|--|-----------------------------------|-------------------------------|-------------------------|----------------------------|
| 22   | 8      | AK2110601<br>(1,148)                       | Skagway  | Klondike Highway Water Main Extension - This project will expand the water distribution system to provide municipal drinking water to a developed area that is currently served by private wells and septic systems.   | \$3,292,000              | \$500,000   |  | х                          | 20 to 30                               | na                                |                               | 4/1/2021                | SFY21-Q1                   |
|      |        |  |  | SUBTOTAL   | \$49,894,130             | \$1,706,600   | \$2,238,000  |                            |  | \$7,205,408                       |                               |                         |                            |
| AME  | NDME   | ENTS TO EXIS                               | TING LOANS   |  |                          |   |  |                            |  |                                   |                               |                         |                            |
|      |        | AK2340010<br>(3,600)                       | Nome   | Bering Street Water Main Replacement - This amendment increases the loan amount (Loan #627241-SG) by \$1,051,012 for a total loan request of \$3,485,000. The project scope is also amended to include replacement of water mains in Seppala Drive due to a high rate of failure / leakage due to settlement from melting permafrost under the road. Replacement of the water mains will be completed in coordination with a roadway improvement project sponsored by the Alaska Department of Transportation and Public Facilities. | \$1,051,012              |   |  | х                          | 20                                     |                                   | Fix It First                  |                         | SFY22-Q1                   |
|      |        | AK2120232<br>(8,050)                       | Ketchikan  | Schoenbar Road Utilities Replacement (Water) - This amendment increases the loan amount (Loan # 481081-S) by \$5,973,779. The project scope is also amended to include replace approximately 1,400 feet of failing 36-inch ductile iron pipe that transmits raw water with 30-inch and 42-inch high density polyethylene (HDPE) pipe. The project will also replace approximately 1,300 feet of failing ductile iron and cast iron distribution lines with 8-inch to 20-inch HDPE pipe.  | \$5,973,779              | \$500,000   |  | х                          | 20                                     |                                   | Fix It First                  |                         | SFY20-Q3                   |
|      |        | AK2211431<br>(852)                         | Unified<br>Alaskan<br>Utilities<br>Homestead<br>Service Area | Well Facility and Transmission Main - This amendment increases the loan amount (Loan #125001-S) by \$243,444 due to increases in cost since the original estimate was prepared in 2016 and to accommodate the construction of a larger well facility to facilitate anticipated future treatment needs.   | \$243,444                |   |  | x                          | 20                                     |                                   | Fix It First                  |                         | SFY22-Q2                   |
|      |        |  |  | LOAN AMENDMENT SUBTOTAL  | \$7,268,235              | \$500,000   | \$0  |                            |  |                                   |                               |                         |                            |
|      |        |  |  |  |                          |   |  |                            |  |                                   |                               |                         |                            |
| SUS  | TAINAI | BLE INFRASTE                               | RUCTURE PLA  | NNING PROJECTS   |                          |   |  |                            |  |                                   |                               |                         |                            |
| 1    | 113    | AK2271999<br>(1,450)                       | Bethel   | Community-wide Water System Expansion Preliminary Engineering Report and Environmental Assessment - Complete the planning documents necessary to estimate the cost to construct a water distribution system to serve over 2,000 households, commercial, and institutional connections. This planning document will address the construction of both water distribution and wastewater collection systems with the cost split between a Alaska Drinking Water Fund and Alaska Clean Water Fund loan.                                  | \$86,893                 |   | \$75,000   | x                          | 5                                      | na                                | Planning                      | 3/22/2021               | SFY22-Q1                   |
| 2    | 51     | AK2120193<br>(1,200)                       | Craig  | New Water Source Study - Review potential new sources of drinking water to serve as a backup source. The City currently has no backup water supply should some interruption occur in the main treatment and distribution facilities. This project will look for other local water sources, including incorporating water from the City's prior water source as a supplement to the existing water source.  | \$100,000                |   | \$75,000   | х                          | 5                                      | na                                | Planning                      | 7/15/2021               | SFY22-Q1                   |
| 3    | 50     | AK2111566<br>(1,483)                       | Haines<br>Borough  | Haines Water System Master Plan - Prepare a master plan to establish a 5-year plan for capital improvement and maintenance projects, including prioritization of projects with a focus on water system infrastructure, treatment and storage facilities, public health compliance, and long range planning.  | \$100,000                |   | \$75,000   | х                          | 5                                      | na                                | Planning                      | 6/1/2021                | SFY22-Q1                   |
|      |        | A 1/22 44 0F 4                             |  | Soldotna Utility Rate Study - Update the 2015 Rate Study to reflect current conditions and   |                          |   |  |                            |  |                                   |                               |                         |                            |

\$30,000

\$30,000

Χ

5

Planning

6/1/2021 SFY22-Q2

master plan considerations. The Rate Study will include both water and wastewater utility

rates; the cost of the study will be split evenly between the Alaska Drinking Water and

AK2241054

(3,807)

Soldotna

Clean Water Funds.

4 50

| Rank | Score                     | Public Water<br>System ID#<br>(Population)     | Applicant                           | Project Name and Description   | Requested<br>Loan Amount | Estimated Principal Forgiveness <sup>(1)</sup> (SFY19-21) | Estimated<br>Principal<br>Forgiveness <sup>(1)</sup><br>(SFY22) | Disadvantaged<br>Community | Loan<br>Term <sup>(2)</sup><br>(years) | Green Project<br>Amount<br>(Type) | Sustain-<br>ability<br>Policy | Estimated<br>Start Date | Quarter<br>Added to<br>PPL |
|------|---------------------------|--|-------------------------------------|--|--------------------------|---|---|----------------------------|--|-----------------------------------|-------------------------------|-------------------------|----------------------------|
| 5    | 46                        | AK2121510<br>(2,503)                           | Ketchikan<br>Gateway<br>Borough     | South Tongass Water Utility Master Plan - Prepare a master plan to determine the long-term viability of the existing treatment processes to meet the area's water demand. Identify needed main replacement based on material, age and failure rate to establish a capital program.   | \$225,000                |   | \$75,000  | x                          | 5                                      | na                                | Planning                      | 10/1/2021               | SFY22-Q1                   |
| 6    | 46                        | multiple<br>water<br>systems                   | Home Water,                         | Water Revenue Study - Prepare a revenue requirement study that will include multiple public water systems that are operated under the Certificate of Public Convenience and Necessity issued to Home Water, LLC.   | \$114,000                |   | \$75,000  | х                          | 5                                      | na                                | Planning                      | 7/30/2021               | SFY22-Q2                   |
| 7    | 45                        | AK2260197<br>(4,916)                           | Dillingham                          | Water Rate Study - Update the 2014 Rate Study to reflect current conditions and future planning considerations. The Rate Study will include both water and wastewater utility rates; the cost of the study will be split evenly between the Alaska Drinking Water and Clean Water Funds.   | \$30,000                 |   | \$30,000  | х                          | 5                                      | na                                | Planning                      | 6/1/2021                | SFY22-Q1                   |
| 8    | 45                        | AK2227204<br>(400)                             | Midtown<br>Estates Water<br>Utility | Mainline Condition Assessment - Combined leak detection and acoustic condition assessment of the distribution system.  | \$97,500                 |   | \$75,000  | x                          | 5                                      | na                                | Planning                      | 7/30/2021               | SFY22-Q2                   |
| 9    | 45                        | AK2211229<br>(350)                             | Unified<br>Alaska<br>Utilities      | Moorehand Main Line Acoustic Assessment - Combined leak detection and acoustic condition assessment of the distribution system.  | \$44,075                 |   | \$44,075  | х                          | 5                                      | na                                | Planning                      | 7/30/2021               | SFY22-Q2                   |
| 10   | 45                        | AK2224078<br>AK2220154<br>AK2211431<br>(1,191) | Unified<br>Alaska<br>Utilities      | Water Revenue Study - Prepare a revenue requirement study that will will include the Creekwood, Homestead, and Sherwood public water systems that are operated under the Certificate of Public Convenience and Necessity issued to Unified Alaska Utilities.   | \$120,500                |   | \$75,000  | х                          | 5                                      | na                                | Planning                      | 7/30/2021               | SFY22-Q2                   |
| 11   | 41                        | AK2221834<br>(2,375)                           | Mile 8<br>Utilities                 | Water Revenue Study - Prepare a revenue requirement study.   | \$133,500                |   | \$75,000  | х                          | 5                                      | na                                | Planning                      | 7/30/2021               | SFY22-Q2                   |
| 12   | 36                        | AK2310926<br>(950)                             | Valley Water<br>Company,<br>Inc.    | Water Rate Study - Perform a study to determine necessary rate increase to allow the water system to meet operating expenses and fund required improvements for an aging system.   | \$52,000                 |   | \$52,000  | х                          | 5                                      | na                                | Planning                      | 4/1/2021                | SFY22-Q1                   |
|      |                           |  | ı                                   | SUSTAINABLE INFRASTRUCTURE PLANNING LOAN SUBTOTAL  | \$1,133,468              | \$0   | \$756,075   |                            | ı                                      |                                   |                               |                         |                            |
|      |                           |  |                                     |  |                          |   |   |                            |  |                                   |                               |                         |                            |
| MICE | MICRO LOAN QUESTIONNAIRES |  |                                     |  |                          |   |   |                            |  |                                   |                               |                         |                            |
|      | 80                        | AK2130067<br>(830)                             | Hoonah                              | Eagle Drive Water Improvements - Install approximately 1,145 linear feet of 12-inch HDPE water main to connect that portion of Hoonah that lacks piped drinking water service.  Water service will be available to 11 additional residential lots. The water main extension will also eliminate dead ends in the system to avoid stagnation. | \$232,884                |   | \$163,019   | x                          | < 5                                    |                                   | Effective<br>Utility<br>Mgmt  |                         | SFY22-Q2                   |
|      |                           | 1  |                                     | MICRO LOAN SUBTOTAL  | \$232,884                | \$0   | \$163,019   |                            |  |                                   |                               |                         |                            |

\$58,528,717

\$2,206,600

\$3,157,094

TOTAL FUNDING REQUESTED (ALL CATEGORIES)

## Alaska Drinking Water Fund - State Fiscal Year 2022 (SFY22) **Programmatic Financing (Pro Fi) Projects**

Applicant: Anchorage Water and Wastewater Utility Loan Term: 20 years

The SFY22 Pro Fi questionnaire includes the following projects included in AWWU's capital improvement plans for the water utility.

| Number   | Project Name  | Description  |
|----------|---|--|
|          | 475 Loop Conversion   | Convert portions of the Anchorage bowl transmission loop to the 475 hydraulic grade line to enhance system operations. The project will provide a new gravity intertie to replace a pumped intertie and demolish an outdated facility. Work also includes new flow monitoring and SCADA additions for new equipment.   |
| D-19-07  | 486 Zone DeBarr Intertie  | Construct approximately 700 feet of 16-inch diameter water main between the Anchorage Loop 06" Debarr PRV Vault (630HGL) and Early View Drive (486 HGL) located in East Anchorage including piping modifications within the Debarr PRV vault. Additionally, this project will address hydraulic deficiencies in the northeast portion of the 486 pressure zone, provide system redundancy, and allow for the Muldoon Booster Station to be abandoned.  |
|          | 900 Reservoir & Transmission Main   | This reservoir is necessary to supply operational and emergency water storage needs in the upper Eagle River pressure zones. This project will construct a one million gallon reservoir and associated transmission piping to serve the upper Eagle River pressure zone. Construction of this reservoir will ensure operational and emergency water storage and prevent the water system from experiencing low system pressures during peak demand periods or emergencies.   |
| D-19-03  | 92nd Avenue Intertie Zone Conversion  | Enhance system operations through the merger of pressure zones and provision of redundancy in water service. Anticipated work to include construction of water main intertie between the 320 Hydraulic Grade Line Pressure Zone (HGL PZ) and the 347 HGL PZ at 94th Avenue and Old Seward Highway.   |
|          | Anchorage Townsite 5th-8th Water<br>Upgrade   | Rehabilitate water distribution infrastructure in downtown Anchorage that is at the end of its useful life. The project includes rehabilitation of approximately 4,200 lineal feet of cast iron and ductile iron mains installed between 1955 and 2002. Six fire hydrants will also be rehabilitated.  |
| D-19-09  | Becharof Street Rakof to Chirikof<br>Water Rehabilitation                           | Replace approximately 988 feet of 1968 installed 8-inch cast iron water main and 660 feet of 1965 installed 6-inch water main at the end of its useful life. Install interties to reduce the consequences of failure of each of these pipes.   |
|          | Bragaw 16th Debarr Water Upgrade  | Rehabilitate or replace approximately 1,300 lineal feet of 1960s-era 8-inch cast iron pipe on Bragaw Street between Debarr Road and E 16th Avenue. The project also includes replacing 2 fire hydrants, 16 water services (3/4 inch), and 2 water services (1/2 inch).   |
| D-19-01b | Dowling Road Pressure Reducing Valve (PRV)  | Construct a new pressure reducing valve facility near Old Seward, Dowling Rd and 92nd Ave to move water more effectively from east to west in the water system.  |
| D-19-12  | E 7th Lane to Pine Water<br>Rehabilitation  | Replace approximately 572 feet of 1968 6-inch cast iron water main at the end of its useful life.  |
| D-19-08  | E. Northern Lights Blvd Augustine<br>Water Upgrade                                  | Replace or rehabilitate approximately 853 feet of 8-inch ductile iron pipe at the end of its useful life.  |
|          | Eklutna Water Treatment Facility<br>Disinfection Improvements                       | Replace the existing 20-year-old on-site hypochlorite generation system to improve reliability of the disinfection system and also improve worker safety.  |
| D-20-23  | Eklutna Water Treatment Facility<br>Energy Recovery Station Control<br>Improvements | Rehabilitate the control infrastructure for the water treatment energy recovery station.   |
|          | Eklutna Water Treatment Facility<br>Motor Control Center Upgrade                    | Perform upgrades to the motor control center and uninterruptible power supplies as provided in the 2018 EWTF Facility Plan.  |
|          | Eklutna Water Treatment Facility<br>Motor Fluoride Improvements                     | Design and construct a replacement dry fluoride feed system to precisely and accurately measure fluoride. The project will include measures to safeguard the general public health and also keep water system operators safe.  |
| D-19-06  | Eklutna Water Treatment Facility<br>Primary Electrical Upgrade                      | Replace or rehabilitate power service infrastructure and distribution equipment associated with the Primary Plant, Portal Facility and Intake Facility in order to increase power reliability and resiliency.  |
|          | Girdwood Water System Upgrade   | Demolish the Vail and St. Moritz booster stations and the Timberline Pressure Relief Valve (PRV) Station that have exceeded their useful life. Construct one new combined booster/PRV station dhering to current standards. The project also includes a new sampling station for water quality management and Supervisory Control and Data Acquisition (SCADA) for active management.  |
|          | Hillcrest Drive Water Rehab   | Rehabilitate and/or replace approximately 2,400 feet of cast iron and steel water main along Hillcrest Drive that is at the end of its useful life. The project is also anticipated to include installation of fire hydrants, gate valves, and valve boxes.  |
| D-19-02  | Inlet Place Water Rehabilitation  | Replace approximately 710 feet of 1953 6-inch cast iron water main at the end of its useful life from 15th Avenue to 12th Avenue on Inlet Place.   |
|          | Reservoir 3 and 4 Circulation Lines   | In order to improve reservoir water circulation, install approximately 80 linear feet of 24-inch ductile iron pipe, 44 linear feet of 16-inch ductile iron pipe, 5 linear feet of 12-inch ductile iron pipe, one (1) single pumper fire hydrant assembly, seven (7) 12-inch to 24-inch gate valves and valve boxes, fittings, cathodic protection anodes, and sections of storm drain pipe. The Work in the Reservoir Facility Building includes mechanical piping, flow meters, valves, fittings, hydro-kinetic turbine, centrifugal pump, instrumentation, electrical, controls, and HVAC equipment. Additionally, the project includes demolition of Century Village Booster Station and removal of the existing sleeve valve in Tudor Valve Vault. |
|          | SW 260 Zone Capacity Improvements   | Provide necessary connectivity between two pressure zones in the AWWU water distribution system and thereby ensure more reliable service. The project will install water main to the SW 260 pressure zone through the Tanglewood Gold Course, Upgrade/construct a Pressure Relief Valve (PRV) Station at Oceanview North and Bowman School, and abandon three existing PVR stations.   |
|          | Upper Eagle River Flow  | Complete booster station upgrades at Meadow Creek and Norfolk Booster Stations including pump upgrades and suction piping.   |
| D-19-11  | West 43rd Aero to Constellation Water<br>Rehabilitation                             | Rehabilitate approximately 2,500 linear feet of 10-inch and 6-inch cast iron pipe and associated appurtenances on West 43rd and West 44th Avenue between Aero Avenue and Beechcraft Drive and on Aero Avenue and Beechcraft Drive between West 43rd and West 44th Avenue.  |
| D-19-14  | Water Master Plan Update  | The water master plan provides a guide for future expansion, modifications and rehabilitation over a 20-year planning horizon.   |
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