Alaska Capacity Development Program

Annual Report to EPA

State Fiscal Year 2023

September 2023

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Executive Summary

The Alaska Department of Environmental Conservation (DEC) is the designated State primacy agency for the Safe Drinking Water Act (SDWA) implementation. As such, DEC is required to prevent the creation of new nonviable community and nontransient noncommunity water systems and to develop a strategy to address the technical, managerial, and financial (TMF) capacity of all existing water systems to reliably deliver safe drinking water.

Effective October 1, 1999, Alaska regulations require owners of new water systems to demonstrate system viability and capacity prior to DEC issuing an approval to construct. Alaska convened a Citizen's Advisory Board (CAB) and used the published results of that effort to produce Alaska's capacity development strategy in 2000. The strategy was revised in 2013 and again in 2022. The U.S. Environmental Protection Agency (EPA) approved the most recent strategy on February 1, 2023.

To assist in the anticipated need for increased capacity development support due to the influx of funding from the Infrastructure Investment and Jobs Act, DEC received authorization for additional positions to support the creation of a standalone Capacity Development (CapDev) Program. During this reporting period, DEC hired a Program Manager and two Environmental Program Specialists to assist in the implementation of Alaska's capacity development strategy.

The following annual implementation report describes the program's efforts during State Fiscal Year 2023 (SFY23) (July 1, 2022 – June 30, 2023) to ensure that both new and existing water systems acquire and maintain the TMF capabilities to successfully operate. This report is structured in accordance with EPA *Reporting Criteria for Annual State Capacity Development Program Reports* and contains all required reporting elements.

EPA Reporting Criteria

The following information addresses the status of new systems and the existing system capacity development strategies crafted, adopted, and implemented by the State of Alaska. These strategies ensure that newly proposed water systems and existing water systems have the technical, managerial, and financial capacity to achieve and maintain compliance with federal regulations.

NEW SYSTEMS PROGRAM ANNUAL REPORTING CRITERIA

HAS THE STATE'S LEGAL AUTHORITY (STATUTES/REGULATIONS) TO IMPLEMENT THE NEW SYSTEMS PROGRAM CHANGED WITHIN THE PREVIOUS REPORTING YEAR? IF SO, PLEASE EXPLAIN AND IDENTIFY HOW THIS HAS AFFECTED OR IMPACTED THE IMPLEMENTATION OF THE NEW SYSTEMS PROGRAM (ADDITIONAL DOCUMENTATION, SUCH AS AN ATTORNEY GENERAL (AG) STATEMENT OR A STATEMENT FROM A DELEGATED DEPARTMENT ATTORNEY, MAY BE REQUIRED.) IF NOT, NO ADDITIONAL INFORMATION ON LEGAL AUTHORITY IS NECESSARY.

The State's legal authority did not change during SFY23.

HAVE THERE BEEN ANY MODIFICATIONS TO THE STATE'S CONTROL POINTS? IF SO, DESCRIBE THE MODIFICATIONS AND ANY IMPACTS THESE MODIFICATIONS HAVE HAD ON IMPLEMENTATION OF THE NEW SYSTEMS PROGRAM. IF NOT, NO ADDITIONAL INFORMATION ON CONTROL POINTS IS NECESSARY.

The State's control points did not change during SFY23.

LIST NEW SYSTEMS (PWSID & NAME) IN THE STATE WITHIN THE PAST THREE YEARS AND INDICATE WHETHER THOSE SYSTEMS HAVE BEEN ON ANY OF THE ANNUAL ENFORCEMENT TARGETING TOOL (ETT) LISTS (AS GENERATED ANNUALLY BY EPA'S OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE).

Appendix A lists new systems within the past three state fiscal years.

EXISTING SYSTEM STRATEGY

IN REFERENCING THE STATE'S APPROVED EXISTING SYSTEMS STRATEGY, WHICH PROGRAMS, TOOLS, AND/OR ACTIVITIES WERE USED, AND HOW DID EACH ASSIST EXISTING PWS'S IN ACQUIRING AND MAINTAINING TMF CAPACITY? DISCUSS THE TARGET AUDIENCE THESE ACTIVITIES HAVE BEEN DIRECTED TOWARDS.

In accordance with the Alaska Capacity Development Strategy, DEC employs a collaborative and flexible approach to providing technical assistance. While the CapDev Program is responsible for implementing the existing systems strategy, other state programs also offer capacity assistance. Coordination among these various programs allows technical assistance providers to address some of the unique challenges faced in Alaska and enhances their ability to provide and direct services where they are most needed.

The following section details the various programs, tools, and initiatives utilized to assist existing public water systems (PWSs) acquire and maintain TMF capacity during SFY23.

Operations and Maintenance Best Practices (O&M Best Practices)

The O&M Best Practices is a tool used to assess the operations and maintenance capacity of rural water utilities. Utilities are scored biannually on technical, managerial, and financial categories comprised of nine criteria. The scoring criteria is included in Appendix B.

The O&M Best Practices score is used to determine the priority of sanitation projects proposed for funding. For some funding sources, the O&M Best Practices score determines eligibility. In other instances, the Best Practices score is used as part of the larger project scoring criteria.

Access to these funding sources incentivizes rural communities to acquire and maintain TMF capacity. Communities are encouraged to actively work with technical assistance providers to improve system capacity, and by extension, their O&M Best Practices score. Resources, such as sample preventative maintenance plans and financial reports, operator trainings, management and financial trainings, and assistance with QuickBooks and taxes are offered by the State to assist utilities with their O&M Best Practices scores.

Public Outreach

As a newly established standalone program, the CapDev Program will work to build capacity through public outreach and formal presentations at statewide professional conferences. Three CapDev Program staff attended and presented at the 2023 Alaska Water Wastewater Management Association (AWWMA) Conference. Additionally, in August 2022, the Program Manager overseeing the Technical Assistance Programs attended the National Capacity Development and Operator Certification Workshop to present and sit on the Targeting Underserved and Disadvantaged Systems panel.

American Water Works Association (AWWA) Water System Operations (WSO) Guidebooks

DEC purchased AWWA WSO Water Treatment Grades 1 and 2 manuals and Certification Exam Prep books to provide additional resources to operators statewide. Operators who request assistance are provided these resources free of charge. Operators who have taken and failed certification exams are also targeted for outreach with these materials.

Small Untreated and Small Treated Water Systems Training Courses

Small untreated (SU) and small treated (ST) water systems are community or non-transient non-community water systems that serve fewer than 500 people, contain fewer than 100 service connections, and either add no chemicals or one chemical for treatment, respectively. In Alaska, 62% of systems that require a certified operator are classified as either SU or ST.

Until recently, operators seeking assistance in passing the SU or ST certification exam had access to online courses that were hosted by the water/wastewater program at the University of Alaska, Southeast (UAS) in Sitka; however, the UAS program was eliminated, and along with it, the SU and ST online courses. Additionally, the DEC-approved correspondence course available to operators uses manuals that were developed in 2002. To address the training gap created by the elimination of the UAS online courses and to "refresh" the 2002 manuals, DEC solicited proposals for the development of a small untreated and small treated online training course, study modules, and consolidation of the SU and the ST manuals into one single manual. During SFY23, DEC worked with AspireAlaska to host the online courses and finalize edits to the manual. The final manual will be used in Small Treated courses in the fall of SFY24, and the online courses will be available to the public on the AspireAlaska training platform in SFY24.

Rural Community Calendars

To support rural communities and utilities, DEC produces an annual calendar for rural community utility staff. Over 500 calendars were mailed to rural communities in 2023. The calendar contains important reminders each month for operators, clerks, and bookkeepers, such as deadlines for sampling, preventative maintenance reports, and taxes, as shown in the excerpt below:

MAY 2023

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1 Take Coliform sample w/distribution residual *WPO duty*	2 Pay April payroll & child support liabilities *Clerk/Bookkeeper duty*	3 Submit the April operator report to DEC *WPO duty*	4 Submit the April Discharge Monitoring Report (if required) to DEC electronically through the NetDMR system *Responsible Official duty*	5 Submit your April preventative maintenance records to your assigned RMW *WPO duty*	6
7	8 Have you reconciled the April bank statement? *Clerk/Bookkeeper duty*	9	10 Have you backwashed the filter? *WPO duty*	11	12 Have you submitted your Community Assistance Program application? *Applications are due by June 1, 2023* *Responsible Official duty*	13
14 Mother's Day	15 Check fuel levels and day tank in WTP *WPO duty*	16	17 Monitor/maintain lift station *WPO duty*	18 Have you tested the backup generator? *WPO duty*	19 Order fuel for summer *Clerk/Bookkeeper duty*	20
21	22 Draft of FY24 Budget should be supplied to the Council if you operate on a State FY *Clerk/Bookkeeper duty*	23 Flush system hydrants *WPO duty*	24	25 Check chemical supplies/spare parts & re-order if needed *WPO duty*	26 Submit the April meeting minutes and financial reports to RUBA staff *Clerk/Bookkeeper duty*	27
28	29 Memorial Day	30	31 How many gallons of water did you treat this month? _____ *WPO duty*	Find your community's assigned LGS/RUBA staff on DCRA's website or contact the Resource Desk, resourcedesk@alaska.gov		

NOTES:
_____
_____
_____
_____

JUNE

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Photos of communities and systems are included to highlight the diversity of Alaska's small systems and landscapes. The 2023 calendar also recognizes two Remote Maintenance Worker staff who passed away recently to offer appreciation for their years of service in assisting small systems across Alaska.

Calendars provide TMF assistance in rural communities where turnover is high and communication with technical assistance staff may be limited due to distance and connectivity issues. Sampling compliance, routine maintenance and booking and reporting requirements are all targeted with this effort. A contacts page is also included at the end of the calendar which lists the various technical assistance providers in the state, contact numbers, and a brief overview of the services offered.

Water System Excellence Award Program

The Water System Excellence Award (WSEA) Program aims to increase the visibility of systems and operators who have demonstrated their commitment to providing safe drinking water, as community appreciation is essential to maintaining TMF capacity. By increasing visibility, DEC hopes that the positive recognition will contribute to employee retention and community support and encourage improvements in systems that are not currently recognized.

The WSEA recognizes water systems that achieve outstanding performance in the operation of their systems, and has two tiers, Ursa Major and Ursa Minor. To earn the Ursa Major award, a water system must maintain four quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. To earn the Ursa Minor award, a water system must maintain four quarters of operator certification compliance with no more than one open, unresolved, or incurred drinking water violation during the award year, or maintain three quarters of operator certification compliance with no open, unresolved, or incurred drinking water violations during the award year. For the 2022 award year (SFY23), 272 water systems were awarded Ursa Major and 73 were awarded Ursa Minor. Award winners receive the following certificates:

Drinking Water (DW) Program

The DW Program is responsible for enforcing federal health-based standards, established by the EPA as required by SDWA. The DW Program utilizes the EPA's quarterly Enforcement Targeting Tool (ETT) to focus attention on those PWSs that, based on the severity and frequency of their violations, are defined as significantly out of compliance with the SDWA requirements. During SFY23, ETT scores were used as indicators of capacity and to prioritize compliance assistance and enforcement for PWSs statewide. Currently, the DW Program and other technical assistance providers work with communities who receive an ETT score of 11 or higher to determine what steps are needed to bring a system back into compliance.

The DW Program also conducts sanitary surveys. Sanitary survey inspections help PWSs strengthen operational and managerial processes, as well as strengthen infrastructure, by identifying barriers or obstacles that prevent systems from doing their best to provide safe drinking water to their customers; providing operator education, technical assistance and training; increasing communication between the PWS staff and DW Program; and identifying and correcting deficiencies, thereby reducing risks to public health.

To assist in the technical capacity of water systems, the DW Program conducts plan reviews of new public water systems and modifications to existing public water systems to ensure that proposed designs meet current engineering standards and will be able to operate within the requirements of the drinking water quality regulations.

State Revolving Fund (SRF) Program

The SRF Program offers low-interest loans from the Drinking Water State Revolving Fund (DWSRF) to eligible PWS owners for infrastructure improvements. These loans assist PWS owners with financing the infrastructure upgrades needed to protect public health and achieve and maintain compliance with SDWA requirements. All SRF Program borrowers for drinking water projects are required to demonstrate sufficient TMF capacity to operate the system in

compliance with state and federal regulations. If a utility is non-compliant, an assessment is made to determine if the proposed SRF-financed project will bring the system into compliance, thus assisting the system in acquiring a greater capacity.

The target audience for DWSRF loans has historically included municipally owned water systems serving mid to large size communities. In order to provide funding assistance to small, rural Alaska communities, the SRF Program initiated efforts to develop a Micro Loan program in SFY19. The Micro Loan program finances projects that would otherwise be challenging to fund through traditional grant programs, or to finance aspects of larger grant-funded projects that are ineligible through a grant.

Rural municipalities may be eligible to receive a low-interest Micro Loan of up to $500,000 with a maximum of 90% principal forgiveness. The level of principal forgiveness depends on the affordability of the utility's user rates as well as the community's O&M Best Practices score. In addition to the direct support for technical capacity provided by infrastructure upgrades, the Micro Loans provide an incentive for PWSs to acquire and/or maintain TMF capacity. By relating the amount of principal forgiveness to the O&M Best Practices score, an incentive is provided for communities to develop and maintain TMF capacity: the higher the O&M Best Practices score, the higher the principal forgiveness.

Remote Maintenance Worker (RMW) Program

The RMW Program is a partnership between DEC and five regional health corporations to assist water systems in building and maintaining technical capacity by providing services to operators in nearly 200 rural Alaskan communities. During SFY23, the RMW Program continued its work of providing capacity assistance through on-site, on-the-job training in the proper operation and maintenance of water systems and compliance with state and federal regulations.

Organization	No. of RMWs	Region Served	Number of Communities
DEC	3	Southeast Alaska Aleutian/Pribilof Islands Kodiak Island Kenai Peninsula	72
Bristol Bay Area Health Corporation	1	Bristol Bay	21
Maniilaq Association	1	Kotzebue Region	10
Norton Sound Health Corporation	2	Norton Sound	15
Tanana Chiefs Conference	3	Interior Alaska	28
Yukon Kuskokwim Health Corporation	5	Yukon Kuskokwim Delta	51
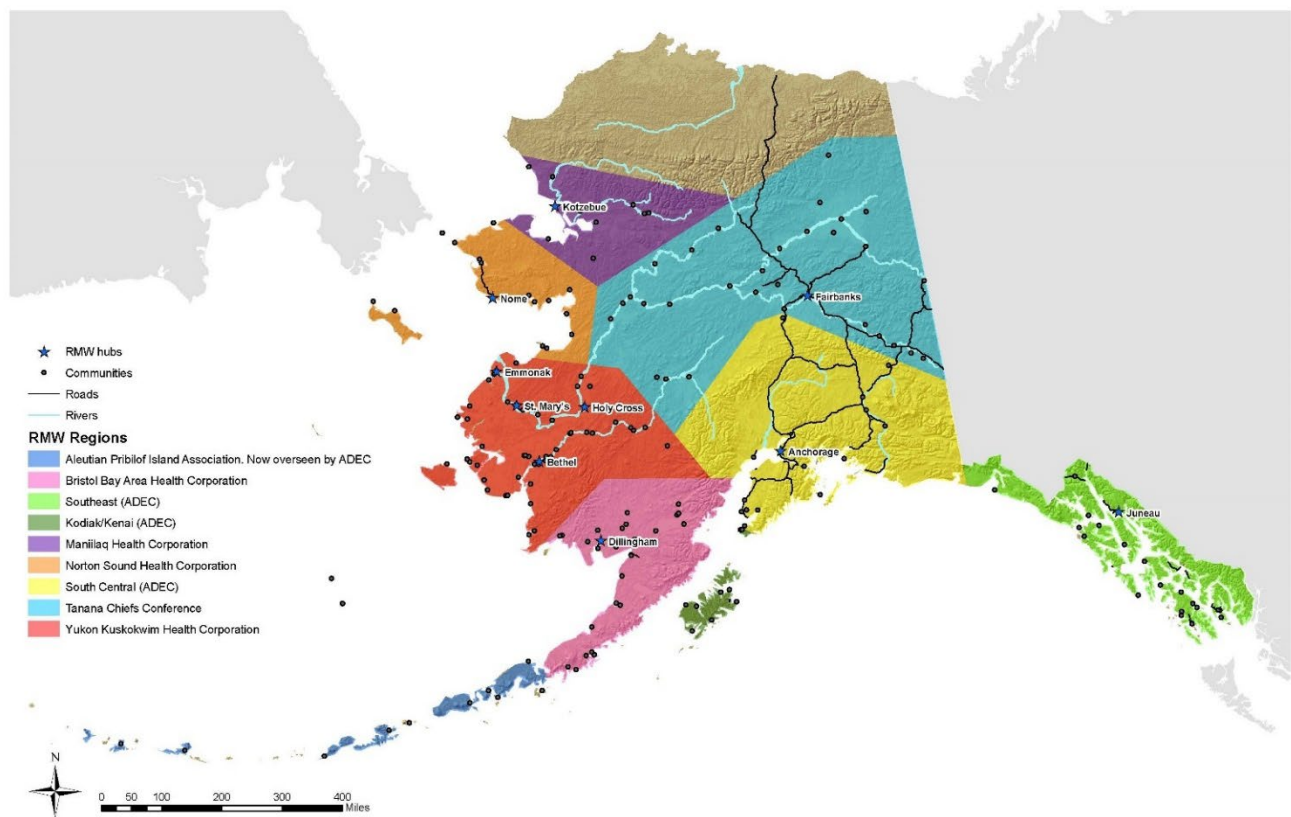
RMWs offer targeted, system specific assistance to operators, allowing them to improve the sampling, troubleshooting, maintenance, and mechanical repair skills needed to adequately run a community's utility. RMWs work with operators to develop and revise operations and maintenance (O&M) and preventive maintenance plans, train them in accurate record keeping, and prepare the operation, maintenance, sampling, monitoring, and testing reports that are presented to the governing body concerning the status of the utility. Further capacity building efforts include informing local government officials of RMW findings and recommendations concerning operation and maintenance requirements and costs, plant O&M issues, and operator training needs. In addition to the one-on-one and local response, RMWs facilitate regional training workshops for operators in their region and provide classroom instruction to prepare operators for State certification exams.

Village Safe Water (VSW) Program

The VSW Program, within the DEC Division of Water, works to provide safe water and hygienic sewage disposal facilities in villages in the state. VSW is comprised of a team of engineers, project support specialists, procurement specialists, accountants, and grant administrators and administers millions of dollars in grants to fund water and sewer studies and the construction of sanitation facilities.

Rural Utility Business Advisor (RUBA) Program

The RUBA Program is part of the Division of Community and Regional Affairs in the Department of Commerce, Community, and Economic Development. Local Government Specialist staff in the RUBA Program assist rural water utility providers with their financial and managerial capacity. While based in Anchorage, Bethel, Dillingham, Fairbanks, Juneau, Kotzebue, and Nome, RUBA staff can travel to communities to provide direct one-on-one

assistance to utility staff. During SFY23, RUBA staff worked alongside community members to identify strengths and weaknesses in their utility management and to develop plans to improve operations.

RUBA trainings are also provided in different regions across Alaska on a cost reimbursable basis. The 32-hour classes offered are: Introduction to Utility Management, Personnel Management, Financial Management, Organizational Management, Planning Management, Operations Management, Elected Officials and Utility Clerk. These courses provide utility staff with the principles and practices necessary to manage small water and wastewater facilities in rural Alaska. During SFY23, RUBA conducted nine classroom and six online management related trainings.

Additionally, RUBA staff play a key role in O&M Best Practices implementation and scoring. Staff collect and review the documentation required for scoring and actively work with communities to improve scores upon request.

Quarterly Technical Assistance Provider & Annual Regional Coordination Meetings

During SFY23, the CapDev Program resumed the quarterly Alaska Water Technical Assistance Providers Meetings. These meetings bring together the various agencies that provide technical assistance to communities throughout Alaska, including the EPA, Alaska Native Tribal Health Consortium (ANTHC), DEC, RUBA, Rural Community Assistance Corporation (RCAC), and Tribal Regional Health Organizations (RHOs). By convening these groups quarterly, DEC works to share regulatory updates and requirements, coordinate efforts, reduce duplicative efforts, and identify funding sources.

The CapDev Program also coordinates annual regional meetings in rural hub communities that bring together representatives of the regulatory programs and technical assistance providers that address rural sanitation needs. Participants include DEC's CapDev, OpCert, RMW, VSW, DW, Wastewater, and Solid Waste program staff, RUBA program staff, ANTHC staff, and RHO environmental health staff. At these meetings, participants review and evaluate the current capacity status of all rural communities within a region to ensure that no community is unintentionally neglected from receiving technical assistance. The goal of these meetings is to coordinate effective and consistent communication between the agencies aiding rural communities with their sanitation infrastructure needs, to capture community needs for funding purposes, and to establish interagency collaboration on technical assistance efforts to communities.

BASED ON THE EXISTING SYSTEM STRATEGY, HOW HAS THE STATE CONTINUED TO IDENTIFY SYSTEMS IN NEED OF CAPACITY DEVELOPMENT ASSISTANCE?

The State continues to work collaboratively and to use a variety of indicators for identifying existing systems in need of capacity development assistance.

ETT Scores & Sanitary Surveys

Statewide, compliance data is a strong indicator of systems in need. As discussed in the previous section, sanitary survey deficiencies and an ETT score of 11 or greater are used to identify and prioritize systems for capacity assistance.

Operator Quarterly Ranking

The Operator Certification Program maintains a quarterly schedule of analyzing and ranking the operator certification compliance status of systems; systems that rank the highest (based on factors such as system type, population served, source water, and system classification) are targeted for capacity assistance.

O&M Best Practices

For rural systems, the O&M Best Practices score is a comprehensive measure of capacity that is updated biannually. Communities with scores below minimum funding thresholds are prioritized for technical assistance from several programs, including the RMW and RUBA programs.

Technical Assistance Provider Coordination

Various agencies and staff provide technical assistance to communities throughout Alaska. By convening these groups quarterly, and annually for rural systems, DEC works to identify and target systems most in need of capacity assistance.

Financial Capacity Assessments

Financial Capacity Assessments are used to determine if a community is eligible for SRF loan funds. Different aspects, such as operating income, cash flows, debt, and affordability, are reviewed to assess the overall financial health of a community and can identify systems in need of capacity development assistance.

DURING THE REPORTING PERIOD, IF STATEWIDE PWS CAPACITY CONCERNS OR CAPACITY DEVELOPMENT NEEDS (TMF) HAVE BEEN IDENTIFIED, WHAT WAS THE STATE'S APPROACH IN OFFERING AND/OR PROVIDING ASSISTANCE?

During the reporting period, DEC addressed recurring capacity concerns and identified new projects to assist water systems build and maintain capacity.

O&M Best Practices Scores

DEC's VSW Program administers the Capital Improvement Project (CIP) funding allocation system that funds planning, design and construction of sanitation improvements in rural Alaskan communities. Prior to construction, recipients of CIP grant funding are required to demonstrate sufficient TMF capacity to operate and maintain their sanitation system in the long term. For served communities, where most homes have running water and sewer service, to apply for funding or to be placed on the CIP funding priority list, a minimum total score of 60, must be achieved and maintained to receive construction funding. Underserved/underserved communities, where most homes currently do not have running water and service from either pipes or individual wells and septic systems, must demonstrate a Best Practices score of at least 35 points to be eligible for construction projects to repair or replace core facilities that have exceeded their design life, but maintain the current level of service. A minimum score of 35 points is also required to be eligible for funding for the design of non-core facilities; construction funding for non-core facilities requires a minimum score of 60 points. Eligibility requirements for a CIP application include a Multi-Agency Review Committee approved Preliminary Engineering Report (PER). During SFY23, a list of communities with approved or ongoing PERs and their current O&M Best Practices scores was compiled. Those communities that were anticipated to apply for CIP funding, but with O&M Best Practices scores below the eligibility threshold, were targeted for additional technical assistance.

System-Specific Training and Certification (S^{2}TC) Program

Operators of water treatment systems are required to be certified at levels equal to system classification. To become certified, operators must pass validated exams and document required operations experience. DEC administers national ABC exams purchased from Water Professionals International. Select operators have been unable to pass the ABC exams, even after significant preparation through course work and coaching. Reasons given include test anxiety and the reality that ABC exams cover a wide variety of water treatment topics, many of which don't apply to the system under the operator's control. However, it has long been maintained that many of these operators, while unable to pass the ABC exams, possess the knowledge and skills needed to safely operate their water systems.

To address this challenge faced by capable and experienced operators, DEC is developing the S^{2}TC Program. This program involves the creation of training modules for different treatment and distribution components of a PWS. Once completed, these modules will serve as the basis for an alternative approach to certification exams that will only be offered to operators who are effectively operating and maintaining a utility but have repeatedly failed certification exams. Operators identified by DEC to participate in this program will be required to prepare and submit a facility description to determine which modules will be administered. Each module is intended to educate and test an operator on information that is specific to the technology used in their utility. In these limited cases, successful completion of the S^{2}TC Program will replace the requirement of passing the standard certification exam and certification will be specific to that system. The training modules will also be made available as study materials for all operators.

During SFY23, the CapDev Program worked to finalize edits to five modules for S^{2}TC Program. Two communities, both of which have long-standing operators who have not passed certification exams despite repeated attempts, have been identified for beta testing during SFY24.

Operator Examination Passage Rates

Assistance for operators unable to pass certification exams continues to be an identified need. DEC's approach to aiding operators includes:

- Contracting the development of small untreated (SU) and small treated (ST) water system online courses and an updated consolidated manual.

- Offering free WSO books and examination preparation materials to any interested operator.

- Developing the S^{2}TC Program for experienced operators who have been unable to pass the ABC examinations.

- Maintaining a Training Coalition Calendar that includes information about all available courses, trainings, and CEU opportunities for operators in Alaska.

Asset Management

DEC is in the early stages of incorporating asset management into the capacity development strategy but has taken advantage of the water utility support system already in place in Alaska to educate and inform public water systems about what asset management is and how it can stabilize and protect water utilities and the public health.

During this reporting period, the asset management assistance supported and encouraged by DEC included a presentation at the AWWMA conference which included information and updates on asset management. Asset

management trainings are listed on DEC's annual training calendar webpage as they become available and qualify participants for continuing education units (CEUs).

The SRF Program offers the Sustainable Infrastructure Planning Projects (SIPP) funding opportunity to assist small water systems in financing planning and related activities that promote sustainable infrastructure. Up to $75,000 in loan principal forgiveness is currently offered to disadvantaged communities to implement SIPP projects including development of asset management plans, feasibility studies, consolidation studies, water rate analysis, leak detection studies, and water system master plans. In SFY23, the SRF Program incorporated asset management into the project evaluation and scoring process for all proposed loan projects to further incentivize the development and implementation of asset management plans and activities. SRF applicants can now receive a total of thirty points in the asset management scoring category. The CapDev Program assisted the SRF Program by conducting outreach and completing the asset management inventory and plan reviews for the eight systems that submitted asset management application materials. Scoring determinations for applications were based on the EPA's *Reference Guide for Asset Management Tools*.

Operator Sampling Toolkit

Compliance with sampling and monitoring is a recurring challenge in Alaska. Remote systems often experience shipping delays due to limited infrastructure and inclement weather which can result in reporting violations. Additionally, the expensive cost of shipping samples can become more burdensome if operators are unfamiliar with proper sampling procedures and samples are rejected by the receiving laboratory. While small systems in urban areas may not experience the same issues related to shipping, systems such as mobile home parks may rely on volunteers who are unfamiliar with the sampling procedures to conduct the required monitoring.

To address capacity needs related to small system sampling and monitoring compliance, the CapDev Program developed an operator sampling toolkit. This tool kit includes an easy-to-read wall chart and companion booklet with instructions tailored to Alaska's public water systems. The wall chart is a large format visual reference for each type of sample, to assist with bottle identification, where and when to take the sample, and details for transportation. The companion booklet includes more comprehensive information with specific instructions to successfully collect and ship water samples. The goal of this tool kit is to help operators stay in compliance and protect the public health by simplifying the water sampling process. During SFY23, the CapDev Program worked to finalize editing and formatting these reference materials. The wall chart and companion booklets will be sent to communities in SFY24.

Quick Reference Guides for Rural Community Sanitation Utilities

Water systems in rural communities suffer from frequent turnover at all levels of the utility, creating an environment where management, administrative staff, and operators may not be aware of the TMF resources available to them. During this reporting period, the CapDev Program worked to finalize editing and formatting for a "welcome packet" binder for new utility operators and managers to address knowledge gaps created by this staff turnover.

The *Quick Reference Guide for Rural Community Sanitation Utilities* gives an overview of the various programs that provide technical assistance to support rural water utilities. Included in this packet are brief descriptions of how each of these programs can help and how to contact them. Also included are samples of commonly used reports and documents needed by water and wastewater utility staff along with QR codes for quick online access, and "How Do I" pages that include simple instructions about common tasks and processes necessary to operate a small

water utility. These welcome packet binders provide a valuable central resource for water system staff in rural water utilities across the state, offer a direct link between rural communities and technical assistance staff, and are a simple, consolidated resource that can be easily accessed by utility staff. During SFY23, the CapDev Program worked to finalize editing and formatting these reference materials. Binders with this information will be assembled and mailed to communities during SFY24 and digital versions will also be available online.

Small System Non-Rural Assistance

Recognizing the prevalence of assistance available to small rural water systems, the CapDev Program developed targeted assistance for small non-rural community water systems that serve under 500 people. These systems do not receive support from many of the programs that assist rural Alaskan systems but have many of the same TMF assistance needs. During this reporting period, the CapDev Program selected the Consumer Confidence Rule as a target area for small non-rural system assistance.

The goal of this project is to assist and encourage eligible community public water systems to meet their Consumer Confidence Rule reporting requirements by offering outreach, an educational guide, and a companion short class to teach water system personnel how to create and deliver their own consumer confidence reports (CCRs) using the EPA's CCR iWriter tool.

The CapDev Program identified potential candidates using the ETT list and worked with the DW Program to confirm systems with outstanding ETT violations. Working collaboratively, both programs identified five systems for this targeted outreach and assistance. The CapDev Program also collaborated with the DEC OpCert Program to award CEUs for the training.

During SFY23, the CapDev Program engaged in outreach communications with the five identified systems and conducted one online training on the CCR iWriter resulting in CEU credit. This effort resulted in the successful submission of four CCR reports and certifications, and seven violations returned to compliance.

Alaska Capacity Development Survey

Unprecedented Federal funding has been allocated towards water and sanitation improvements in Alaska's communities over the next five years. TMF capacity are the cornerstones for successful implementation of that investment. The passage of the Bipartisan Infrastructure Law (BIL) renewed energy among rural Alaska communities, RHOs, State and Federal agencies, technical assistance providers and others to improve TMF capacity in the communities and utilities that will benefit from the BIL investments. On behalf of technical assistance providers across the state, DEC contracted with Agnew::Beck Consulting to conduct an anonymous survey to yield input from water and wastewater industry stakeholders about the existing capacity development resources available to utilities.

Two online surveys were developed and administered to collect valuable feedback from utility owners, operators, administrators, as well as technical assistance providers, system funders, and regulators. This survey effort had two overarching goals: to solicit feedback to inform decisions about allocating resources for the CapDev Program, and to increase awareness of available tools and opportunities to build TMF capacity for water and wastewater systems statewide.

During SFY23, survey results were analyzed and cross tabulated to identify key findings and trends among responses and a summary report was drafted for DEC review. The final report outlining the key findings and

recommendations from the survey effort and appendices with the raw data and analyses conducted will be completed in SFY24. The CapDev Program will utilize the final report to target program efforts on the training and resource needs identified by the water and wastewater industry.

The State did not perform a review of the implementation of the existing system strategy during SFY23.

During SFY23, the CapDev Program submitted an updated Capacity Development Strategy to EPA Region 10 for review and approval. The purpose of this update is to be reflective not only of agency and regulatory changes, including the addition asset management initiatives, but also of an expanded Alaska Capacity Development Program capitalizing on other existing programs that also focus on capacity building efforts. EPA Region 10 approved this revised strategy on February 1, 2023 and it is available on the DEC website at: https://dec.alaska.gov/water/technical-assistance-and-financing/capacity-development/

Reporting Period and Submittal Dates

The reporting period for this report is July 1, 2022 – June 30, 2023, with a submittal date of no later than September 30, 2023

Appendix A: New Systems for SFY21-23

PWSID	System Name	PWS Type	Active	Source	Population	City	Startup Date	FY	ETT (Yes/No)
AK2392041	CLEAR SPACE FORCE STATION – LRDR	NTNC	A	GW	60	ANDERSON	7/1/2020	FY21	No
AK2314051	FT WAINWRIGHT / DRMO	NTNC	A	GW	35	Fairbanks	7/28/2020	FY21	No
AK2226055	PALMER LIFEWAYS DAYCARE	NTNC	A	GW	56	PALMER	8/1/2020	FY21	No
AK2382101	TCC UPPER TANANA HEALTH CLINIC - TOK	NTNC	A	GW	65	TOK	9/21/2020	FY21	No
AK2220496	THREE BEARS CORPORATE OFFICE	NTNC	A	GW	50	WASILLA	2/26/2021	FY21	No
AK2220495	TRAPPER CREEK WATERING POINT	C	A	GW	500	TRAPPER CREEK	3/19/2021	FY21	No
AK2226057	ARKOSE WOODS	C	A	GW	90	PALMER	7/1/2021	FY22	No
AK2121527	KETCHIKAN WATER, TRUCK 1	C	A	SWP	100	KETCHIKAN	5/11/2022	FY22	No
AK2220485	VIEW POINTE AT THE RANCH - PHASE 1 & 2	C	A	GW	50	PALMER	4/1/2022	FY22	No
AK2249263	HOMERUN OIL CO. WATER HAULER	C	A	SWP	100	HOMER	5/22/2023	FY23	No
AK2340882	KIVALINA K-12 SCHOOL	NTNC	A	SWP	217	KIVALINA	11/1/2022	FY23	No
AK2220500	KNIK-FAIRVIEW CCS EARLY LEARNING CENTER	NTNC	A	GW	128	WASILLA	11/21/2022	FY23	No
AK2220512	LIBERTY TAX BUILDING	NTNC	A	GW	125	WASILLA	4/1/2023	FY23	No
AK2220506	LUPINE MOB LLC	NTNC	A	GW	80	WASILLA	4/20/2023	FY23	No
AK2310421	NOAA-NESDIS-CDA STATION-Fox	NTNC	A	GW	40	Fox	1/4/2023	FY23	No
AK2220507	VALLEY VIEW TOWER	NTNC	A	GW	85	WASILLA	4/1/2023	FY23	No

Appendix B: Best Practices Scoring Criteria

Category		Best Practice	Points	Contacts	Additional Information
Technical	*Operator Certification*	Utility has more than one operator certified to the level of the water system	10	Operator Certification Program	Regulations require that the primary operator of a water system be certified at level equal to the classification of a system. The classification of each water system can be found online at https://dec.alaska.gov/Applications/Water/OpCert/. For scoring purposes, the certification requirements considered will be for Water Treatment unless a system only requires a Water Distribution operator, in which case only Water Distribution certifications will be considered. Operators of Small Treated and Small Untreated systems who hold a Water Treatment certification at any level are considered to be certified to the level of the system. Wastewater Collection and Wastewater Treatment certifications will be considered if a community has a wastewater system but no water system. Systems that do not require a certified operator will receive full points.
		Primary operator is certified to the level of the water system and the backup operator holds some level of certification in water treatment or distribution	7		
		Primary operator is certified to the level of the water system and the backup operator holds no certification or there is no backup operator	5		
		Utility has one or more operators certified at some level in water treatment or distribution	3		
		Utility has no certified operators	0		
	Preventive Maintenance Plan	Utility has a written PM plan; PM is performed on schedule; records of completion are submitted on a quarterly basis and have been verified	25	Remote Maintenance Workers (RMWs)	A Preventive Maintenance Plan is a schedule of maintenance activities necessary for continued operation of the utility. At a minimum, the plan must include those activities required to prevent a loss of service. RMWs are available to assist in developing a PM Plans and training operators in proper maintenance. Utilities seeking 25 points must submit completed PM records to their assigned RMW on a quarterly basis. PM criteria apply to wastewater utilities if there is no public water system. Communities without a public water or wastewater system will receive full points.
		Utility has a written PM plan; performance of PM and record keeping are not consistent	15		
		Utility has no PM plan or performs no PM	0		
	Compliance	Utility had no Monitoring and Reporting violations during the past year	10	Drinking Water Program	Public water systems are required to collect water samples to demonstrate that the water meets drinking water quality standards and is safe for consumers. The Drinking Water Program provides each utility with an annual Monitoring Schedule each year. Sampling is a primary responsibility of the operator and sufficient funds for monitoring must be included in the budget. Communities without a public water system will receive full points.
		Utility had up to five Monitoring and Reporting violation during the past year	5		
		Utility had more than five Monitoring and Reporting violation during the last year	0		
	Total Technical Points		**45**		
Managerial	*Utility Management Training*	A person who holds a position of responsibility for management of the utility has completed a DCRA approved Utility Management course or other utility management training course within the last five years	5	RUBA	This person is not required to have the Utility Manager title, but must have some responsibilities pertaining to the management of the utility. This person must reside within the community and represent the utility, even in instances when the utility is managed by a third party.
	Meetings of the Governing Body	The utility owner's governing body meets routinely consistent with the local ordinance/bylaw requirements and receives a current report from the operator	5	Rural Utility Business Advisor (RUBA)	Meetings must be held as prescribed by ordinance or by rules and regulations of the governing body, with reasonable exceptions made for unforeseeable circumstances. A written or oral report from the operator or contracted utility manager must be recorded in the meeting minutes.
		The utility owner's governing body meets routinely consistent with the local ordinance/bylaw requirements	2		
		The utility owner's governing body does not meet	0		
	Total Managerial Points		**10**		
Financial	*Budget*	Utility owner and the Utility have each adopted a realistic budget and budget amendments are adopted as needed; Accurate monthly budget reports are prepared and submitted to the governing body	15	RUBA	If the utility is managed or operated by a third party, the utility owner and the contractor must demonstrate appropriate budgeting and financial reporting practices. The utility owner must demonstrate appropriate budgeting for any utility subsidies and for the contracted services. The contracted manager must also demonstrate a realistic budget for the utility. When the utility is managed by a third party, monthly financial reports must be submitted to, and reflected in the meeting minutes of, the utility owner's governing body. Utilities not under contracted management must have a distinct budget for the utility operations in order to achieve the maximum score.
		Either the Utility or the Utility owner has adopted and implemented a budget, the other has not	13		
		Either the Utility or the Utility owner has adopted a budget, but it is not being implemented	10		
		Utility owner and the Utility have not adopted a budget	0		
	Revenue	Utility is collecting revenue sufficient to cover the Utility's operating expenses and to contribute to a repair and replacement account	20	RUBA	To receive full points, the reports must show that sufficient revenues - whether from user fees, explicitly identified subsidies, or a combination of both- are being collected to meet all the utility's associated expenses, and that the utility is budgeting for repair and replacement expenses and/or already has sufficient funds saved to cover foreseeable repair and replacement costs.

'Collection policy' means a set of procedures designed to ensure bills are paid on time and in full, and to collect on past-due payments. Sending customers a bill/statement each month showing the amount owed is not a collection policy. The collection policy must include a statement of action that will be taken if past-due amounts are not received. |
		Utility is collecting revenue sufficient to cover expenses	15		
		Utility has a fee schedule and a collection policy that is followed	5		
		Utility has no fee structure or collection policy	0		
	Worker's Compensation Insurance	Utility has had a workers' compensation policy for all employees for the past two years and has a current policy in place	5	RUBA	All employees of the entity which owns the utility must be covered by workers' compensation insurance. In addition, all employees of a third party managing the utility must be covered, if applicable.
		Utility has a current workers' compensation policy in place for all employees	2		
		Utility has no workers' compensation policy	0		
	Payroll Liability Compliance	Utility has no past due tax liabilities and is current with all tax obligations	5	RUBA	This criteria applies to the utility owner, as well as to a third party managing the utility, if applicable. Taxes considered include both Federal and State taxes. A utility representative must sign an IRS tax authorization form for this information to be verified for scoring purposes.
		Utility owes back taxes, but has a signed payment agreement, is current on that agreement, and is up-to-date with all other tax obligations	2		
		Utility is not current with its tax obligations and/or does not have a signed repayment agreement for back taxes owed	0		
	Total Financial Points		**45**		
	Total Points Possible		**100**		