



# State of Alaska Annual Capacity Development Report

State Fiscal Year 2017



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- Cover photo - Eklutna Lake, which is the 119 square mile glacial watershed that serves as the primary drinking water source for the Municipality of Anchorage.

## **Introduction**

The Alaska Department of Environmental Conservation (DEC) Drinking Water (DW) Program implements the state's capacity development program. The following annual capacity development implementation report describes the capacity development efforts during State Fiscal Year 2017 (July 1, 2016 – June 30, 2017). This report contains all of the required United States Environmental Protection Agency (EPA) reporting elements.

The Alaska Capacity Development Program is funded using 15% of the Federal Capitalization Grant received for the fiscal year, with no more than 10% of that amount used for capacity development efforts (1452 (k)(1)(B)). Capacity development efforts are split between the DW Program and the Operator Training and Certification Program. The State General Fund also provided funding for Drinking Water Program staff conducting capacity development inspections, primarily the travel costs associated with Status Component Inspections.

## **DEC Drinking Water Program**

The DW Program is responsible for requiring public water systems to supply safe drinking water for public consumption that meets minimum federal health-based standards, established by the Environmental Protection Agency as required by the federal Safe Drinking Water Act. Alaska has had primary enforcement responsibility of the public water system supervision program (Safe Drinking Water Program) since 1978. Engineering and Environmental Program Specialist staff provide guidance to the public water systems (PWS) owners and operators on the design, installation and maintenance of drinking water facilities. They review project descriptions and engineered plans for new and modified systems to ensure that appropriate standards are met to protect human health and minimize the impact to the environment. Staff also provide access to office files on local public drinking water systems; as well as technical and compliance assistance; and workshops on regulatory, engineering, and drinking water public health-related issues. The DW Program currently regulates approximately 1,450 Community and Non-Community public water systems across Alaska.

## **EPA Reporting Criteria**

The following information addresses the status of new and existing system capacity development strategies developed, 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**

1. *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.*
  - a. No.

2. *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.*
  - a. No.
3. *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 Tracking Tool (ETT) lists (as generated annually by EPA's Office of Enforcement and Compliance Assurance).*
  - a. See Attachment 1

### **Existing System Strategy**

1. *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.*
  - a. Engineering Reviews – Existing PWS that undergo changes, upgrades, expansion etc. are required to submit engineering plans to the DW Program for review. In all cases, the DW Program engineering staff do a technical capacity review of these plans to ensure the design meets the specific treatment objectives for the system. During the course of the review, it is very common for the DW Program engineer to provide technical assistance to the design engineer prior to significant investment in the proposed modification. In cases where there are significant upgrades, an increase in the complexity of the treatment train or a significant expansion to the size (population served) of a system, a financial and managerial capacity review is done as well. In cases where sustainability issues have been noted in the past, financial and managerial reviews are done regardless of the extent of the upgrades. The results of the review are sent to the submitting design engineer as well as the system owner.
  - b. Engineering Inspections – The DW Program engineering staff completed seven Filtration Avoidance Inspections, all of which included evaluations of the technical and managerial aspects of the systems, with the overall goal to identify factors that when addressed could lead to increased compliance and optimization of the system. The results of the inspections are sent to the PWS owners.
  - c. Web Support – The DW Program maintains and supports web resources that provide information to PWS owners, operators and consulting engineers on financial and managerial tools, capacity assessments, as well as compliance and monitoring assistance and information. Additionally, an array of Drinking Water related information and resources is available on our website.
  - d. Sanitary Survey Inspections – The DW Program provides training and quality assurance/quality control oversight of approximately 80 individuals approved as Sanitary Survey Inspectors. While completing the survey, inspectors review the management and operations of the PWS and identify areas for improvement. Technical assistance is provided during and as a result of the inspection both to correct noted deficiencies and as suggestions to improve the operation of the system.

- e. Technical Assistance Provider Group – The DW Program has partnered with several other agencies who provide training and technical and managerial assistance to PWS operators, including the DEC Village Safe Water Program, Alaska Rural Water Association, Rural Community Assistance Corporation, U.S. Department of Agriculture/Rural Development Program and the Environmental Finance Center Network. The DW Program works with these agencies to share information on trends relating to training opportunities, as well as sharing information of specific communities and systems that could benefit from the technical, financial and managerial advice/assistance that these agencies have to offer. In general, these agencies focus their efforts on rural areas across Alaska as these are the areas that generally have the greatest need of assistance.

The DW Program also partners with health corporations around the state, to include: Alaska Native Tribal Health Consortium, Yukon-Kuskokwim Health Corporation, Bristol Bay Health Corporation, Norton Sound Health Corporation, Tanana Chiefs Conference, SouthEast Alaska Regional Health Consortium. Normally, every spring each of the regional health corporations meet with the Rural Utility Business Advisor staff, Village Safe Water Program and staff Operator Assistance Program staff to discuss the developments, plans and known issues in each of the communities that lie within the specific health corporation's area of responsibility. Depending on the availability of travel funds, the DW Program staff attend these meetings. DW Program staff routinely work with the health corporations and other agencies, and remain updated on the outcomes of the meetings. Often times staff from other DEC agencies such as Food Safety and Sanitation, Solid Waste, Wastewater, Spill Response, etc. attend these conferences as well. The goal and results of these meetings is a collaborative effort by all agencies to help the communities address technical, financial, managerial issues that affect not only the PWS's specifically, but the communities as a whole.

- f. Municipal Grants and Loans – The DW Program routinely coordinates and collaborates with the Municipal Grants and Loan Program on the technical, managerial and financial issues associated with PWS seeking financial support. DW Program staff often refer PWS owners to the Municipal Grants and Loans Program Manager to explore the feasibility of applying for and securing funding to make infrastructure upgrades at the PWS. Additionally, DW Program staff participate in the grant scoring and prioritization process and also provides information on the compliance status of PWS's.
- g. Operations Assistance – The DW Program routinely coordinates with the Operations Assistance Program relative to training opportunities for PWS operators. The Remote Maintenance Worker (RMW) Program, which is a section under the Operations Assistance Program, develops the capacity of Rural Alaskans to operate local PWS and sewer systems, while safeguarding State and Federal capital investments in utility infrastructures. The primary services of the RMW program are: provide training and technical assistance to PWS operators

through a circuit rider program, provide response to emergency situations that threaten/impact community water systems, maintain and inventory of emergency repair equipment for loan to communities.

2. *Based on the existing system strategy, how has the State continued to identify systems in need of capacity development assistance?*
  - a. In addition to several of the avenues mentioned above (engineering reviews and inspections, Sanitary Survey Inspections, Technical Assistance Provider group meetings, and the annual regional health corporation meetings), the DW Program identifies systems in need of capacity development assistance through the evaluation of compliance data. The scoring criteria used for the Enforcement Targeting Tool (ETT) is applied, though the goal is to identify and address the systems with scores of 1 -10 as well as the systems with scores of 11 or above which are officially on the ETT. By offering technical and compliance assistance to systems with scores below 11, the DW Program can help prevent systems from showing up on the ETT.
  
3. *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?*
  - a. The DW Program's approach to providing assistance relative to an identified TMF related issue is to work directly with PWS owners, operators and administrative contacts to address the issue through one, or a combination of avenues as discussed in the Existing System Strategy section above: engineering reviews and inspections, web support, sanitary surveys and follow-up, Technical Assistance Provider Group, Municipal Grants and Loans, and Operations Assistance. Another avenue of offering assistance on a statewide basis is through public outreach/formal presentations at Statewide Professional Conferences, to include: Alaska Rural Water Annual Conference, Alaska Water and Wastewater Management Association Annual Conference, Alaska Tribal Conference on Environmental Management, and the Southeast Alaska Regional Health Corporation Annual Conference. DW Program Staff regularly deliver formal presentations on technical and managerial subjects at all these conferences. The primary audience at these presentations are typically PWS owners/operators and design engineers.
  
4. *If the State performed a review of implementation of the existing systems strategy during the previous year, discuss the review and how findings have been or may be addressed.*
  - a. We did a review of our entire Capacity Development Strategy in July 2016. Updates and revisions were made to the document in order to make the document easier to read and understand. There were no changes made to the processes (strategies) themselves.
  
5. *Did the State make any modifications to the existing system strategy? If so, describe.*
  - a. No modifications were made.

**Reporting Period and Submittal Dates**

The reporting period for this report is July 1, 2016 – June 30, 2017, with a submittal date of no later than September 30, 2017.

Attachment 1

PWSID	System Name	PWS Ty	Startup Da	Fiscal Ye	ETT List	Which list?
AK2249219	ACAPULCO RESTAURANT	NC	17-Aug-15	FY16	No	
AK2330124	AFC POTABLE DELIVERY TRAILER 25-550	NC	27-Jan-17	FY17	No	
AK2330115	AIC WATER TANKER #15-284	NC	27-Mar-15	FY15	No	
AK2250037	AKHIOK	C		FY15	Yes	January 2015, April 2015, July 2015, October 2015, January 2016, April 2016,
AK2218810	AKLCITF - TRAINING FACILITY	NC	10-Sep-14	FY15	No	
AK2220458	ALASKA LAESTADIAN LUTHERAN CHURCH	NC	19-Mar-15	FY15	No	
AK2218778	ALASKA WILDLIFE CENTER	NC	16-May-17	FY17	No	
AK2263072	ALASKA'S GOLD CREEK LODGE	NC	08-Mar-16	FY16	No	
AK2330052	ARCTIC CAMP	NC	05-Jan-17	FY17	No	
AK2310625	BADGER PLAZA	NC	10-Mar-15	FY15	No	
AK2220466	BIG LAKE LIONS RECREATION CENTER	NC	16-May-16	FY16	No	
AK2315586	BIRCHVIEW WATER HAUL	C	08-Oct-14	FY15	No	
AK2391956	BLACK DIAMOND GOLF EMPLOYEE HOUSING	NC	21-Sep-16	FY17	No	
AK2392033	BLM - BRUSHKANA RIVER CAMPGROUND	NC	15-May-15	FY15	No	
AK2220457	BRENTWOOD PLAZA	NC	20-Feb-15	FY15	No	
AK2220474	BRIGHT MINDS LEARNING CENTER	NTNC	09-Mar-17	FY17	No	
AK2220471	BROWN BEAR ESPRESSO	NC	04-Aug-16	FY17	No	
AK2220473	CAMERON ACRES LOT 2 BLOCK 1	C	01-Jan-17	FY17	No	
AK2330113	CH2M HILL WATER TANKER # 30027	NC	06-Mar-15	FY15	No	
AK2330116	CH2M HILL WATER TANKER #30028	NC	21-Apr-15	FY15	No	
AK2390154	CLEAR AFS ASRC LRDR TEMP. CAMP	NTNC	27-Jun-17	FY17	No	
AK2370099	CLEARWATER LODGE	NC	02-Sep-16	FY17	No	
AK2333241	CONOCOPHILLIPS KUPARUK IND. CENTER	NTNC	01-Jan-97	FY17	No	
AK2330106	CRUZ WTP # 1, MOBILE TREATMENT PLANT	NC	09-Feb-15	FY15	No	
AK2330107	CRUZ WTP # 2, MOBILE TREATMENT PLANT	NC	09-Feb-15	FY15	No	
AK2391249	DENALI BACKCOUNTRY LODGE	NC	02-Jul-14	FY15	No	
AK2220476	DENALI BREWING COMPANY	NC	15-Jun-17	FY17	No	
AK2263071	DILLINGHAM COURTHOUSE	NC	21-Oct-15	FY16	No	
AK2271983	DONLIN GOLD CAMP	NC	28-Jun-17	FY17	No	
AK2373003	EIELSON CHURCH OF CHRIST	NC	14-Apr-16	FY16	No	
AK2311613	EL DORADO GOLD MINE	NC	03-Sep-15	FY16	No	
AK2220375	EVERETTS AT MAT SU RESORT	NTNC	04-May-17	FY17	No	
AK2330122	EXXON ROLL ON/OFF, RAW/POTABLE HAUL	NC	21-Apr-16	FY16	No	
AK2220469	FIRE DANCE TUTORING CENTER	NC	27-May-16	FY16	No	
AK2315625	FNSB- PIONEER PARK	NC	29-Sep-16	FY17	No	
AK2249220	FRONTIER ICE AND BAKERY	NC	18-May-16	FY16	No	
AK2226048	GATHERING PLACE, THE	NC	28-Jan-16	FY16	No	
AK2262733	GRANT AVIATION- DILLINGHAM	NC	23-Feb-16	FY16	No	
AK2226049	HEALTH QUEST THERAPY INC	NC	03-Nov-16	FY17	No	
AK2333464	HILCORP MILNE PT POTABLE HAUL TRUCK	NC	17-Jun-15	FY15	No	
AK2330123	ICE SERVICES 10K GAL WATER CAR	NC	16-Dec-16	FY17	No	
AK2330111	ICE SERVICES 8K GAL WATER CAR	NC	30-Aug-16	FY17	No	
AK2330118	ICE SERVICES TREATMENT PLANT # 2015	NC	29-May-15	FY15	No	
AK2260812	IGIUGIG WATER SYSTEM	C			Yes	July 2014, October 2014, January 2015, April 2015, July 2015, October 2015,
AK2218817	IN AND OUT H2O	NC	07-Apr-17	FY17	No	
AK2249225	INLET RIDGE APARTMENTS	C	02-Feb-17	FY17	No	
AK2372994	JB'S THAI FOOD	NC	21-Sep-15	FY16	No	
AK2263066	KAKO RETREAT CENTER	NC	15-Jun-15	FY15	Yes	April 2016



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AK2220467	KNIK RIVER LODGE II	NC	23-May-16	FY16	No	
AK2272017	KWETHLUK NEW PIPED WATER SYSTEM	C		FY16	Yes	July 2015, October 2015, April 2016, July 2016, October 2016, January 2017, April 2017
AK2261575	L&PSD PORT ALSWORTH SCHOOL	NTNC	23-Sep-15	FY16	No	
AK2263070	LEADER CREEK BUNKHOUSE #1	NC	13-Feb-15	FY15	No	
AK2270613	LKSD TUNUNAK PAUL ALBERT HS	C			No	
AK2121522	MCKENZIE INLET LOGGING CAMP	NTNC	15-Mar-17	FY17	No	
AK2382062	MOOSE MASTERS	NC	13-Jun-17	FY17	No	
AK2249216	MOOSEBACK ANNIES RESTAURANT	NC	14-May-15	FY15	No	
AK2220472	MSBSD BERYOZOVA SCHOOL	NTNC	09-Dec-16	FY17	No	
AK2220446	MSBSD DAY SCHOOL	NTNC	08-Aug-14	FY15	No	
AK2220459	MSBSD DENA'INA ELEMENTARY SCHOOL	NTNC	05-Aug-16	FY17	No	
AK2220470	MSBSD FRONTERAS CHARTER SCHOOL	NTNC	08-Jun-16	FY16	No	
AK2220462	MSBSD REDINGTON JR/SR HIGH SCHOOL	NTNC	14-Aug-15	FY16	No	
AK2271952	NAPASKIAK EAST WATERING POINT	C	06-May-16	FY16	Yes	July 2016, October 2016,
AK2121502	NAUKATI SCHOOL	NTNC	26-Sep-16	FY17	No	
AK2249221	NIKISKI SENIOR CENTER LAKE MARIE	NC	01-Jan-16	FY16	No	
AK2249226	NINILCHIK 132.6 CABINS AND RV PARK	NC	17-May-17	FY17	No	
AK2331184	NORTH SLOPE BOROUGH SA 10	NTNC			No	
AK2330119	NSB SA10 HOTEL	NTNC	28-Sep-15	FY16	No	
AK2330121	PEAK WATER HAUL MODULE R2051	NC	03-Dec-15	FY16	No	
AK2373021	PIONEER BIBLE CHURCH	NC	13-Feb-17	FY17	No	
AK2330114	PRICE GREGORY WATER TRUCK	NC	01-May-17	FY17	No	
AK2249228	RANDOLPH YOST PLATFORM	NTNC	14-Sep-16	FY17	No	
AK2299038	ROADSIDE POTATOHEAD RESTAURANT, THE	NC	01-Jun-16	FY16	No	
AK2330109	SA EXPLORATION SLEIGH CAMP #1	NC	04-Dec-14	FY15	No	
AK2330110	SA EXPLORATION SLEIGH CAMP #2	NC	10-Dec-14	FY15	No	
AK2370235	SALCHAKET ROADHOUSE	NC	26-Aug-16	FY17	No	
AK2263073	SAMARITAN LODGE ALASKA	NC	30-Jun-16	FY16	No	
AK2263068	SILVER BAY SEAFOODS DREWS SHARED WELL	NC	21-Apr-15	FY15	No	
AK2218807	SKY MANOR WELLHOUSE	C	16-Jul-15	FY16	No	
AK2220465	SNOWSHOE ACRES LLC	C	01-Aug-14	FY15	No	
AK2249223	STERLING HARBOR MENNONITE CHURCH	NC	17-Mar-16	FY16	No	
AK2249068	STILLPOINT LODGE	NC	30-May-16	FY16	No	
AK2220449	TALKEETNA PUBLIC LIBRARY	NC	27-May-15	FY15	No	
AK2220443	TERRACE ON THE LAKE	C	23-Sep-14	FY15	No	
AK2225499	TESORO STORE 76	NC	01-Jan-15	FY15	No	
AK2392106	THE ALASKAN COFFEE BEAN	NC	14-Feb-17	FY17	No	
AK2220468	THREE BEARS BIG LAKE CONVENIENCE STORE	NC	15-Sep-16	FY17	No	
AK2382046	THREE BEARS OUTPOST #1	NC	15-Sep-15	FY16	No	
AK2218813	THREE BEARS STORE - BIRCHWOOD	NTNC	12-Sep-14	FY15	No	
AK2220475	THREE BEARS STORE 37 - HOUSTON	NC	16-May-17	FY17	No	
AK2270215	TOKSOOK BAY WATER SYSTEM	C			No	
AK2271211	TUNTUTULIAK WASHETERIA AND WATERING PT	C	08-Oct-14	FY15	Yes	January 2015, April 2015, July 2015, October 2015,
AK2272754	YKHC PREMATERNAL HOME - BETHEL	NTNC	01-Mar-15	FY15	No	

Details for new systems which also showed up on an ETT list:

Akhiok – Akhiok is a long standing PWS that got a new modular treatment plant. Interim Approval to Operate the new modular plant was issued in Dec. 2014 with Final Approval to Operate being granted June 2016. Prior to the new modular plan the PWS was on the ETT list for both SWTR and sampling issues including TCR, DBPs, and lead and copper. The PWS has since returned to compliance for SWTR; however remains on ETT for sampling and reporting issues including nitrate, VOCs, RADS, DBPs, conducting a sanitary survey and submitting a CCR certification page.

Iguigig Water System – PWS went from ground water source to surface water source in 2015. System on ETT for Arsenic MCL prior to new source going on line. Was on ETT for 2 quarters after surface water source going on line. Has not been on ETT since April 2016.

Kako Retreat Center – New system in 2015, was on ETT in April 2016 for nitrate and not conducting a sanitary survey. They have returned to compliance for both and have not been on ETT since April 2016.

Napaskiak East Watering Point - This system is one that was shut down for a period of time and was reactivated in 2016. System on ETT in July 2016 for nitrate, DPBs, Arsenic and VOCs. System has returned to compliance for nitrate, but was on April ETT list with score of 10 for missed sampling for DBPs Arsenic and VOCs.

Kwethluk New Piped Water System – New system in 2013. System is currently on ETT for SWTR, not conducting sanitary survey and not submitting CCR certification pages.

Tuntutuliak Washeteria - PWS that has water treatment plant upgrades in 2014. System was not operated between December 2013 and October 2014. System has historically struggled with monitoring, however the system went from being on ETT for nitrate, arsenic and inorganic sampling, VOC, DBPs and lead and copper in 2015 to not being on ETT in 2016. Was on April 2017 ETT for Arsenic MCL and missed Arsenic sampling and CCR, however has returned to compliance for the CCR violations.