

State of Alaska, Department of Environmental Conservation
 Division of Environmental Health
 Drinking Water Program
 555 Cordova St.
 Anchorage, Alaska 99501

Presorted Standard
 US Postage Paid
 Anchorage, Alaska
 Permit # 69

Northern Flows



Alaska's Drinking Water Program Newsletter

Issue 19 • Fall 2004

Important Information



For Water System Operators and Owners

Northern Flows

Drinking Water Program Directory

STATEWIDE FUNCTIONS

James Weise, DGS	Program Manager	269-7647
Vacant.	Field Operations Manager	269-xxxx
Vacant	Comp Tech Srvs Manager	269-xxxx
Vacant	Statewide DW Engineer	269-xxxx
Kathaleen Kastens	Project Coordinator	269-7639
Margaret Hansen	Administrative Clerk	269-7656
Sherri Trask	C/E Coordinator	269-3075
Jeanine Oakland	Environmental Spec.	269-2007
Karen Leis	Regulations Spec.	269-3082
Vacant	Regulations Spec.	269-7653
Maria Ridgway	Analyst Programmer	269-7625
Daniel Rogers	Analyst Programmer	269-2008

DRINKING WATER PROTECTION

Suzan Hill	Program Coordinator	269-7521
Michael Knapp	DW Protection	269-0292
Chris Miller	DW Protection	269-7549

ANCHORAGE FIELD OFFICE

Heather Newman	Program Coordinator	269-7619
Vanessa Blevins, P.E.	Env. Engineer	269-7696
Sarah Rygh	Env Engineer Assist.	269-3076
David Edmunds	DW Compliance	269-7518
Jamie Stazel	DW Compliance	269-7624
Doug Zellmer	DW Compliance	269-7623
Kathleen Free	Environmental Tech	269-7618
Leticia Tadina	Environmental Tech.	269-7517
Leilua Fadely	Administrative Clerk	269-7594

WASILLA FIELD OFFICE

Lynn Lowman	Program Coordinator	376-1861
Tee Little	DW Compliance	376-1860
Kellie Alvstad	Environmental Tech.	376-1859
Allan Nakanishi, P.E.	Env. Engineer	376-1862

JUNEAU FIELD OFFICE

David Khan, P.E.	Env. Engineer	465-5317
Carrie McMullen	DW Compliance	465-5333
Vacant	Environmental Tech.	465-5325
Maggie Stumme	Administrative Clerk	465-5350

SOLDOTNA FIELD OFFICE

Vacant	Program Coordinator	262-5210
David Litchfield	DW Compliance	x224
Scott Forgue, P.E.	Env. Engineer	x243
Vacant	Environmental Tech	x

FAIRBANKS FIELD OFFICE

Cindy Christian	Program Coordinator	451-2138
Lee Johnson, P.E.	Env. Engineer	451-2179
Linda Grantham	DW Compliance	451-2137
Marci Irwin	DW Compliance	451-2168
Johnny Mendez	Env. Engineer Assist.	451-5193
David Schleiger	Environmental Tech	451-2170
Xenia DeVito	Administrative Clerk	451-2108

Message from the Manager

For much of Alaska, our summer was hot, dry, and smoky. Our fall started with a “bang” in South-central Alaska. We have been drenched with over 8” of rain since September and Anchorage received over 7 inches of snow on September 26, 2004. This is one of our earliest and heaviest snowfalls on record. Have these events caught you unprepared for winter? Hopefully the weather will be moderate over the next few weeks and we can complete our unfinished summer and fall projects. For public water system (PWS) owners and operators, this should include completing any annual monitoring before the end of the calendar year, getting your sanitary survey completed, especially if it is overdue, and basically wintering your system. Remember, if you “fail to plan, you plan to fail.”

Over the past several months regulation development activities has continued to consume Alaska Department of Environmental

Conservation (ADEC), Drinking Water Program staff time. We plan to begin a 30 day public comment period, very soon, for another set of revisions to the Drinking Water Regulations, 18 AAC 80. This proposed set of revisions will include the adoption by reference of the federal Radionuclides Rule, Variance and Exemptions Rule, Arsenic Rule, Filter Backwash Rule, and Analytical Methods. Additionally, all the references in the current Drinking Water Regulations, 18AAC 80, are scheduled to be updated. The timely adoption of the federal rules and updating references is required for primacy, and the State of Alaska has primacy for drinking water and PWS oversight. The big push with this regulation package is the requirement of primacy states to have the Radionuclides Rule effective on or before December 8, 2004.

As this set of “rules by adoption” regulation package is being reviewed for public comment, another set of revisions to the Drinking Water Regulations are in process with an anticipated public comment period scheduled for January 2005. As was noted in our Summer 2004 newsletter, Issue #18, the oversight and regulation of Class C PWS under

18 AAC 80, those systems serving fewer than 25 persons on a seasonal or routine basis, will be repealed from the regulations. This is a FY 2005 legislative applied general fund reduction for the Drinking Water Program, and means that approximately 2,000 known Class C PWS serving about 40,000 persons will not be covered under any drinking water regulations. This is less government oversight and more private individual accountability and responsibility.

To better assist PWS owners and operators achieve and maintain long term compliance and good public health protection for their customers, the ADEC Drinking Water Program plans to begin full implementation of Alaska's Capacity Development Strategy. This strategy, which was developed through statewide workgroups and stakeholder involvement, was approved by U.S. EPA on September 26, 2000. Capacity Development focuses on the technical, managerial, and financial ability of a PWS to routinely meet Safe Drinking Water Act requirements. ADEC Drinking Water Program staff will focus their efforts on use of the small system capacity self assessments using the technical

Continued on page 4

This Issue

Regulations	Waterborne Disease
2	3
Wellhead Protection	Denali Commission Resources
6 & Insert	5
Staff Profile	Electronic Surveys
7	6

Governors Message:

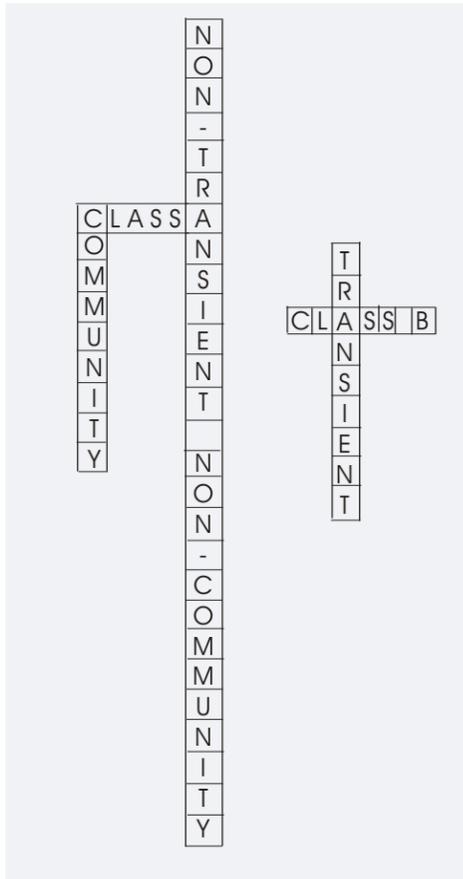
Hello Rads, Arsenic, and Filter Backwash Rules Good-bye C's *by Karen Leis*

The Alaska Department of Environmental Conservation (ADEC) is in the middle of two proposed regulations packages that will be released for public comment any day now. I promise there is something new in these proposed changes for each of you. I also have a message just for you surface water systems.

First, the "Good-bye Class C Water Systems, and Other Name Changes" proposed regulations package will explain the word puzzle graphics with this column. In accordance with the Legislators' wishes, in HB 375, Drinking Water Program will not be regulating any water system that serves fewer than 25 people any amount of time, nor any number of people for fewer than 60 days per year. This regulations package is long, but pretty simple, it writes the regulations for small drinking water systems out of our regulations. Good-bye Cs, be careful and stay healthy.

We will also change the names of Class A public water systems to either "Community Water Systems (CWS)" or "Non-transient Non-community Water Systems (NTNCWS)" and the Class B water systems will become "Transient Non-community Water Systems (TNCWS)," to make our regulations more like the federal public water systems naming conventions. We are also making the regs less wordy by proposing to eliminate "owner or operator of a public water system" and just say "system." You all know what your management structure is, and we don't need to repeat this phrase throughout every section. There will also be some other small clean up changes.

Mentioning clean up changes brings me to thank all of you regulations sticklers out there who spot places where we could write more clearly. I love to hear from you, so please continue to email me at the address at the end of the article.



Secondly, we have a proposed regulations package that adopts the federal Radionuclides, Arsenic, Filter Backwash, Variances and Exemptions Rules by reference, straightens out the adoption-by-reference section of Chapter 80, clarifies Alaska's sanitary survey inspector program, changes some fees, and includes (the always popular) clean up changes. Neither of these have been released for public comment as of this writing, but you can go to the ADEC regulations website at

<http://www.state.ak.us/dec/regulation/index.htm> to see if the public comment periods for changes to Chapter 80 Drinking Water have opened when you read this. We are hoping to have both packets competed before the end of the year.

Thirdly, I want to be sure that all you surface water systems and ground water systems under the influence of surface water, serving fewer than 10,000 people, have had a chance to look the final Long Term 1 Enhance Surface Water Treatment Rule which can be found at <http://www.epa.gov/fedrgstr/EPA-WATER/2002/January/Day-14/w409.pdf>. Even though the State of Alaska has not adopted this rule by reference yet because we have an extension from the EPA, you guys still have to be aware of the effective dates for your sized systems (new turbidity limits come in January 2005), and meet the federal standards. If you have questions about this, please call your own compliance officer in your area.

Finally, I want to thank those of you who wrote to request your own personal electronic copy of the federal drinking water CFRs and shared your feelings about my generous offer. Also, I believe there may be a few of you working at public water systems who might still need a copy, so my offer to send all requestors an electronic version by email, free of charge, still holds. I am still sending the July 1, 2003 version, because that is the latest I have, but as soon as the July 1, 2004 version comes to me, I will regard every request as a "subscription," and will send out new federal rules as soon as I get them.

Karen_Leis@dec.state.ak.us

Staff Profile- Statewide Compliance Coordinator *by Cindy Christian*

Sherry Trask is an Environmental Specialist III, Statewide Compliance and Enforcement Coordinator in the Anchorage Office. She is responsible for a wide range of statewide activities in the Drinking Water Program. As the Statewide Compliance and Enforcement Coordinator, Sherry is the primary liaison between the Drinking Water Program and the Environmental Protection Agency (EPA) on drinking water primacy issues and implementing the work plan for the EPA Performance Partnership Agreement (PPA). She is also the primary EPA contact for compliance and enforcement issues related to the Significant Non-Compliers (SNC) List. Sherry coordinates compliance and enforcement activities between the state Drinking Water Program and EPA when public water systems (PWS's) are referred to EPA for formal enforcement. PWS's are referred to EPA for formal enforcement when the Drinking Water Program has exhausted all of its enforcement options and the PWS will not return to compliance with the Drinking Water Regulations. Sherry and her staff are active in ensuring consistency in regulatory interpretation between the various Drinking Water Program offices and in providing detailed reports of Program activity to the Program Manager and the Program Coordinators. Sherry is also responsible for special projects, such as establishing remote total coliform labs in several hub communities and working with contractors to develop an electronic data reporting system for the Safe Drinking Water Information System (SDWIS/State). This system will allow ADEC certified laboratories to report chemical and microbiological data

directly to the SDWIS/State database.

Sherry came to Alaska in 1975 with her family when her mother began working on the Transalaska Pipeline. She has lived in Anchorage, Fairbanks and Barrow. Sherry graduated from West Anchorage High School and received a Bachelor of Science degree in Poultry Science from the University of California Davis. She continued her graduate studies at the University of Alaska Fairbanks (UAF) and earned a Master of Science degree in Biochemistry, specializing in lipid biochemistry and neurochemistry. Sherry was also a PhD candidate at UAF, completing numerous courses in lipid and neurochemistry. Sherry was a volunteer in the Peace Corps in 1986 and 1987. She was stationed in Honduras and worked with Honduran villagers on many different animal husbandry projects. While in Honduras, Sherry unfortunately gained first hand experience with giardia and amoebic dysentery and discovered severe allergies to some of the native plants. Sherry worked as a Microbiologist at Northern Testing Laboratories in Anchorage from 1996 until 1999. In 1999, she came to work for the ADEC Drinking Water Program as an Environmental Technician. After several months in that position, she became an Environmental Specialist. She mainly worked on compliance and enforcement issues with PWS's



in the western part of the state, including the Dillingham area, the Aleutians, the Pribilofs and Kodiak Island. Having seen firsthand the ravages of waterborne disease in Honduras, Sherry was interested in using her knowledge of drinking water issues, microbiology and biochemistry to protect public health in communities in Alaska. Sherry really enjoys working with the PWS owners and operators and traveling throughout Alaska to visit different communities.

Sherry is involved in many activities outside of work. She loves to garden and do remodeling projects. She has completed several major remodeling projects on properties she owns in the last few years. She is also involved in the Anchorage opera community. Sherry has recently begun learning how to play the banjo. She has refurbished a pre-World War II 4-string banjo, which was a challenge! She also likes to travel to interesting places with friends. Sherry is an important and integral member of the Drinking Water Program team, working to ensure the protection of public health throughout the state.

Electronic Data Reporting System *by Maria Ridgway*

The Drinking Water (DW) Program is in the process of developing a web-based electronic reporting data system that will automate the collection of sample results data submitted by certified laboratories to the DW Program. The application will allow the DW Program to implement the department's quality assurance program and import the data into the existing ADEC Public Water System Safe Drinking Water Information System (SDWIS/State) database. The DW Program is interested in improving the reporting process of sample results between the state and certified laboratories and ensure that public water suppliers test the drinking water that they provide to the public, as required, for the regulated drinking water contaminants. The

DW Program currently receives PWS analytical data in many different formats requiring interpretation by local DW Program staff for data entry. The current paper-based manual data reporting and entry process consumes time and limited DW Program staff resources. Automation of this process will help staff complete a timely review of the increasing amount of contaminant monitoring test results from public water systems, follow up on those chemical and biological detects above the detection levels stated in the Code of Federal Regulation and specify corrective measures where public health risk and contamination is indicated. Data will be available to quickly evaluate the status of compliance with regulated water systems and identify the ones that need more attention. This project

will help staff to better manage their workload and perform a quicker follow up on other complaints and deficiencies.

The DW Program is working with certified laboratories to develop a data collection format which will define the interface for laboratories and PWS owners/operators to submit monitoring sample results.

We are hoping that this system will provide better customer service, will increase staff efficiency, will improve data reliability and overall better compliance for Alaska's federally regulated PWS.

We expect to have the application available for use by February 2005. ~

Message from the Manager cont'd. *by James Weise*

service assistance of the Alaska Rural Water Association and Rural Community Assistance Program. Additionally, in early calendar year 2005, we plan to adopt, customize, and implement use of U.S. EPA's electronic enhanced sanitary survey (EESS) form. The modified EESS form, or Alaska EESS form, will be available for statewide use by ADEC Drinking Water Program staff and

third party sanitary survey inspectors using personal data assistants (PDAs), laptop, or desktop computers.

As you continue to prepare your PWS for the winter season and complete end-of-the-year compliance requirements, enjoy our beautiful fall colors, cool and invigorating mornings, and the ever increasing amounts of "termination dust" on our

majestic mountains.

James R. Weise
James Weise
Manager
Drinking Water Program

Answer: (C) The EPA guidance on Emergency Response Plans (ERP), it says there are 8 core elements to every good ERP. They are 1) System Specific Information 2) PWS Roles and Responsibilities 3) Communications Procedures 4) Personnel Safety 5) Alternate Water Source 6) Equipment and Chemical Replacement Supplies 7) Property Protection 8) Water Sampling and Monitoring.

Waterborne Disease Outbreaks *by Marci Irwin*

Waterborne disease outbreaks have been a concern for water systems and water consumers for as long as water systems have been available. These diseases, while more prevalent in ancient times and developing countries, can affect the affluent and modern as well. In 1861, Queen Victoria's husband, Prince Albert, died from Typhoid, after drinking contaminated water in London. More recently, in 1993 cryptosporidium in the Milwaukee water system caused more than 400,000 people to get sick and more than 100 people to die. Here in Alaska, it is easy to think that these issues always happen somewhere else; however, as seen by the example below, Alaskan water systems are not exempt.

feet away from the watering point. The source consists of a shallow well with the top of the casing buried in a pit to prevent vandalism. A road was discovered about ten feet uphill from the well. The road had changed the natural drainage of the area and the spring runoff was collecting around the well site. Both human and animal feces and natural debris were present in the area. The DW Program staff began communication with the media and public regarding the contamination case.



Contamination Case: On April 20, 2004, the Alaska Department of Environmental Conservation Drinking Water (DW) Program staff began to receive phone calls that the water from a fill and draw public water system had a bad taste and was discolored. A site investigation was conducted by DW Program staff and water samples were taken at the watering point. Turbidity readings of the water revealed a turbidity of over 10 Nephelometric Turbidity Units (NTU) and resulted in the DW Program staff immediately issuing a Boil Water Notice (BWN).

Further investigation was conducted around the well site a few hundred

By the following day, the system had been shut down due to the presence of fecal and total coliform in the water samples. The Epidemiology Section of the Alaska Department of Health and Social Services was contacted and a phone number was made available for the public to report health concerns to the Regional Public Health Center nurse. Both the Health Center and the DW Program staff received calls regarding illnesses consisting of nausea and gastrointestinal discomfort and disorders, all symptoms characteristic with waterborne disease.

The owner of the road regraded it to divert the drainage away from the well site. The owner of the water system disinfected and extensively flushed the water system. After the work was completed on the system and the road, the turbidity returned to the normal levels of 0.1 to 0.2 NTUs and total coliform bacteria test results confirmed that the water was free from bacteria. The water system was reopened to the public on May 4, 2004. The DW Program staff are continuing to work with the system owner on improving the source protection.

Due to the nature of waterborne disease, every system must take precautions to protect their water. Programs such as the Sanitary Survey and the Source Water Protection Program are just such precautions. Sanitary surveys allow for a person, trained in reviewing water systems, to examine a water system and bring to light potential contamination that may be unrecognized in day to day operations. This gives the water system owners and operators advance notice and a chance to avoid contamination of their water system through resolving the issues found in the sanitary survey. The Source Water Protection Program also alerts water systems to potential sources of contamination and provides tools to assist in protection of the water. When systems implement a plan to protect their water, the occurrences of waterborne disease is reduced. ~

Question: In the EPA guidance on Emergency Response Plans (ERP), it says there are 8 core elements to every good ERP which of the following is not one of the of those 8 core elements?
A) System information B) Water Monitoring C) Possible Security Breaches D) Personnel Safety E) All of the Above

Wellhead Protection Program Needs Assessment Survey *by Suzan Hill*

A ADEC's Drinking Water Protection Program (DWPP), a component of the Drinking Water Program has completed Source Water Assessments for 1,427 public drinking water systems (PWS) throughout Alaska. The next step is for PWS and communities to make use of this important tool by developing and implementing local wellhead protection management plans (WPMP). These WPMPs will identify issues of concern and solutions that you choose to protect the quality of your community's drinking water through education, best management practices and various other tools. The DWPP is currently developing a Wellhead Protection

Program that will assist PWS and communities in their local protection activities.

In order to best develop a program that will suit the needs of your PWS and community, we are asking that you complete the survey inserted in this newsletter. If there is someone more appropriate in your community to respond to this survey, please share the survey with them. The purpose of this survey is to determine the number of communities that have an existing protection plan in place, to measure the level of interest in participating in a Wellhead Protection Program, and to assess your needs in

implementing a WHMP.

Please take the few minutes needed to complete this survey. When you are finished, simply fold the survey with the DWPP mailing address on the outside. **Return postage has been provided no stamp is necessary.**

This is an important opportunity for you to provide us with information that we will use as a guide for future program development. Your assistance is greatly appreciated. If you have any questions regarding this survey or the Wellhead Protection Program, contact Suzan Hill, Program Coordinator at (907) 269-7521.

Electronic Sanitary Survey Application *by Vanessa Blevins*

The Alaska Drinking Water Program is in the final stages of transitioning to an electronic sanitary survey form which runs on a pda (personal data assistant). This is being done to meet the enhanced sanitary survey requirement in our capacity development program.

to a desktop application which has the added ability to generate form letters and ultimately update the "SDWIS State" data base with the sanitary survey data.



The new electronic form incorporates the eight elements of a sanitary survey in a checklist format which can be customized for a particular facility or for a common facility type (small systems, surface water, etc). This customization allows for more accuracy and eliminates unnecessary questions. The pda will link

The Drinking Water Program staff attended training this spring on the new electronic sanitary survey forms. Staff is currently revising the general questions used on the electronic form. PDA's have been purchased for each of the Drinking Water Program offices. Third party sanitary surveyors will be provided with the electronic forms once they have been finalized. Field implementation of the new electronic sanitary survey process is scheduled for the spring of 2005.

For more information check out the EPA website at: www.epa.gov/safewater/dwa/e-sansurvey.html.

The **LT1ESWTR** has been modified to correct typographical errors, inadvertent omissions, editorial errors and outdated language. These changes became effective July 29, 2004. The most significant change was the revision of the turbidity compliance date from January 14, 2005 to January 1, 2005. Look at: www.epa.gov/safewater/mbdp/lt1eswtr.html

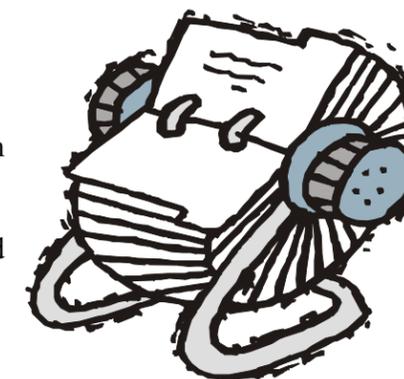
Resources Corner: EPA Website *by Jeanine Oakland*

The State of Alaska presents its own unique challenges for government regulators due to geography, isolated populations of people, and the merging of traditional living with modern rules and regulations. The financial burdens of these unique circumstances are often more than the State of Alaska can handle effectively. A proposal made by Ted Stevens lead to a new cooperation between the federal and state government, to form the aptly named Denali Commission. This new approach to providing assistance to Alaska's remote communities works in combination with several other state agencies such as the Department of Environmental Conservation (DEC), Village Safe Water (VSW), and Alaska Native Tribal Health Consortium (ANTHC). The Commission combines with the Federal Government to provide services in "the most cost-effective manner practicable by reducing administrative and overhead costs." Their focus is primarily on infrastructure needs to rural communities, but they also promote economic growth through job training. The Denali Commission Act of 1998 is directed "to promote rural development, provide power generation and transmission facilities, modern communication systems, water and sewer systems and other infrastructure needs."

The Commission is comprised of seven members appointed by the Secretary of Commerce, including the State Governor and a variety of local officials (including President of University of Alaska, President of Alaska Federation of Natives). One of the members is the Federal Co-Chairperson who is selected through

a nomination process by the Speaker of the House and President pro tempore of the Senate. Each fiscal year, the Denali Commission is required to develop a work plan outlining the recommendations for funding projects in the next fiscal year. They receive a variety of proposals from state agencies, local governments, and other organizations in need of funding. The work plan is given final

approval by the Secretary of Commerce after it's been reviewed by the Federal Co-Chairperson and made available for public comments. The work plan for FY05 is posted on their website (www.denali.gov/), and is worth taking a look at how the Commission is going to disperse the available funds to improving the infrastructures in rural Alaskan communities. Providing safe drinking water is listed as a high priority in the FY05 work plan. It is listed in Goal #1, and as the third objective in that goal, behind energy facilities and health care respectively. Although improvements to water and wastewater is listed as a high priority the Commission has not targeted it as one of the infrastructure goals to receive funding because of the amount of funding the state already receives for these improvements. The Commission will assist in improving the planning and coordination between ANTHC and VSW, which it considers to be the primary agencies in assisting development of water and wastewater facilities in rural communities.



The homepage of their website provides notice of deadlines for Requests for Proposals (RFP), such as the September 15th deadline for the Washeteria program. This program provides funds for improving

washeterias that many rural communities rely on for safe drinking water. According to the Denali Commission website, "to date have awarded \$6.6 million to 20 new construction, renovation, and repair projects across the state." Currently 6 proposals are under review and awards will

be announced on November 15th. There are also opportunities for funding of training, which is another effective tool to aiding smaller communities in keeping their water safe.

In a State where the basic infrastructure needs are estimated to be over \$13 billion (for FY05), the Denali Commission is a great support system for Alaska's rural and isolated communities. In the Drinking Water program we often work with struggling communities trying to come into compliance with Drinking Water regulations. While the Denali Commission may not directly fund water infrastructure needs, it can however help to fund other infrastructure improvements, such as Energy facilities (bulk fuel storage, power generation). This in turn may help to free up community funds that could now be directed towards the needs of the water system. For more information on the resources available from the Denali Commission please visit the website at www.denali.gov/