

**State of Alaska
FY2009 Governor's Operating Budget**

**Department of Environmental Conservation
Drinking Water
Component Budget Summary**

Component: Drinking Water

Contribution to Department's Mission

Verify safe drinking water.

Core Services

- Maintain state primacy for regulating public drinking water systems.
- Enforce public water system (PWS) monitoring requirements for drinking water contaminants.
- Review construction, installation, and operation plans for PWS to protect public health.
- Assist PWS owners in identifying the sources of their drinking water and help them develop strategies to effectively protect those sources from contamination.
- Provide technical and compliance assistance to PWS owners and operators, and the public.

End Result	Strategies to Achieve End Result
<p>A: Drinking water is safe.</p> <p><u>Target #1:</u> Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.</p> <p><u>Measure #1:</u> Change in the % of plans that can be approved within 30 days from initial receipt.</p> <p><u>Target #2:</u> 100% of the population served by public water systems (PWS) in compliance with health-based standards.</p> <p><u>Measure #2:</u> % of the population served by public water systems (PWS) in compliance with health-based standards.</p>	<p>A1: Timely review of all complete drinking water engineering plans submitted.</p> <p><u>Target #1:</u> Review all complete submissions of drinking water engineering plans within a 30 day time frame.</p> <p><u>Measure #1:</u> % of all complete plans reviewed within 30 days of receipt.</p> <p>A2: Implement sanitary survey requirements for all federally regulated public water systems.</p> <p><u>Target #1:</u> 100% of public water systems file required sanitary surveys according to schedule.</p> <p><u>Measure #1:</u> % of public water systems in compliance with their sanitary survey schedule.</p> <p>A3: Train and certify third party sanitary survey inspectors.</p> <p><u>Target #1:</u> 100% of the sanitary survey inspectors are trained and certified.</p> <p><u>Measure #1:</u> % of the sanitary survey inspectors trained and certified.</p>

Major Activities to Advance Strategies	
<ul style="list-style-type: none"> • Conduct reviews for construction, operation, and separation distance waivers. • Review reports provided to consumers by PWS about sampling results. • Process variances and exemptions to reduce the number of PWS significantly out of compliance. • Respond to PWS noncompliance with enforcement actions and make referrals to EPA when appropriate. • Help PWS owners prepare Emergency Response 	<ul style="list-style-type: none"> • Conduct sanitary surveys of PWS and certify third party sanitary survey inspectors. • Adopt and implement federal drinking water rules. • Submit timely primacy applications to EPA for all federal rules adopted. • Provide technical assistance about wellhead protection to communities. • Review PWS sampling, monitoring, and reporting activities for all regulated drinking water contaminants.

Major Activities to Advance Strategies

Plans and perform security audits on their water systems.

FY2009 Resources Allocated to Achieve Results

FY2009 Component Budget: \$5,955,200

Personnel:

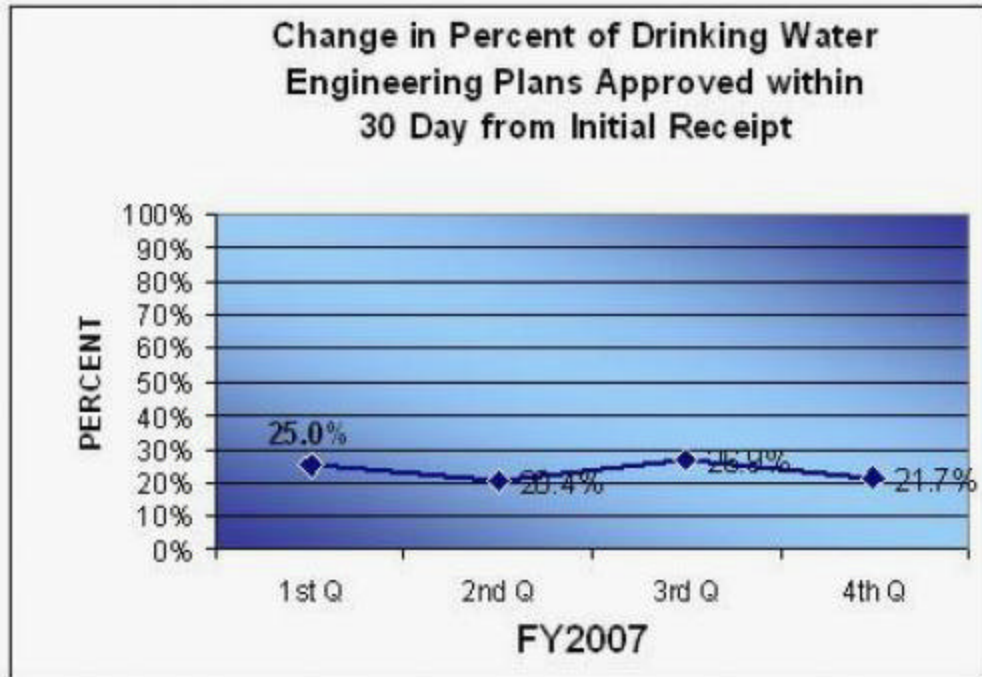
Full time	57
Part time	0
Total	57

Performance Measure Detail

A: Result - Drinking water is safe.

Target #1: Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.

Measure #1: Change in the % of plans that can be approved within 30 days from initial receipt.



Analysis of results and challenges: To provide for the protection of public health, Drinking Water regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified, engineered plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet the criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineered plan submittals within 30 days of receipt.

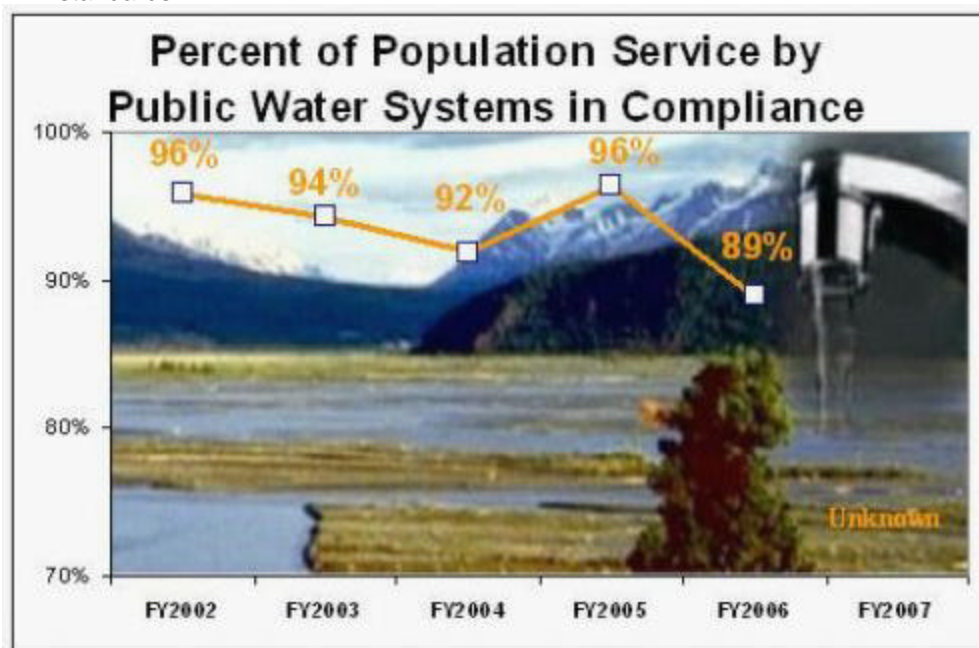
Most public water systems by design are complex, with many individual components, including the treatment

plant and distribution system that must be reviewed and approved by DEC. Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineered plan review process is also complex. Some engineered plan submittals do not contain required information needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the engineering review process timeline. Continued Department efforts have decreased the number of substantially incomplete engineered plan submittals. Typically, a large number of engineered plans are submitted in the spring, at the beginning of the construction season, creating backlogs that continue into the winter months. During the winter months, submittals decrease and the backlog is reduced.

As new rules become effective through the EPA they will have an affect on the length of time it takes to review an engineered plan submittal. These new rules would include the recent Long Term 1 and 2 Enhanced Surface Water Treatment Rules and the Disinfectant/Disinfection By-Products, Stage 2 Rule.

Target #2: 100% of the population served by public water systems (PWS) in compliance with health-based standards.

Measure #2: % of the population served by public water systems (PWS) in compliance with health-based standards.



Analysis of results and challenges: To address the threat of waterborne disease and provide for the protection of public health, the State of Alaska has adopted the Safe Drinking Water Act (SDWA) requirements and the Drinking Water Program is responsible for the implementation of the SDWA within the State. All federally regulated public water systems are required to be in compliance with the SDWA. Various health-based standards contained within the SDWA are designed to protect people from consuming unsafe drinking water. Health-based standards are EPA established limits for many chemical and radiological contaminants, called Maximum Contaminant Levels (MCL's), as well as microbiological contaminants. The MCL is an enforceable standard that all public water systems must meet in order to serve drinking water to the public. There are also various Treatment Technique criteria that public water systems must meet. Treatment Techniques have to do with the way water is treated to make it potable and safe for human consumption. All of these criteria make up the health-based standards.

The Drinking Water Program continues to offer compliance and technical assistance to all public water system operators and owners to help them remain in compliance with all of the health-based standards that apply to their systems. The Drinking Water Program also has various enforcement strategies in place to require that public water systems remain in compliance with the health-based standards. This two-pronged approach to compliance assistance and enforcement allows the Drinking Water Program staff appropriate oversight of the Public Water System serving safe drinking water to as many people as possible. Additionally the increasing number of complex federal drinking water rules such as Long Term 1 and 2 Enhanced Surface Water Treatment

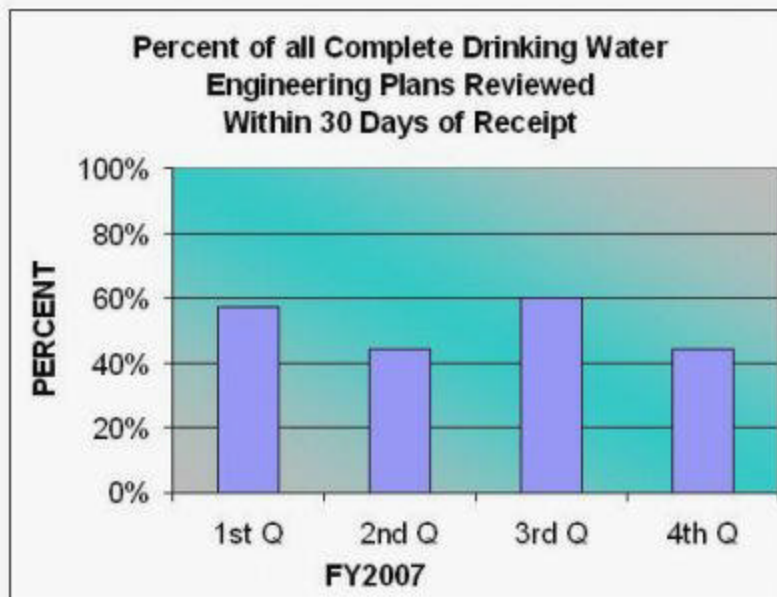
Rules and the Disinfectant/Disinfection By-Products, Stage 2 Rule challenges the resources of both the Drinking Water Program and the Public Water System owners and operators. This is why we have seen a decrease in percentage from the previous year (FY06).

The Drinking Water Program is unable to report on this measure quarterly as in previous years, because this information is compiled and distributed by USEPA and the reporting frequency has been reduced to an annual federal fiscal year basis. The FY2007 percentage of the population of Alaska served by public water systems that meet all health-based standards will be available after October 1, 2007.

A1: Strategy - Timely review of all complete drinking water engineering plans submitted.

Target #1: Review all complete submissions of drinking water engineering plans within a 30 day time frame.

Measure #1: % of all complete plans reviewed within 30 days of receipt.

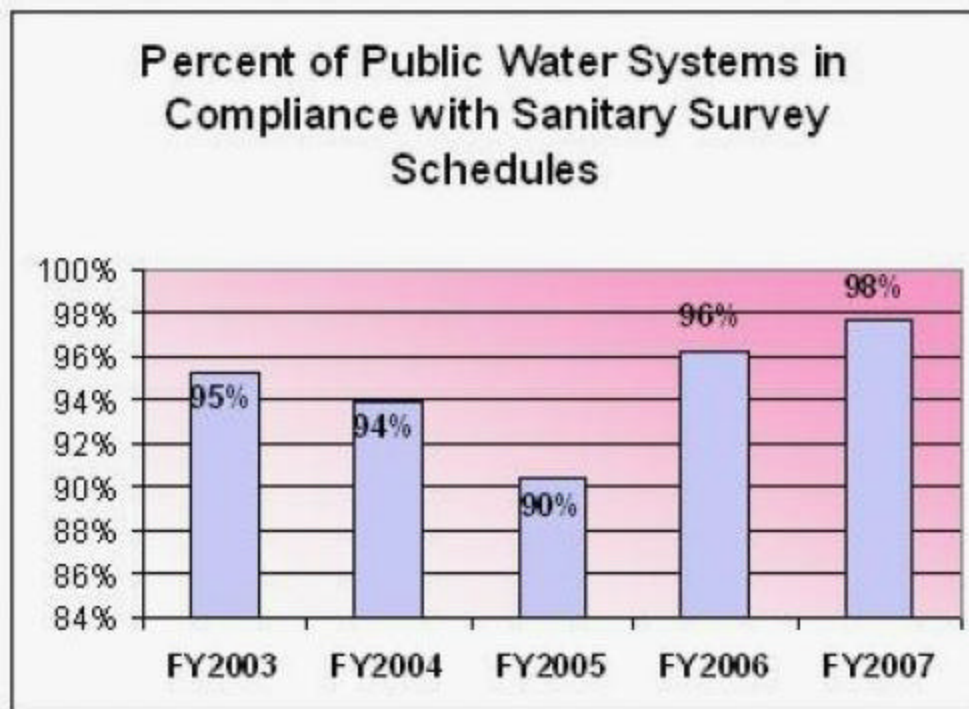


Analysis of results and challenges: To provide for the protection of public health, Drinking Water Regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified that engineered plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineered plan review process, the department engineer will determine if specifications and materials used in the construction or modification of a PWS meet criteria of the Drinking Water Regulations. These criteria address many items that, taken together, assure that the public is being served safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineered plan submittals within 30 days of receipt. The fluctuation in percentage was due to the Drinking Water Program engineering staff turn over and recruitment difficulty.

A2: Strategy - Implement sanitary survey requirements for all federally regulated public water systems.

Target #1: 100% of public water systems file required sanitary surveys according to schedule.

Measure #1: % of public water systems in compliance with their sanitary survey schedule.



Analysis of results and challenges: As part of the 1986 Amendments to the Safe Drinking Water Act, the EPA promulgated the Total Coliform Rule (TCR) which was adopted by the State in 1993. The TCR is the primary health-based regulation used to require all public water systems to routinely monitor for bacteriological contamination in the drinking water they serve to the public. Since most waterborne disease outbreaks are caused by bacteria or other microorganisms, routinely testing for bacteriological contaminants is one of the best ways we have of making sure that drinking water is safe to drink. Another very important part of the TCR is the requirement that all federally regulated public water systems have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and the operations and maintenance procedures of a public water system. The sanitary survey process is used to evaluate the adequacy of a system and helps to determine if they are producing and distributing safe drinking water. Sanitary surveys are required every three to five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Many systems using groundwater as a source are required to have a sanitary survey every three years; however most Alaska systems using groundwater as a source are required to have a survey every five years. Systems using surface water as a source are required to have a sanitary survey every three years.

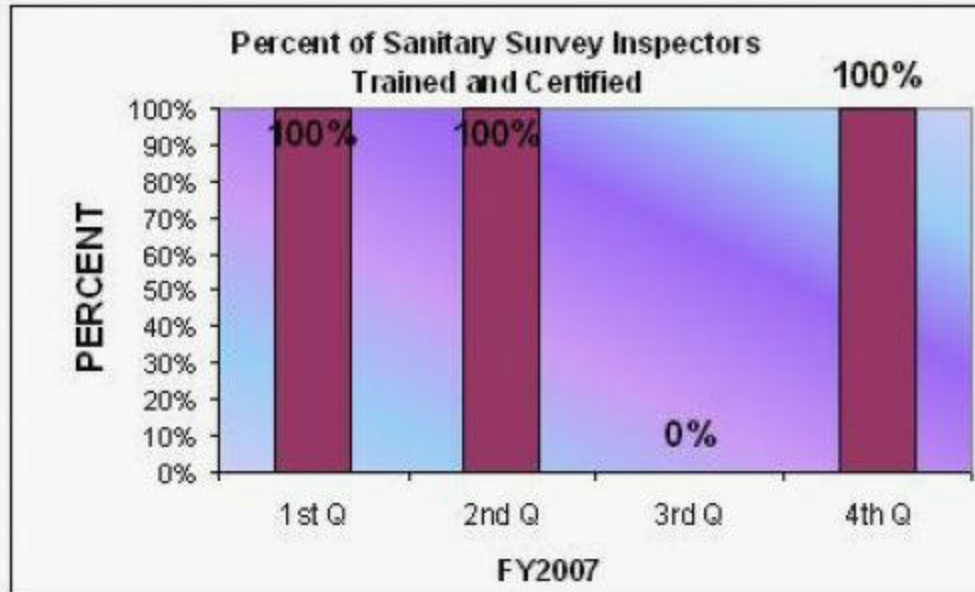
In the fourth quarter of FY2007 a total of 1,583 public water systems had a sanitary survey scheduled requirement. Of that total, 1,537 public water systems had their scheduled sanitary survey completed or were current with their sanitary survey requirements. This number reflects an 98% compliance rate with the sanitary survey requirement for FY2007.

While a 98% compliance rate with the sanitary survey scheduled requirement is good, it does fall below the target rate of 100% of the population being served by a public water system in compliance with health-based standards. Since the sanitary survey scheduled requirement is one of the most important health-based standards, conducting timely sanitary surveys is one of the priority goals of the Drinking Water Program. Some of the challenges we face in meeting this goal are; remote location and difficulty getting to some of the public water systems, cost to the system of conducting the sanitary survey, and the lack of sufficient and timely enforcement actions to establish/confirm the high priority of sanitary surveys. The Drinking Water Program

continues to address these challenges by having the Program's Environmental Programs Specialists and Environmental Engineers trained and certified, as well as ADEC-approved third party sanitary survey inspectors. Most ADEC-approved sanitary survey inspectors schedule and conduct sanitary survey inspections for public water systems.

A3: Strategy - Train and certify third party sanitary survey inspectors.

Target #1: 100% of the sanitary survey inspectors are trained and certified.
Measure #1: % of the sanitary survey inspectors trained and certified.



Analysis of results and challenges: All federally regulated public water systems are required to have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if they can produce and distribute safe drinking water.

Sanitary surveys are required every three to five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health requires that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training.

There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be conducted by department staff, so the Drinking Water Program has partnered with the University of Alaska Southeast, the Alaska Training/Technical Assistance Center (ATTAC), to provide training sessions for both DEC staff and other non DEC (third party) individuals who have prior experience with public water system treatment and distribution process. ATTAC completed one Basic Sanitary Survey training session (5 day class) this year.

The data for the first, second, and fourth quarters of FY2007 shows that we have met our goal of 100% certification of sanitary survey inspectors, however the 3rd quarter shows 0%. This was due to having zero sanitary inspectors being certified.

Key Component Challenges

Meeting the requirements of the Safe Drinking Water Act Amendments of 1996 continues to be a challenge for the Drinking Water Program. This will continue as new rules are adopted over the next couple of years. These new

requirements establish significant expectations and new deadlines for compliance that will be difficult for Public Water Systems (PWS) to meet. The new rules are complex and require more DEC involvement to help PWS owners and operators comply. The complexity also means that DEC will need to provide more assistance to consulting engineers who design these systems before they are built so that they will comply with current and upcoming rules.

In FY2007, DEC obtained primacy for implementing the Arsenic Rule which impacts approximately 80 PWS by requiring them to remove much more Arsenic from drinking water than previously required. DEC obtained primacy for a variety of other rules in FY2007 which is listed in accomplishments below some having more impacts than others. One more final push of rule adoptions is necessary for Alaska to have full primacy of the federal Safe Drinking Water Act.

Significant Changes in Results to be Delivered in FY2009

The Alaska Drinking Water Program is an EPA delegated primacy program with a federal grant as the primary source of funding. For the past several years, grant funding has not kept pace with increasing costs required to implement the program and the DEC fell behind in adopting and implementing new federal rules. As a result, the EPA retained partial primacy and enforcement for new rules. Traditionally, the EPA enforcement is more stringent, including significant administrative penalties without adequate technical assistance - making it difficult for public drinking water systems to attain and maintain compliance. If the State does not eventually gain full primacy, the EPA takes over completely.

Funding for additional staff and resources is needed to keep pace with new requirements, so that the DEC can adopt and implement new rules in a timely manner. Additional federal funds requiring a 50% match are available.

The 2007 legislature proposed a three year plan for obtaining and implementing primacy and funded the first and second year to ensure that Alaska's public water systems will be regulated by the state Drinking Water Program not the EPA. A transaction in this component's budget seeks funding for the third and final year of that three year plan.

In addition to providing needed technical assistance, State primacy allows:

1. Issuance of variance so that samples for the Total Coliform Rule (TCR) can make it to labs in time to be tested and keep most of our rural water systems in compliance. The EPA will not.
2. Issuance of variances or exemptions that allow public drinking water systems to achieve compliance over time while still providing public health protection. The EPA does not.
3. Issuance of construction and operation approvals that reflect local knowledge, experience, and an understanding of arctic engineering principles. Experience the EPA does not have.

In FY2009, DEC will be granted primacy for the Groundwater Rule. This rule will impact approximately 1,300 Alaska public water systems or 83% of the systems in the state. It will force the Public Water Systems (PWS) to monitor activities that may impact their source water such as mining, pipeline projects, forestry, subdivision developments etc. and require communities to plan how their resources will be used or protected for drinking water. It will require extensive technical assistance from the DEC as the PWS and communities grapple with these issues. Having the DEC rather than the EPA implement this new requirement will make it much easier for the PWS to comply and provide safe water.

Major Component Accomplishments in 2007

- DEC received full primacy for the Long Term 1 Enhanced Surface Water Treatment Rule, the Arsenic Rule, Radionuclides Rule, Public Notification Rule, Variances and Exemptions Rule, Filter Backwash and Recycling Rule, Lead and Copper Rule Minor Revisions, Interim Enhanced Surface Water Treatment Rule, Stage 1 Disinfectants and Disinfection Byproducts Rule, Long Term 1 Enhanced Surface Water Treatment Rule, and new Analytical Methods. This required having regulations in place that the EPA felt sufficiently met the intent of the federal rules (this has taken at least 5 years) as well as turning in an extensive primacy request application.
- DEC coordinated three sanitary survey workshops for the certification of Drinking Water Program staff and third party sanitary survey inspectors. Public Water Systems are required to have sanitary surveys conducted on a regular basis. DEC has created an electronic sanitary survey form increasing the speed the information can be conveyed to water system owners and operators as well as DEC. This is critical if significant public health concerns exist.
- DEC Coordinated and facilitated ten PWS Technical Assistance Providers meetings, and hosted a roundtable during the Alaska Water Wastewater Management Association (AWWMA) annual conference in Fairbanks, May 2007. These meetings provide focused, intense technical assistance to communities such as Gambell and

Scammon Bay by bringing all the agencies working with the community together so that efforts can be coordinated and the community trained effectively to stay in compliance. Participants include the Alaska Rural Water Association, Alaska Native Tribal Health Consortium, Alaska Training and Technical Assistance Center, Rural Utility Business Advisors, Remote Maintenance Workers, and the Alaska Rural Community Assistance Corporation. This approach is something new we have been trying to see if we can effectively intervene and brake the cycle of errors in problematic communities.

- DEC completed a joint EPA/DEC surface water treatment and disinfectants/disinfection byproducts workshop to help public water system owners and operators and consultants understand all the Surface Water Treatment Rules. Over 129 people participated.
- DEC completed comprehensive performance evaluation (CPE) workshops for the City of Unalakleet (October 2006) and the Valdez Marine Terminal (May 2007).
- DEC assisted the communities of Anchorage (April 2007), Kodiak (May 2007), Cordova (June 2007), to complete their 2007 Needs Survey for water system infrastructure improvements. This data is used by EPA to determine the long term needs of the nations PWS and future demands on infrastructure funding.

Statutory and Regulatory Authority

AS 44.46.020, AS 44.46.025, AS 46.03.020, AS 46.03.024, AS 46.03.050, AS 46.03.070, AS 46.03.080, AS 46.03.090, AS 46.03.100, AS 46.03.710, AS 46.03.720, AS 46.03.761, AS 46.03.900, 18 AAC 15, 18 AAC 72, 18 AAC 80

Contact Information

Contact: Kristin Ryan, Director
Phone: (907) 269-7644
Fax: (907) 269-7654
E-mail: Kristin.Ryan@alaska.gov

Drinking Water Component Financial Summary

All dollars shown in thousands

	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	3,367.0	4,046.5	4,679.8
72000 Travel	103.7	212.7	250.7
73000 Services	424.0	787.2	827.1
74000 Commodities	114.7	157.6	177.6
75000 Capital Outlay	0.0	20.0	20.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	4,009.4	5,224.0	5,955.2
Funding Sources:			
1002 Federal Receipts	2,962.0	3,772.4	4,188.2
1003 General Fund Match	856.7	1,247.4	1,559.6
1004 General Fund Receipts	0.0	3.4	3.4
1005 General Fund/Program Receipts	167.6	200.8	204.0
1007 Inter-Agency Receipts	5.1	0.0	0.0
1061 Capital Improvement Project Receipts	18.0	0.0	0.0
Funding Totals	4,009.4	5,224.0	5,955.2

Estimated Revenue Collections

Description	Master Revenue Account	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		0.0	0.0	0.0
Restricted Revenues				
Federal Receipts	51010	2,962.0	3,772.4	4,188.2
Interagency Receipts	51015	5.1	0.0	0.0
General Fund Program Receipts	51060	167.6	200.8	204.0
Capital Improvement Project Receipts	51200	18.0	0.0	0.0
Restricted Total		3,152.7	3,973.2	4,392.2
Total Estimated Revenues		3,152.7	3,973.2	4,392.2

**Summary of Component Budget Changes
From FY2008 Management Plan to FY2009 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2008 Management Plan	1,451.6	3,772.4	0.0	5,224.0
Adjustments which will continue current level of service:				
-FY 09 Bargaining Unit Contract Terms: General Government Unit	53.6	153.9	0.0	207.5
Proposed budget increases:				
-Obtain and Implement Primacy for New Public Drinking Water System Federal Rules	261.8	261.9	0.0	523.7
FY2009 Governor	1,767.0	4,188.2	0.0	5,955.2

**Drinking Water
Personal Services Information**

Authorized Positions		Personal Services Costs		
FY2008				
Management		FY2009		
Plan		Governor		
Full-time	53	57	Annual Salaries	3,087,795
Part-time	0	0	COLA	225,163
Nonpermanent	0	0	Premium Pay	0
			Annual Benefits	1,718,975
			<i>Less 7.00% Vacancy Factor</i>	(352,133)
			Lump Sum Premium Pay	0
Totals	53	57	Total Personal Services	4,679,800

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Assistant I	1	0	0	0	1
Administrative Clerk II	1	0	0	0	1
Administrative Clerk III	2	1	0	0	3
Administrative Officer I	1	0	0	0	1
Analyst/Programmer I	1	0	0	0	1
Analyst/Programmer III	1	0	0	0	1
Analyst/Programmer IV	1	0	0	0	1
Environ Eng Asst I	0	1	0	1	2
Environ Eng Asst II	1	0	0	1	2
Environ Engineer I	1	1	1	2	5
Environ Engineer II	4	1	0	0	5
Environ Program Manager I	2	1	0	2	5
Environ Program Manager II	0	1	0	0	1
Environ Program Manager III	1	0	0	0	1
Environ Program Spec I	0	1	0	1	2
Environ Program Spec II	5	2	0	2	9
Environ Program Spec III	4	1	1	1	7
Environ Program Technician	1	1	1	2	5
Hydrologist I	2	0	0	0	2
Regulations Spec I	1	0	0	0	1
Regulations Spec II	1	0	0	0	1
Totals	31	11	3	12	57