

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

**Department of Natural Resources
Water Development
Component Budget Summary**

Component: Water Development

Contribution to Department's Mission

To facilitate the development and stewardship of Alaska's water resources by authorizing its beneficial uses.

The work within the Water Development Budget Component is intended to accomplish three outcomes:

- I. Manage, Allocate, and Protect the State's Water Resources, and Administer Water Rights
- II. Provide Technical Hydrologic Support
- III. Ensure Safe Operation and Construction of Jurisdictional Dams

Core Services

The core services in this component are:

1. Water Management, which manages and allocates the state's water resources to ensure economic and environmental certainty for individuals and industries in Alaska based on priority, usufructuary rights, and public interest values;
2. Hydrologic Survey, which provides scientific hydrologic data, data analysis, and maintains hydrologic data for use by state government and the public;
3. Dam Safety, which protects public safety and property through ensuring safe dams.

WATER MANAGEMENT

Water Rights. Water rights establish legal rights for the beneficial use of water in Alaska. The Water Management Unit (WMU) staff adjudicates applications to ensure that the water is available, that granting the water rights permit will not impair the rights of existing water rights, and that the water appropriation is in the public interest (i.e., that it will not have a significant adverse effect on the environment). Adjudication includes public, prior appropriator, and agency notice of the application, hydrologic data analysis, resolving water use competition, and negotiating conflicting permit terms and conditions.

Temporary Water Use Authorization. A temporary water use authorization is required when a significant amount of water is needed for a short-term project such as highway construction or reconstruction, or oil and gas exploration. No right is granted under a temporary water use authorization.

Staff manages more than 21,000 adjudicated water property rights, water use files and pending applications. In FY 2008, with current staffing the WMU will process 70% of new water right applications received, 20% of the backlog water right applications, 1% of the backlog instream flow applications, and 2% of the more than 3,000 backlog water right extensions, amendments, and revocations pending action.

(See Key Component Challenges).

The unit also asserts the state's interest and authority in water allocation issues raised by federal actions (e.g., environmental impact statements, environmental assessments, Federal Regulatory Energy Commission (FERC) hydropower re-licensing, and federal reserved water rights claims); manages reservations of instream flow; resolves violations of the Alaska Water Use Act; participates in Large Project Team meetings and field work (e.g., the Pebble Mine Project); drafts management and fee regulations; participates in the development of statewide electronic permitting systems; coordinates with local, state, and federal agencies on watershed management and associated permitting issues; and supports the Attorney General's Office with litigation of water management decisions.

HYDROLOGIC SURVEY

Alaska Hydrologic Survey (AHS) staff provides hydrologic data and data analysis to the public, industry, and agencies that can be used to determine appropriate use and allocation of the State water resource.

Provide up-to-date complete data on all known water wells within the State.

Ground water data on all known water wells within the state are contained within the web based Well Log Tracking System (WELTS) database. Currently, nearly 33,000 individual water well logs are available in the WELTS database. Despite representing the best source of data statewide on water wells, poor compliance with state regulations requiring submittal of well logs to AHS has left this data source with inclusion of only an estimated 30% of actual wells in the state. Emphasis on collection of well logs for existing wells not in the WELTS system is now the emphasis to further grow and expand this critical database. WELTS data are used by the public to assess and protect individual water supplies; by industry to secure adequate water supplies for economic development; and extensively by agencies in the allocation and adjudication of water rights. AHS works with and cooperates extensively with the water management staff to assist and ensure that the water resource is allocated using the best available data.

Provide data analysis/interpretation of hydrologic issues.

AHS hydrologists provide analysis of data and interpretation of hydrologic issues. The issue of climate change has tremendous implications on the efficacy of existing hydrologic data to accurately predict future hydrologic conditions. In essence, older data sets may be inadequate to design for future events responding to a new set of hydrologic conditions. This reality will place a greater need for hydrologic data and analysis than ever before. Homeowners frequently seek assistance in the interpretation and analysis of hydrologic issues regarding their personal water sources, flooding, and erosion mitigation. Agencies mandated by Federal and State statute to allocate and protect the water resources of the State are dependent upon access to the data and require analysis of the data by professional hydrologists. Staff hydrologists collect data from one or more of the multiple databases maintained by AHS, through literature/data searches of all known sources, and through on-site field data collection and interpretation.

Provide hydrologic oversight and analysis to industry to enhance economic development:

Necessary to any industrial or economic development is the need for hydrologic data and analysis regarding the water resources. Water is a critical component for mining, oil and gas, fisheries, construction, and other industries. Industry relies on DNR's Hydrologic Survey staff to interpret and analyze hydrologic data during the design phase of development projects in order to assure adequate water; and during development and operation to assure the compliance with all stipulations placed on use of the water and adherence to water quality requirements. AHS hydrologists provide this service by: active participation on the states Large Mine Project Team which facilitate the permitting and development of large scale mining such as the Pebble project, to small scale projects and other development projects; oversight of technical hydrologic concerns pertaining to expansion of the North Slope Oil industry and seasonal construction of critical ice-roads; monitoring of existing mining and oil industry facilities to ensure compliance with water quality regulations; and monitoring and assessment of gravel borrow sites needed to facilitate small to large scale development.

DAM SAFETY

The Dam Safety and Construction Unit is responsible for supervising the safety of dams in Alaska. The unit consists of one registered professional engineer who oversees the following actions:

Periodic Safety Inspections of Jurisdictional Dams. State laws require that dam safety inspections be conducted every three years for Class I and II dams, and every five years for Class III dams. These inspections are typically conducted by a private professional engineer and reviewed and approved by the State Dam Safety Engineer. Current inspections monitor the health of existing dams and reduce the possibility of failures.

Certificates of Approval to Construct, Repair, Modify, Remove, Abandon or Operate a Dam. Before work begins on a dam, it must be approved by the state to assure that the dam will be built and operated safely. The review time for the application submittals is approximately 6 months.

Safe and Effective Emergency Response to Dam Failures. Dam Safety regulations require dam owners to maintain Emergency Action Plans for all Class I and II dams. These plans must be updated and exercised regularly to prepare for a dam failure.

Other Dam Safety Related Work. The Unit also provides engineering assistance for technical review of related work in DNR (such as unregulated dams at mines and other private dam owners, and engineering problems associated with active and abandoned mining operations).

End Result	Strategies to Achieve End Result
<p>A: Business and individuals obtain water authorizations for which they apply.</p> <p>Target #1: Process 100% of new water right applications received.</p>	<p>A1: Process water rights and temporary water use authorizations within expected timelines</p> <p>Target #1: Process new water right applications within 6 months.</p>

<p><u>Measure #1:</u> Percentage of new water right applications processed compared with the number received.</p> <p><u>Target #2:</u> Process 100% of new temporary water use authorizations received.</p> <p><u>Measure #2:</u> Percentage of new temporary water use authorizations applications processed compared with the number received.</p>	<p><u>Measure #1:</u> Median number of months to process new water rights.</p> <p><u>Target #2:</u> Process temporary water use applications within 3 weeks.</p> <p><u>Measure #2:</u> Median number of weeks to process new water use authorizations.</p> <p><u>Target #3:</u> Eliminate 10% to 15% of backlog of water right applications.</p> <p><u>Measure #3:</u> # of water rights processed from the backlog per year.</p>
End Result	Strategies to Achieve End Result
<p>B: Provide hydrologic data to the public, industry, and agencies that can be used to determine appropriate use of state water resources.</p> <p><u>Target #1:</u> Provide information, analysis, and response to 1,000 hydrologic customer requests.</p> <p><u>Measure #1:</u> Number of customers served.</p>	<p>B1: Post hydrologic data on public well site and provide analysis of hydrologic issues.</p> <p><u>Target #1:</u> Post 100% of new well data received on the WELTS data base web site.</p> <p><u>Measure #1:</u> Percentage of well data posted on WELTS site.</p> <p><u>Target #2:</u> Respond to 100% of requests for analysis of hydrologic issues.</p> <p><u>Measure #2:</u> Percentage of requests responded to.</p> <p><u>Target #3:</u> Provide hydrologic support to 100% of major industrial projects where requested.</p> <p><u>Measure #3:</u> Percentage of industrial project support requests supported.</p>
End Result	Strategies to Achieve End Result
<p>C: All dams under DNR jurisdiction are operated safely without failure.</p> <p><u>Target #1:</u> No jurisdictional dams fail.</p> <p><u>Measure #1:</u> Number of jurisdictional dam failures.</p>	<p>C1: Obtain compliance with regulations that were established to assure the safety of dams under state jurisdiction.</p> <p><u>Target #1:</u> A current periodic safety inspection on 60% of jurisdictional dams.</p> <p><u>Measure #1:</u> Percentage of jurisdictional dams with current inspections.</p>

Major Activities to Advance Strategies	
<ul style="list-style-type: none"> • Process 250 new water right applications with a median cycle time of 6 months. • Issue 150 temporary water use authorizations with a median cycle time of 3 weeks. • Issue 6 new instream flow reservations. • Process 100 backlog water right applications. • Complete entry of a total estimated 1000 well logs received into the WELTS database. • Provide hydrologic data analysis and interpretation for an estimated 200 requests for assistance. • Provide hydrologic support to 8 major industrial projects such as Pt. Bullen, and North Slope ice road 	<ul style="list-style-type: none"> • Provide notice to owners of dams with due or over due periodic safety inspections. • Review & approve periodic safety inspection reports submit to the State and issue Cert. of Approval to Operate a Dam to owners in compliance w/regs. • Review applications and issue Certificates of Approval to construct, repair, modify, remove or abandon a dam. • Process 50 water right extensions, amendments, and revocations, or instream flow applications associated with new water right applications. • Work with the well drillers association to encourage greater compliance with submission of well logs.

Major Activities to Advance Strategies

- development.
- Participate in the ACWA process.
- Secure matching funds needed to support hydrologist positions.
- Hire an Engineering Assistant for the Dam Safety Unit.
- Hire two additional water right adjudicators for the Water Management Unit.
- Fund the Alaska Hydrologic Survey and Water Management Units with additional General Funds.

FY2009 Resources Allocated to Achieve Results

FY2009 Component Budget: \$2,041,300

Personnel:

Full time	19
Part time	0
Total	19

Performance Measure Detail

A: Result - Business and individuals obtain water authorizations for which they apply.

Target #1: Process 100% of new water right applications received.

Measure #1: Percentage of new water right applications processed compared with the number received.

Water Rights

Year	WR processed	YTD
2003	365	100%
2004	244	90%
2005	185	60%
2006	153	90%
2007	229	63%

Analysis of results and challenges: The target of processing 100% of new applications was not reached due to growth in: economic development in all industries, regional populations, statewide demands for water use, localized competition for water sources, public scrutiny, controversial nature of projects, size of projects, permit compliance issues, field inspections, and enforcement actions and litigation of AS 46.15.080 decisions and violations of the Water Use Act.

Due to inadequate staffing and staff turnover, the Water Management Unit was unable to complete basic data entry on all 366 incoming applications in FY07.

The transportation, mining, and oil and gas industries, along with community development is dependent on the use of state water appropriation. When authorizations are not provided in a timely fashion, there can be delays in projects, or even the prevention of the project. Water use competition is growing in Alaska with more and more legal challenges to various types of water use authorizations. If these permits are not evaluated properly, there is a risk of individuals and businesses losing their right to appropriate water through legal challenges.

Target #2: Process 100% of new temporary water use authorizations received.

Measure #2: Percentage of new temporary water use authorizations applications processed compared with the number received.

Percentage of new Temporary Water Use Auth. Processed

Year	TWUAs processed	YTD
2003	292	100%
2004	95	100%
2005	160	100%
2006	115	100%
2007	175	91%

Analysis of results and challenges: Due to increased application volume and staff shortage, the target of processing 100% of new Temporary Water Use Applications was not reached. These applications are the unit's highest priority and are processed within 4 weeks of receipt.

Temporary Water Use Permits are used frequently in conjunction with short term construction projects such as oil and gas ice roads and DOT/PF road construction projects.

A1: Strategy - Process water rights and temporary water use authorizations within expected timelines

Target #1: Process new water right applications within 6 months.

Measure #1: Median number of months to process new water rights.

Median Cycle Time

Year	Months
2004	6
2005	6
2006	2
2007	6

Analysis of results and challenges: During FY07, 95% of new applications received were adjudicated within 6 months.

Target #2: Process temporary water use applications within 3 weeks.

Measure #2: Median number of weeks to process new water use authorizations.

Median Cycle Times

Year	Weeks
2004	3
2005	4
2006	3
2007	4

Analysis of results and challenges: In FY 2007 new applications were completed within 4 weeks of receipt. This allowed for the use of water by industry for project development and construction associated with oil and gas exploration, road construction, mining, and other temporary water uses.

Target #3: Eliminate 10% to 15% of backlog of water right applications.

Measure #3: # of water rights processed from the backlog per year.

Backlogged Water Rights

Year	# processed	YTD
2004	80	15%
2005	19	5%
2006	100	24%
2007	35	6%

Analysis of results and challenges: Currently the WMU has over 550 backlog water right applications pending adjudications. This unit was committed to adjudicating all new applications submitted in FY 2007 and 100 of the backlog applications. Some of the backlog applications were adjudicated because they were associated with new applications (in the same area or taking water from the same source). Even though some applications were processed from the backlog, even more applications were added to the backlog because staff could not process all the new applications. The other backlog applications will be adjudicated in the order they are received. The backlog is expected to increase in FY2008. There is little hope of ever eliminating the backlog of water rights applications at current staff levels.

B: Result - Provide hydrologic data to the public, industry, and agencies that can be used to determine appropriate use of state water resources.

Target #1: Provide information, analysis, and response to 1,000 hydrologic customer requests.

Measure #1: Number of customers served.

Year	YTD Total
2004	2,038
2005	1,258
2006	1,200
2007	1,262

Analysis of results and challenges: This represents customers served by specific hydrologic requests, industry support requests, field/site visits, and data review and analysis. This number may fluctuate annually depending on the nature of development occurring in Alaska that requires hydrologic assistance, climatic factors influencing the availability of surface and groundwater, and other factors. Throughout FY07 the hydrologist operated with only 80% of full staffing.

In addition to the individual requests reported above, the division recorded 15,695 WELTS (Well Log Tracking System) "hits" during FY07. Many of these on-line data requests would have been individual data requests without access to the web portal.

B1: Strategy - Post hydrologic data on public well site and provide analysis of hydrologic issues.

Target #1: Post 100% of new well data received on the WELTS data base web site.

Measure #1: Percentage of well data posted on WELTS site.

Percentage of Well Data Posted

Year	YTD
2003	100%
2004	100%
2005	80%
2006	100%
2007	78%

Analysis of results and challenges: Of 725 well logs received during FY07, 565 were added to the WELTS database, comprising 78% compliance with goals. This database gets about 43 "hits" per day from the public seeking this information.

Target #2: Respond to 100% of requests for analysis of hydrologic issues.

Measure #2: Percentage of requests responded to.

Percentage of Responses

Year	YTD
2003	100%
2004	100%
2005	100%
2006	100%
2007	75%

Analysis of results and challenges: Domestic issues including flowing artesian wells in permafrost areas, illegal pumping and diversion of water onto private property, hydrologic support for water rights adjudications, and the protection of both the states water resources as well as individual water rights dominate this target. Palmer gravel pit conflicts strained limited staffing. Other water rights issues also required field trips and detailed analysis because of the potential for legal action and also to minimize possible conflict between water users. Hydrologic analyses of instream flow issues to maximize the use of the water and protect needed habitat has become a more dominant issue as more applications are being processed. Work priority is given to DNR issues, especially for the Water Resource Section needs, and less to unfunded requests from the public.

Target #3: Provide hydrologic support to 100% of major industrial projects where requested.

Measure #3: Percentage of industrial project support requests supported.

Percentage of Requests Supported

Year	YTD
2003	100%
2004	100%
2005	100%
2006	100%
2007	100%

Analysis of results and challenges: Major industrial involvement during FY 07 included work in the TeckComico's Red Dog Mine, Usibelli Coal Mine, Nova Gold's Rock Creek Mine and proposed projects such as Northern Dynasty's Pebble project and PacRim Coal's Chuitna Coal Project and various gravel operations around the state. Involvement has included data analysis and review for permitting and planning of these major projects through the State's Large Mine Project Team. Review of hydroelectric power generation hydrologic issues as part of the FERC process in Southeast Alaska was also done. Other issues related to permitting water use, both in Anchorage and Fairbanks, where analysis was required due to potential interaction between water users.

Hydrologic review/advice in regard to water use on the north slope, where lakes and streams are a major resource controlling development and exploration but with very high habitat potential were addressed.

C: Result - All dams under DNR jurisdiction are operated safely without failure.

Target #1: No jurisdictional dams fail.

Measure #1: Number of jurisdictional dam failures.

Number of failures

Year	YTD
2003	0
2004	0
2005	0
2006	0
2007	0

Analysis of results and challenges: Zero dam failures indicate that the objectives of the Alaska Dam Safety Program were met for the year. However, only certain dams in Alaska fall under the jurisdiction of ADNR regulations. Those dams are defined in AS 46.17.900(3). Although generally rare, the consequences of a dam failure can be dramatic. Dams generally fail through lack of proper design, construction, maintenance or operation, although natural disasters can contribute to the failure of the best designed and constructed dams. All jurisdictional dams must be regularly inspected and evaluated to determine if remediation to prevent a dam failure is required. However, many of the dams under state jurisdiction were constructed before the dam safety regulations were effective. Achieving full compliance for all of the jurisdictional dams requires cooperation from dam owners who may be constrained by budgets, schedules, incentive and other factors.

The division dam engineer worked on many dam projects throughout the state. Some of the large mining projects require a considerable amount of review because of the need for water impoundment. The division also actively worked with the Municipality of Anchorage to get them to address problems with the Fire Lake Dam to prevent failure.

C1: Strategy - Obtain compliance with regulations that were established to assure the safety of dams under state jurisdiction.

Target #1: A current periodic safety inspection on 60% of jurisdictional dams.

Measure #1: Percentage of jurisdictional dams with current inspections.

Percentage of inspections

Year	YTD
2003	51%
2004	49%
2005	55%
2006	54%
2007	53%

Analysis of results and challenges: In FY07, 15 dams were subjected to a periodic safety inspection, which results in 55% of the 76 dams under state jurisdiction with a current periodic safety inspection. The regulations require the dam owner to hire a qualified engineer to conduct this inspection and submit a report to the state. In addition, the regulations require the State Dam Safety Engineer to review and approve the inspection reports for these dams. Because the inspection may occur in one fiscal year, and the report may not be submitted, reviewed and approved until the following fiscal year, the measure is based on the date of the visual inspection of the dam.

All jurisdictional dams are subject to a periodic safety inspection, but not every dam is inspected each year. The inspection interval is dependent on the hazard potential classification of the dam. Class I (high) and Class II (significant) hazard potential dams are typically inspected every three years. Class III (low) hazard potential dams are to be inspected every five years. Hazard potential classification is based on an estimate of the

probable consequences of the dam failure, regardless of the condition of the dam. In contrast, risk takes into account the condition of the dam and the probability of its failure, in addition to the hazard potential classification.

In any given year, a certain number of dams will be due for a new inspection while a certain number of dams will be overdue for an inspection, mostly those that are habitually out of compliance. The percent of dams in compliance is a measure of the cooperation of dam owners with the Alaska Dam Safety Program. The Dam Safety and Construction Unit promotes cooperation with the Alaska Dam Safety Program, while balancing enforcement of the dam safety regulations based on the apparent risk that a specific dam represents. Compliance in any given year is contingent on a number of factors including the dam owner's incentive, budget and schedule, as well as weather, project understanding and staff workload.

Because of our reliance on voluntary compliance, we expect that we will only receive 60% compliance, though we try to gain more compliance.

Key Component Challenges

The complexity, competing interests, growing demands, and controversial developments of water appropriations are all increasing the processing time for new and backlog applications. Also increasing are the other responsibilities and issues related to adjudication, such as: water use violations requiring inspections, enforcement, and occasionally litigation; stressed aquifers in urban areas requiring innovative mitigating measures; outreach efforts to educate developers, engineers, and homeowner's associations on water law and water resources; development of statewide well construction standards; FERC hydropower re-licensing negotiations; regional climate changes; significant population growth; unresolved water rights amendments; critical water management area adjudications; water use monitoring and permit compliance; contentious mining project adjudications, revocations and proper decommissioning of water intake structures; and federal reserved water rights claims.

Additionally, funding and staff are not available for the processing of 3,000+ permit extensions, certificate amendments, and revocations pending action. This problem will have significant long-term consequences for Alaska's industries and citizens. Not adjudicating a water right application within a reasonable time, or not processing a necessary amendment to an existing water right, will result in: delays in financing and development of projects; no legal rights or certainty during disputes over water; cost and impacts of litigation; and impacts to public trust resources.

In order for the Water Management Unit (WMU) to provide its core services, and to meet the promised targets and cycle times, two additional staff (Natural Resource Specialists - one in Anchorage and one in Fairbanks) are necessary.

The Dam Safety Unit has been operating with one engineer since it was created in the mid-1980. The work load for this unit has increased every year, and it is now critical that a new engineering position be created to insure that new dams being constructed and existing dams are not a threat to public safety and the environment. In addition, the new position will be required to assist the WMU with the increasing demand for engineering expertise related to the impoundment, diversion and withdrawal of water for industrial, and commercial water uses statewide.

If this position is not created in FY09, there will be a major backlog of dam inspections, approvals to construct dams, approvals to operate a dam and approvals to appropriate water. A current backlog exist of dams requiring inspection, although the dam owner is required to hire a qualified engineer to do the inspections the State of Alaska is required to review and approve all reports, and issue the necessary authorizations to construct, modify, and operate all jurisdictional dams in Alaska.

In recent history Alaska Hydrologic Survey's (AHS) key funding challenge has been its partial support under State general fund appropriations. Roughly 60% of AHS funding has been general fund, the balance of 40% has been raised through cooperative agreements with local governments, grants and RSA's. As pressures for more hydrologic support increase, the commitment of time and matching funds made to contractual obligations has reduced AHS responsiveness to issues most pertinent to DNR priorities. The mission of AHS has evolved in the past five years to where 90% of the work load is for projects with DNR authorizations and permits, or involves conflicts with existing water rights. This shift in work priorities equates to the AHS being underfunded because of the lack of time to devote to work that could be billed to RSA's. In the past, the division dealt with the shortages by keeping a position vacant when necessary. This change to focus attention on DNR mission related issues is even more critical with the increased emphasis on environmental issues in small to Pebble Mine sized mining projects, and the operation and or expansion of any north slope oil production. Inadequate hydrologic support for these projects will cause potential for delay or environmental damage,

either of which is detrimental to Alaskan economic development.

Additional regulation of the water well drilling industry to protect both the States interest, as well as the individual well owner is a key performance challenge facing AHS, and DNR. Estimates put the number of domestic water wells in the state at over 100,000. The WELTS database, despite being the best source for data on groundwater statewide, has approximately 33,000 wells in the database, or just over 30% of likely existing wells statewide. By state law drillers of water wells drilled anywhere in the state are required to submit to DNR a well log. That well log represents another data point on the states groundwater resource, and is, or will be critical to the management of that resource. Compliance with the required submission of logs is poor. Additional regulations mandating compliance with well data submission is needed.

Significant Changes in Results to be Delivered in FY2009

The Water Management Unit's goal is to provide the service levels promised the legislature in 2001: a typical new water right application will be adjudicated within 6 months, a typical temporary water right use authorization within 3 weeks. The unit's goal will be to reduce the backlog of pending water right applications will be reduced by 100.

The addition of an Engineering Assistant for the Dam Safety and Construction unit will allow that unit to increase its dam inspection compliance rate, which is only at 54%.

In addition to the Alaska Hydrologic Survey's existing services, and provided that greater compliance with submission of well logs for inclusion in the WELTS system, there should be a significant increase in the availability of well logs for entry into the database, and a more rapid expansion of the WELTS system. This expansion would be most rapid if compliance with submission of well logs included already completed wells with available data now existing only in well driller's files.

Major Component Accomplishments in 2007

Processing Water Rights. The Water Management Unit processed 80% of the water rights applications received during FY07, even with additional adjudication work resulting from increased competition for water sources and enforcement actions.

Processing Temporary Water Use Authorizations. The Water Management Unit processed 100% of the Temporary Water Use Authorization applications received. To ensure that the authorizations can withstand any legal challenges, staff went to unusual lengths to ensure that the record showed that staff had gone above and beyond procedures requirements for issuing the authorizations and reflected documentation that showed the environment would be protected. The lack of litigation is a significant change and increased the reliability of the authorizations for the applicants.

In FY07, the unit processed temporary water use authorizations for ConocoPhillips Alpine Satellite Oil and Gas Expansion Project, Pioneer Ooguruk Oil and Gas Development Project, FEX Northwest NPRA Oil and Gas Exploration Project, Mystery Creek Resources Nixon Fork Mine Project, and Teck-Pogo Mine Project.

The Unit also asserts the state's interest and authority in water allocation issues raised by federal actions. Finally, staff manages more than over 21,000 adjudicated water property rights, water use files and pending applications.

The **Alaska Hydrologic Survey Unit** (AHS) provided Division staff with hydrologic data and data analysis for support of adjudication and issuance of temporary water use authorizations and water rights throughout the State. Legal issues pertaining to protection of private property and property rights through illegal diversions and use of water and drainage of aquifers associated with gravel extractions were successful. Increased participation in the hydrologic data interpretation needs for the protection of instream flows for the preservation of habitat through the State's instream flow reservation process has also proven successful. Continued participation in the State's Large Mine Project Team including, such as participating in studies for the controversial Pebble Copper mine project and oversight of the operational Red Dog Mine, are essential services AHS provides.

In all, AHS has met its goals, with an over 1200 individual requests for hydrologic assistance, the posting of almost 2000 additional water well logs to the WELTS system bringing the total number of well logs to almost 33,000 individual wells; oversight of hydrologic data needs for issuance of temporary water use permits for North Slope oil field operations,

participation in 5 active major industrial mine projects (Usibelli, Red Dog, Pogo, Fort Knox, Rock Creek); participation in 5 industrial mining projects in the exploration phase (Pebble, Chuitna, Donlin, Niblack, Big Hurrah; participation in the closing of two mines (Illinois Creek, True North); and numerous small projects. The continued success of the WELTS online database giving access to groundwater data statewide is evidenced by the over 15,000 "hits" recorded during FY'07. Without the online system an unknown number of individual requests requiring manual AHS staff retrieval of data would have reduced to nearly eliminated AHS staff availability to support many of the other projects/support issues completed.

The Dam Safety and Construction Unit issued a Certificate of Approval to Operate, Construct, Modify, Remove, or Abandon a Dam for 8 dams in Alaska, including proposed construction for two new dams, and the removal and abandonment of two existing dams. Only one Emergency Action Plans was exercised, and two new plans were received. There are 18 Emergency Action Plans now on file, bringing the level of compliance to 37%, although only half of these plans are current. A Periodic Safety Inspections occurred on 15 dams, putting the level of compliance at 54%.

Statutory and Regulatory Authority

The Water Development Component operates under the following statutory and regulatory authority:

Statutory	Regulatory
AS 46.15.020-.970	11AAC 05.010 and 11 AAC 93.040-.970
AS 35.05.965	
As 46.17.010-.900	
AS 41.08	

Contact Information

Contact: Richard Mylius, Director
Phone: (907) 269-8600
Fax: (907) 269-8904
E-mail: dick.mylus@alaska.gov

Water Development Component Financial Summary

All dollars shown in thousands

	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	1,360.7	1,440.5	1,733.6
72000 Travel	23.0	53.7	70.7
73000 Services	66.3	137.5	173.3
74000 Commodities	22.4	31.3	63.7
75000 Capital Outlay	0.0	0.0	0.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	1,472.4	1,663.0	2,041.3
Funding Sources:			
1002 Federal Receipts	21.1	43.0	43.8
1004 General Fund Receipts	956.5	939.1	1,401.2
1005 General Fund/Program Receipts	83.5	85.5	91.3
1007 Inter-Agency Receipts	56.3	126.7	56.7
1061 Capital Improvement Project Receipts	59.3	58.3	131.7
1108 Statutory Designated Program Receipts	47.0	110.4	116.6
1156 Receipt Supported Services	248.7	300.0	200.0
Funding Totals	1,472.4	1,663.0	2,041.3

Estimated Revenue Collections

Description	Master Revenue Account	FY2007 Actuals	FY2008 Management Plan	FY2009 Governor
Unrestricted Revenues				
Receipt Supported Services	51073	4.0	0.0	0.0
Unrestricted Total		4.0	0.0	0.0
Restricted Revenues				
Federal Receipts	51010	21.1	43.0	43.8
Interagency Receipts	51015	56.3	126.7	56.7
General Fund Program Receipts	51060	83.5	85.5	91.3
Statutory Designated Program Receipts	51063	47.0	110.4	116.6
Receipt Supported Services	51073	248.7	300.0	200.0
Capital Improvement Project Receipts	51200	59.3	58.3	131.7
Restricted Total		515.9	723.9	640.1
Total Estimated Revenues		519.9	723.9	640.1

**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	1,024.6	43.0	595.4	1,663.0
Adjustments which will continue current level of service:				
-Fund Source Switch from Receipt Supported Services to General Fund	100.0	0.0	-100.0	0.0
-ETS Chargeback Redistribution	0.8	0.0	0.0	0.8
-Correct Unrealizable Fund Sources for Salary Adjustments: GGU	15.1	0.0	-15.1	0.0
-FY 09 Bargaining Unit Contract Terms: General Government Unit	43.7	0.8	24.7	69.2
Proposed budget increases:				
-Increased Mining Activity and Workload	308.3	0.0	0.0	308.3
FY2009 Governor	1,492.5	43.8	505.0	2,041.3

**Water Development
Personal Services Information**

Authorized Positions		Personal Services Costs		
<u>FY2008</u>				
<u>Management</u>	<u>Plan</u>	<u>FY2009</u>		
		<u>Governor</u>		
Full-time	16	19	Annual Salaries	1,102,680
Part-time	0	0	COLA	78,688
Nonpermanent	0	0	Premium Pay	0
			Annual Benefits	606,593
			<i>Less 3.04% Vacancy Factor</i>	(54,361)
			Lump Sum Premium Pay	0
Totals	16	19	Total Personal Services	1,733,600

Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Engineering Assistant II	1	0	0	0	1
Hydrologist I	0	0	1	0	1
Hydrologist II	2	1	0	0	3
Hydrologist III	1	0	0	0	1
Natural Resource Mgr I	1	0	1	0	2
Natural Resource Mgr II	1	0	0	0	1
Natural Resource Mgr III	1	0	0	0	1
Natural Resource Spec II	3	2	1	0	6
Natural Resource Spec III	2	0	0	0	2
Tech Eng II / Architect II	1	0	0	0	1
Totals	13	3	3	0	19