

# **State of Alaska FY2002 Governor's Operating Budget**

Department of Natural Resources  
Water Development  
Component

## Component: Water Development

**Contact: Gary Prokosch, Chief, Water Resources Section**  
**Tel:** (907) 269-8645 **Fax:** (907) 269-8947 **E-mail:** garyp@dnr.state.ak.us

### Component Mission

To facilitate the development and stewardship of Alaska's water resources.

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

- I. Protect and Provide for Water Property Rights
- II. Provide Technical Hydrologic Support
- III. Ensure Safe Operation and Construction of Jurisdictional Dams

### Component Services Provided

#### WATER MANAGEMENT

The services provided by this component are necessary for public safety, environmental protection, and economic development including, oil and gas exploration and production, fish processing, hatcheries, recreational resorts, mining, municipal and village water and sanitation systems, hydroelectric power, and recreation sites. In addition, the component provides hydrologic data and analysis useful in locating and designing infrastructure and resource development projects, and basing management decisions on scientific information. Administrative decisions that resolve conflicting water uses in the public interest often avoid extensive litigation and project delay. The component also provides public safety, and property protection through ensuring safe dams, which reduce flood insurance costs. Finally, water rights are property rights that enhances the value of other uses.

**WATER RIGHTS.** A water right is a property right necessary to establish legal standing against future water users and those current water users who never applied for a water right. The filing of a completed application or registry sets a priority date of appropriation and establishes the amount, season, place, and nature of use that remains valid through the registration or adjudication process. Adjudication includes public and agency notice of the application, resolving conflicting permit terms and conditions, and compliance with land use and coastal zone plans. A representative year of application filings would include: 10 commercial hydroelectric projects (primarily in SE Alaska); 20 oil and gas projects (North Slope and Cook Inlet), 4 seafood processing facilities, 110 for lodges, fish hatcheries, stores, golf courses, logging camps, ski areas and commercial projects; 35 mining operations; 20 village and community water systems; 10 public buildings (schools, state and federal offices, hospitals and camp grounds), 15 for instream flow (primarily ADF&G and USF&WS ), 100 residential homes and 1 bulk water export.

The Unit also asserts the state's interest and authority in water allocation issues raised by federal actions, protects the rights of other water appropriators in adjudication of federal reserved water rights, and maintains availability of unappropriated water for future development against de facto water allocations by actions of federal agencies. It also adjudicates applications for reservations of instream flow where significant state interest is involved.

**TEMPORARY WATER USE PERMITS.** A temporary water use authorization is required when a significant amount of water is required for projects such as highway construction or reconstruction or mineral exploration. (No water rights are granted under a temporary water use authorization.) Unless the project is in a water shortage area, within the coastal zone, involves a salmon spawning or other high value fish habitat, is controversial or is unusually complex, a temporary water use permit is completed within approximately four weeks of receipt. Permits within the coastal zone typically require 60 days. The adjudication of water rights and temporary water use permits are concurrent work, often by the same adjudicator.

**WATER RIGHT DATA AND RECORDS.** There are over 16,000 adjudicated water property rights, water use files and pending applications. There are 2060 files that are in need of being updated to assure that changes to water use or point of water use, permit extensions, revocations, and transfers of rights are current. With current budget limitations, the Unit can only update 100 of the 2060 files and only those in areas where other high priority adjudications are in process. Accurate up-to-date records show existing and pending water property rights and adjudicated water uses.

These records are fundamental for legal title purposes and to protect senior property rights as new or expanded junior water ownership or uses are adjudicated.

**OTHER WATER RIGHT RELATED TASKS.** Staff is expected to respond to complaints, appeals, and litigation about water use or misuse. The FY02 budget allows for reaction to complaints of significant state interest only. Staff will also receive over 400 requests for information and data. Public assistance will be limited to requests that are of significant state interest only. It is estimated that less than half of the requests will be addressed.

## HYDROLOGIC SURVEY

**PERMIT REVIEW AND RESOLUTION OF LEGAL ISSUES.** Staff of the Alaska Hydrologic Survey (AHS) provides the basic hydrologic expertise for the Department of Natural Resources. As a result, staff is needed for DNR permitting that involve technical water resource issues. Staff is expected to provide scientific hydrologic data and analysis to 600 new and on-going projects requiring ADNR permitting. The primary goal and strategy is to provide hydrologic data for use within DMLW needed for management of the mining industry, land management issues, and water rights permitting. Other divisions within ADNR also request assistance with the collection, interpretation and analysis of hydrologic data in their permitting process. Outside of ADNR, assistance has been requested by ADF&G, ADEC, and USEPA.

**HYDROLOGIC INVESTIGATION/REPORT AND DATA COLLECTION.** Staff investigates a water resource issue or problem important to a particular project or industry. As an example the Alaska Hydrologic Survey is working cooperatively with Alyeska Resort in the collection of stream flow data needed in conjunction with its snow making operation. Snowmaking allows the resort to open a month or more earlier, providing for a longer season and greater cash flow and economic benefit to Girdwood and Southcentral Alaska. The data collected also allows the water managers to work with ADF&G to establish an instream flow for the protection of fish and fish habitat. This project also ties in with a cooperative project with ADEC that involves streamflow of Glacier Creek in Girdwood. These combined efforts with multiple cooperators enhances this unit's capability to provide scientific hydrologic data that is mandatory to sound management of resources.

**TECHNICAL ASSISTANCE AND HYDROLOGIC DATA SEARCH AND RETRIEVALS.** Staff searches and retrieves data contained within the databases maintained by AHS for the public and for government. There are three primary databases maintained by AHS. The Well Log Tracking System (WELTS) has ground water information on approximately 25,000 water wells throughout the state. Homeowners, communities, municipalities, consultants, and state and federal agencies seek these data. The WELTS system is currently being converted to a system that will be available on-line. Web access to the WELTS data will enhance public access and improve efficiency of staff. The Alaska Water Use Database System (AKWUDS) is the only comprehensive database in the state with information on community water use. In addition to information on public water supply, data on industrial use such as oil & gas production, seafood processing and hydroelectric production are available. It currently has several thousand-station years of record (a year of data for a single station). Agencies use this data category when seeking assistance with planning efforts dealing with community-based needs for water. The Alaska Rivers Information Database (ARID) contains data on more than 14,000 surface water bodies in Alaska. The ARID system is a primary source of information with regard to property ownership issues in navigability and hence is relied upon by ADNR navigability program.

Approximately 325 (50% of total requests) requests for data retrieval are accompanied with a request for some data interpretation or analysis. These requests vary from explanations of what is included in the data being provided, to far more complex requests including analysis of regional ground water flow directions and water balance calculations. Within this output category also come requests for technical reviews of hydrologic data not collected by AHS, nor retrieved from AHS databases.

**HYDROLOGIC DATA ENTRY AND COMPUTER/DATABASE MANAGEMENT.** Management of AHS computer databases includes entering and updating data into ground water, surface water, and water quality databases to meet DNR's and the public's data needs. The goal and strategy of this sub-component is to ensure the continued update and expansion of AHS water databases. Without continual database maintenance the usefulness of the database quickly declines.

**DAM SAFETY**

**PERIODIC SAFETY INSPECTIONS OF JURISDICTIONAL DAMS.** Safety inspections must be conducted every three years for Class I and II dams, and every five years for Class III dams. These inspections are conducted by an approved professional engineer and reviewed by the State or occasionally by the State Dam Safety Engineer.

**CERTIFICATES OF APPROVAL TO CONSTRUCT, REPAIR, OR OPERATE A DAM.** Prior to major work on a dam, Certificates of Approval must be issued by the State. The engineering plans, specifications, engineering reports and studies are reviewed to determine if the facility will be operated safely. The cycle time for these certificates is approximately 6 months from application to issuance.

**SAFE AND EFFECTIVE EMERGENCY RESPONSE TO DAM FAILURES.** Dam Safety regulations require Emergency Action Plans for all Class I and II dams. These plans are implemented in case of a dam failure, such as an earthquake. To be effective, a plan must be reviewed and exercised on a regular basis after it is developed. However, less than 10% the Class I and II dams in the state have a current Emergency Action Plan; DMLW is enforcing the requirement for these important plans.

**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).

## **Component Goals and Strategies**

### **OUTCOME: I. PROTECT AND PROVIDE FOR WATER PROPERTY RIGHTS**

Water Management encourages the maximum use of Alaska's water consistent with the public interest by providing certainty and security of rights, reduced risk for investment, and reduced transaction costs. The Unit adjudicates water rights, issues temporary water use permits, and maintains the water records database.

At current budget levels, staff will not be able to adjudicate a majority of these applications. The Water Management project has seen a 53% reduction in general funds and a 67% reduction in staff over the past 10 years. In FY 00, budget reduction eliminated 5 of the then remaining 9 water management positions. This budget reduction virtually eliminated the state's water rights program. The remaining four positions can no longer carry out the requirements of the Alaska Statutes 46.15 (The Water Use Act). To solve this problem, the Department is proposing a solution involving a budget increment and statutory and regulatory changes that decrease the amount of work required of state government, and provide a revenue source to adequately fund the program.

In FY01, DMLW expects to adjudicate 100 water right applications to put water to a beneficial use, to amend 150 permits or certificates, and amend or issue 150 temporary water use permits. Will conduct approximately 30 inspections to ensure compliance with permit terms. If the budget increment and regulatory changes are implemented in FY 02, DMLW anticipates that all 250 applications received next year, as well as the 150 temporary water use permits will be processed.

### **OUTCOME: II. PROVIDE TECHNICAL HYDROLOGIC SUPPORT**

Hydrologic Survey provides scientific technical data, analysis, and interpretation of hydrologic information. The Survey collects and assembles ground and surface water quantity and quality data required for resource development and the orderly use of Alaska's water resources for domestic, community, commercial, and conservation purposes. In FY01, DMLW expect to provide hydrologic information, data, and evaluations for 625 water permits, mining issues and legal issues; provide hydrologic investigations and assistance to 150 customers; provide hydrologic data to 725 customers; and assist 350 customers with data evaluation and interpretation. DMLW will also enter approximately 3,900 new hydrologic data points to its existing databases.

### **OUTCOME: III. SAFE OPERATION AND CONSTRUCTION OF JURISDICTIONAL DAMS**

Dam Safety assures the continuing safety of all non-federally owned dams and dams not regulated by the Federal Energy Regulatory Commission. The National Flood Insurance Program provides a flood insurance premium rate

discount to all communities in Alaska because of the state dam safety program. A well administered dam safety program protects lives, property, and natural resources. The Unit will review or perform 15 periodic dam safety inspections; issue 15 certificates to construct, modify or operate a jurisdictional dam; and review and test up to 6 emergency action plans for high hazard dams. The unit will also provide engineering assistance to the Mining Section and Surface Coal Mining Unit as needed.

Additional output and measurement information for the component is available upon request from DNR Admin Services Manager (Nico Bus 465-2406).

### **Key Component Issues for FY2001 – 2002**

The fundamental issue facing the Water Development component is the fact that there is no longer enough staff to conduct the program required by statute.

The law requires that an individual, commercial business, industry, public water supplier, or any other user of the state's water resources obtain water rights (property right) by filing an application, before withdrawing a significant amount of surface or groundwater. There is no assurance under the current budget that the application would be adjudicated. AS 46.15 requires that a person using more than 500 gallons of water per day must have a Permit or Certificate of Appropriation. Taking water without a permit or certificate is a violation of state law and would be subject to a Class A misdemeanor. A development project in the state that required water would find their development at risk, if they violate the law and take water without a permit or certificate. The development would be subject to litigation by any special interest group or individual that wanted the development stopped for not having the appropriate state permits and the water user would have no certainty or security in their use of water.

#### **A THREE-PART SOLUTION**

To provide the services required by Alaska's citizens and businesses, the Department is proposing a three-part solution. First, the Division must do business more efficiently. That is, we must use fewer staff to conduct the public's work. To that end, we are proposing regulations which provide that lower levels of water use may occur with a brief review but without full adjudication. It will allow staff to focus on proposed water withdrawals that DNR, DEC, or DF&G determine are likely to endanger the environment. Any water right application of significant state interest would be adjudicated under current law. Staff estimates that an application registry system would apply to as many as 65% of the applications filed in a year.

Second, the Department needs adequate staff to run even the reduced water use program. The present staff of four is not adequate to provide reasonable turn-around under the proposed regulations. To that end, the Department is proposing a budget increment to adequately fund the program.

Third, the Department recognizes that in the current budget environment, additional general funds are unlikely to be appropriated each year. The Department is proposing legislation to allow it to charge a water use fee to adequately fund the program. This fee would be based on the amount of water granted in a permit or certificate of appropriation (water right) or temporary water use permit. The fee would extract funds in exchange for providing a water right, a private property right, or authorizing the use of a portion of the state's water resources. The fee would be relatively modest for most users to reflect the fact that in many locations throughout the state, water is not a scarce resource. If a water user fee were established, the Department would request program receipt authority to fund the program with only limited general funds. The Division estimates that a water user fee could generate revenue for the operation of the program and, in time generate additional general funds under the 6i receipts. (The legislation may also fix some additional technical problems with the water use act. )

### **Major Component Accomplishments for FY2000**

The Water Management Unit issued 100 water right decisions with an average cycle time of 12+ months, a major decrease in production and increase in cycle time; conducted 26 field compliance visits with 100% needing some kind of compliance action. Issued 119 Temporary Water Use Authorizations with an average cycle time of 4 weeks, a noted increase in cycle time. Conducted 5 field compliance visits with 100% needing some kind of compliance action. Updated 197 water right records and responded to 780 public requests for assistance and information on water rights,

water use, and water quantification. Issued 2 instream flow reservations. Responded to 10 federal actions involving water rights.

The Hydrologic Survey Unit provided Division staff with hydrologic information, data, and evaluations for 522 water permits, mining issues and legal issues; provided hydrologic investigations and assistance to 150 customers; provided hydrologic data to 678 customers; and assisted 377 customers with data evaluation and interpretation. Entered 3,624 new hydrologic data points to its existing databases.

The Dam Safety and Construction Unit reviewed or performed 12 periodic dam safety inspections; issued 13 certificates to construct, modify or operate a jurisdictional dam; and reviewed and tested 2 emergency action plans for high hazard dams. The unit also provided engineering assistance to the Mining Section and Surface Coal Mining unit for projects at Usibelli Coal Mine, Illinois Creek Gold Mine, and Pogo exploration sites.

### **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	

### **Key Performance Measures for FY2002**

#### **Measure: Number of Water Right Files applied for and processed** *(Developed jointly with Legislature in FY2000.)*

**Current Status:**

In FY00 225 applications were received, and the backlog of applications was 490.

**Benchmark:**

In FY 00, the Water Management Unit processed approximately 104 water rights and issued 119 temporary water use permits.

**Background and Strategies:**

Staff will not be able to keep up with demand for service in FY 01 due to budget cuts. For FY 02, DNR is proposing a budget increment and regulatory changes to the program. The funding and changes will allow the Division to change the level of services to the point where all applications are processed each year. The details of the proposal are explained elsewhere in this budget document.

#### **Measure: Number of Periodic Dam Safety Inspections** *(Developed jointly with Legislature in FY2000.)*

**Benchmark:**

Staff performed 12 dam safety inspections as well as issuing 13 authorizations to construct, repair or modify a dam.

**Background and Strategies:**

Authorizations and inspections are the basic tools to insure that dams under state jurisdiction remain safe and protect downstream life and property.

### **Status of FY2001 Performance Measures**

<i>Achieved</i>	<i>On track</i>	<i>Too soon to tell</i>	<i>Not likely to achieve</i>	<i>Needs modification</i>
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Component — Water Development

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	<i>Achieved</i>	<i>On track</i>	<i>Too soon to tell</i>	<i>Not likely to achieve</i>	<i>Needs modification</i>
• Number of Water Right Files Processed				X	
• Periodic Dam Safety Inspections		X			

**Water Development**  
**Component Financial Summary**

All dollars in thousands

	FY2000 Actuals	FY2001 Authorized	FY2002 Governor
<b>Non-Formula Program:</b>			
<b>Component Expenditures:</b>			
71000 Personal Services	772.5	789.6	1,042.9
72000 Travel	23.2	24.7	31.7
73000 Contractual	43.0	164.7	152.7
74000 Supplies	5.4	23.3	26.3
75000 Equipment	0.0	2.0	7.0
76000 Land/Buildings	0.0	0.0	0.0
77000 Grants, Claims	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
<b>Expenditure Totals</b>	<b>844.1</b>	<b>1,004.3</b>	<b>1,260.6</b>
<b>Funding Sources:</b>			
1002 Federal Receipts	14.2	21.6	29.6
1004 General Fund Receipts	647.4	657.9	970.9
1005 General Fund/Program Receipts	133.9	135.2	137.8
1007 Inter-Agency Receipts	47.5	182.1	122.3
1053 Investment Loss Trust Fund	0.0	6.0	0.0
1061 Capital Improvement Project Receipts	1.1	0.0	0.0
1108 Statutory Designated Program Receipts	0.0	1.5	0.0
<b>Funding Totals</b>	<b>844.1</b>	<b>1,004.3</b>	<b>1,260.6</b>

**Estimated Revenue Collections**

Description	Master Revenue Account	FY2000 Actuals	FY2001 Authorized	FY2001 Cash Estimate	FY2002 Governor	FY2003 Forecast
<b>Unrestricted Revenues</b>						
General Fund Program Receipts	51060	15.2	2.0	2.0	2.0	2.0
<b>Unrestricted Total</b>		<b>15.2</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
<b>Restricted Revenues</b>						
Federal Receipts	51010	14.2	21.6	21.6	29.6	29.6
Interagency Receipts	51015	47.5	182.1	133.8	122.3	122.1
General Fund Program Receipts	51060	133.9	135.2	135.2	137.8	137.8
Statutory Designated Program Receipts	51063	0.0	1.5	1.5	0.0	0.0
Capital Improvement Project Receipts	51200	1.1	0.0	0.0	0.0	0.0
Investment Loss Trust Fund	51393	0.0	6.0	6.0	0.0	0.0
<b>Restricted Total</b>		<b>196.7</b>	<b>346.4</b>	<b>298.1</b>	<b>289.7</b>	<b>289.5</b>
<b>Total Estimated Revenues</b>		<b>211.9</b>	<b>348.4</b>	<b>300.1</b>	<b>291.7</b>	<b>291.5</b>

## Water Development

### Proposed Changes in Levels of Service for FY2002

Currently, in FY01, the Division is able to adjudicate and issue less than half of the applications it receives in any one year, and a very small percentage of other actions necessary to keep a water user in compliance with the law. (The other actions are such things as permit extensions, amendments, etc.)

The proposed new statutes and regulations along with the proposed \$300.0 GF increment will allow DMLW to process and adjudicate all new applications and other required actions received in any one year. In addition, DMLW would eliminate the backlog of adjudications and other required actions within a few years. For most water users, the cycle time would decreased from a few years to just 45 days.

### Summary of Component Budget Changes

#### From FY2001 Authorized to FY2002 Governor

*All dollars in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2001 Authorized</b>	799.1	21.6	183.6	1,004.3
<b>Adjustments which will continue current level of service:</b>				
-Convert Special FY2001 Labor Cost Fund Sources to GF	1.5	0.0	-1.5	0.0
-Year 2 Labor Costs - Net Change from FY2001	8.1	0.0	0.2	8.3
<b>Proposed budget decreases:</b>				
-Decrease Interagency Receipts Authority to Anticipated Level	0.0	0.0	-60.0	-60.0
<b>Proposed budget increases:</b>				
-Water Use Rights Adjudication Staffing to Meet Workload	300.0	0.0	0.0	300.0
-Increase Federal Authority for Dam Safety Inspections	0.0	8.0	0.0	8.0
<b>FY2002 Governor</b>	<b>1,108.7</b>	<b>29.6</b>	<b>122.3</b>	<b>1,260.6</b>

**Water Development**  
**Personal Services Information**

Authorized Positions			Personal Services Costs	
	FY2001 Authorized	FY2002 Governor		
Full-time	11	15	Annual Salaries	782,247
Part-time	0	0	COLA	11,278
Nonpermanent	0	0	Premium Pay	0
			Annual Benefits	274,617
			<i>Less 2.36% Vacancy Factor</i>	<i>(25,242)</i>
			Lump Sum Premium Pay	0
<b>Totals</b>	<b>11</b>	<b>15</b>	<b>Total Personal Services</b>	<b>1,042,900</b>

**Position Classification Summary**

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Clerk II	1	0	0	0	1
Hydrologist II	3	1	0	0	4
Hydrologist III	1	0	0	0	1
Natural Resource Mgr I	1	0	0	0	1
Natural Resource Mgr III	1	0	0	0	1
Natural Resource Off I	1	0	1	0	2
Natural Resource Off II	2	1	1	0	4
Tech Eng II / Architect II	1	0	0	0	1
<b>Totals</b>	<b>11</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>15</b>