



## THE DIVISION OF WATER

The Alaska Division of Water manages an estimated 40% of our Nation's free flowing (not frozen) fresh water resources including over 3 million lakes and close to 30,000 streams. The Division also manages all ice, permanent snow fields, and all coastal waters.

These responsibilities include the State Water Management Policy and Water Management Strategy; issuing water rights, and temporary water use permits; glacial ice harvesting permits; administering the dam safety program; rendering and reviewing navigability determinations and asserting ownership of an estimated 14 million acres of submerged lands; surveying, collecting and distributing surface, ground and coastal water resource data essential to all economic activity; coordinating water data collection and management activities with other state/federal agencies; providing support to the State Water Board and the Alaska Water Management Council; and advocating responsible water development. The Director of the Division represents the Governor on the Western State's Water Council (17 western states) and on the President's Commission on Western Water Policy.

The Division of Water is comprised of four sections in addition to the Office of the Director, the Alaska Hydrologic Survey which includes the State Water Lab, Water Management and Development, Navigability, and Dam Safety and Construction. The Division has offices in Anchorage, Fairbanks, Juneau, and Wasilla.

## FY95 Budget Presentation

### The purpose and function of the Division of Water is:

To manage the water resources of Alaska, which are in common use, through responsible and efficient adjudication.

To collect, interpret, and disseminate water resource information essential for responsible economic development.

To ensure the safety of dams.

To secure quiet title to an estimated 14 million acres of submerged lands.

To promote responsible development of water resources.

To raise the public and political profile of water as an important natural resource.

To provide leadership in the collaborative resolution of water management problems and statewide priorities.



## **The Division of Water is organized and staffed:**

### **Office of the Director**

**Director**

**Secretary I**

**Accounting Tech I (vacant)**

### **Alaska Hydrologic Survey**

**Chief of Survey (Director)**

**2 Hydrologist IV**

**5 Hydrologist III**

**2 Hydrologist II (vacant)**

**1 Chemist II**

**1 Data Entry Clerk (PT)**

### **Water Management and Development Section**

**Section Chief/Senior Adjudicator (NRM I)**

**3 FT Regional Chiefs/Adjudicators 1 PT (NRO II)**

**3 Adjudicators NRO I**

**2 Adjudicators NRT (vacant)**

### **Dam Safety Section**

**Section Chief/Technical Engineer II**

### **Title Navigability Section**

**1 Section Chief NRM I**

**1 Technical Expert NRO II**

### **Regional Offices are located in:**

**Juneau**

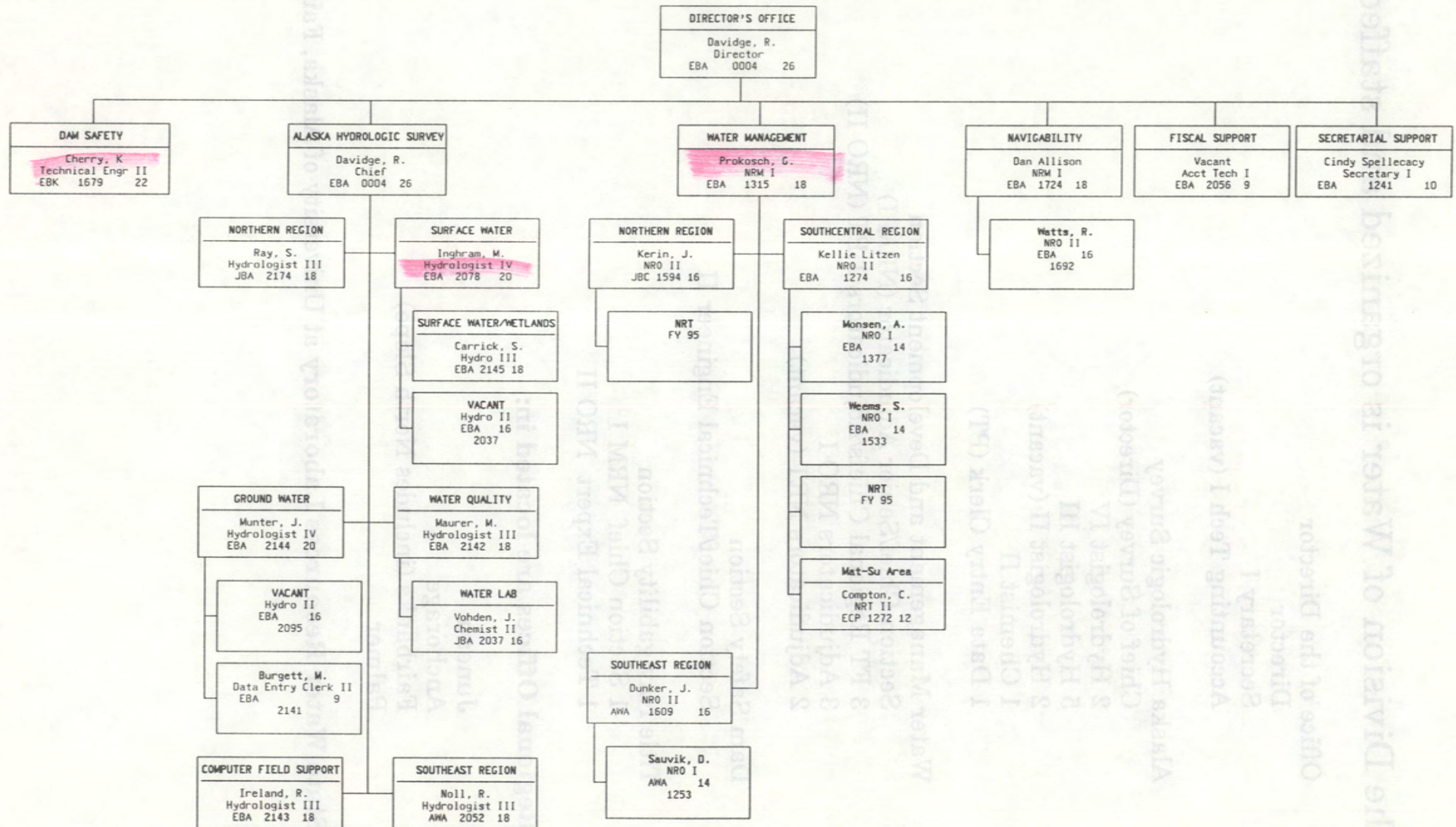
**Anchorage**

**Fairbanks (includes North Slope)**

**Palmer**

**State Water Resources Laboratory at University of Alaska, Fairbanks.**

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER





## **The Division of Water serves:**

**Over 16,000 active water rights, with record maintenance requirements**

**Monitor stipulations on over 1800 permits and certificates**

**Over 700 permits/certificates to appropriate water adjudicated per year**

**Over 300 Annual Placer Mine permits issued per year**

**Over 750 files require site specific data annually**

**Over 125 temporary water use permits per year issued**

**Respond to citizen and agency complaints about misuse of water**

**The State of Alaska which is charged by law to appropriate water held in common use.**

**All jobs created and sustained by economic activity that depends on water, such as:**

**Mining**

**Timber/wood fibre Industry**

**Community/Public Water Supplies**

**Recreation and Tourism**

**Seafood Processing**

**Domestic Uses**

**Agriculture**

**Hatcheries**

**Oil and Gas exploration and development**

**Construction (roads, bridges, diversions, impoundments)**

**Service Industry**

**Water Exports (bulk and bottled)**

**Power Generation (Hydroelectric)**

**Resource Management (fish, game, land, water quality)**

**What are the needs of water users?**

**Physical source of water**

**Legal Rights to Water**

**Protection of source (quality/quantity) for continuing operations**



What are some EXAMPLES of what the Division of Water does for industry?

### **Physical Source**

**1. Shore-based Bering Sea Fishery** - City of St. Paul is undergoing major expansion of shore based seafood processing. Industry requires new sources of fresh water. The Division of Water provided key technical assistance to define capacity of groundwater supplies.

**2. Northwest Alaska Tourism** - The key limiting factor to tourism development in northwest Alaska is the lack of sanitary facilities in rural communities. The Division of Water recently discovered a fresh water aquifer for the City of Gambell that may provide an alternative to pumping brackish water through their new water and sewer system.

### **Legal Rights to Water**

Unless a water user has formally established the right to a certain amount of water from a specific source, the state can not provide any legal protection for their use of water, no matter how large or small the use is or for how long the use has been historically. Every year the Division of Water is contacted by citizens who desire some level of state assistance in protecting their water use only to find that since they have not secured a water right the activity that may be causing harm to their use could now have a superior legal right to that water.

The Division of Water continues, within its very limited budget, to advise Alaskans of the legal value of securing water rights. We regularly provide legislators with water rights applications and fact sheets for their constituencies and constantly advise citizens and businesses to secure water rights.

In most cases uses of water in Alaska do not compete, however, we are seeing a growing number of situations where there is competition for a limited supply. A clear understanding of the water resource faced with competing demands is essential to any contested adjudication. Although applicants must provide their own third party assessment of the water source, these evaluations must be independently reviewed by the hydrologists with the Division of Water to ensure they are scientifically sound. If found to be sound the adjudication proceeds. If there are problems identified then the Division of Water either requests additional clarification or conducts its own analysis.

## **Protection of Sources (quality/quantity)**

1. The Kenai Peninsula is totally dependent on groundwater. The Division of Water has been instrumental in helping the Kenai Peninsula Groundwater Task Force (state, federal, borough, citizens, business) develop a plan for protecting their public water from diverse contamination threats.

2. Placer mining has long been accused of surface water contamination. The Division of Water, in a study funded by ADEC (initiated under suit by the Trustees for Alaska) studied four metals (Cadmium, Copper, Lead, Zinc) thought to be released down stream of placer mining. The Division showed that these metals were not released down stream by placer miners, saving them significant additional analytical expenses and unnecessary regulatory compliance.

# **PRIORITIES**

## **The priorities of the Governor are:**

1. Implement responsibilities of an Owner's State.
2. Stimulate sustainable economic development.
3. Implement efficiencies.
4. Deliver essential services.
5. Stimulate local initiative and personal responsibility.

## **The Strategic Missions of the Department of Natural Resources are:**

As Alaska moves into the 21st century facing a time of serious economic stress and in response to the Governor's priorities, the missions of DNR are:

- I. To vigorously fulfill and implement the Statehood Compact and pioneer effective leadership of an Owners' State through the integration of state and federal interests, cooperation, and protect State interests.
- II. To stimulate resource-based economic activity while conserving Alaska's wild, scenic and cultural values as a major player in an evolving world.
- III. To simplify and accelerate regulatory processes and organizational structures to allow rapid, sustained economic growth.
- IV. To raise public awareness of Alaska's natural resource asset base, its market potential within Alaska and the world, how it effects our daily lives, and how to implement its promise for our common future.



The priorities of the Division of Water are:

High Priority

1. Reduce backlog of water development permitting actions (2000+).
  - Complete Interactive River Mile Index System (CIP request FY93, FY94, FY95)
  - Add two adjudicators
1. Consolidate/simplify water development permitting processes.
1. Quiet Title all submerged lands beneath priority navigable waters. (AGO, ADF&G, SPCO, Lands/Mining/Oil & Gas)
1. Honor all agreements [contracts] (RSAs, Ias, Coop Agreements)
  - Assist communities in developing public water supplies (DEC, DCRA, USGS).
  - Support cooperative efforts (state/federal/private) to map and understand groundwater (quantity, characteristics, and contamination) issues. (Kenai, Fbks GW Task Forces)
1. Expedite permit (water/dam) reviews for all large projects.
  - On Time w/in Budget - **Required**
  - Ft Knox Mine, AJ Mine, Kensington Mine, Hydro, etc.
1. Complete statewide Water Gaging Network Evaluation. (CIP approved, USGS RSA)
1. Establish regional gaging system (USGS/AHS). (CIP request/USGS Coop Pgm, FY94, FY95)
1. Perform necessary high hazard dam safety inspections. (owner pays)
  - Test all Emergency Action Plans for High hazard structures
1. Generate new revenue/jobs from the use and development of Alaska water. (Water management should be paid for by water use.)
  - Facilitate Alaska water exports to southwest (CA, NV) and northern Mexico and explore other markets (Pacific Rim, Middle East).
  - Characterize potential (21) SE AK export sites. (USFS/USGS/DOW - MOU)

- Assist Alaska communities/companies interested in water development opportunities.  
[Bulk and Bottled water exports]
  - Secure Alaskan control over bag technology for bulk water transport. (DCED/CIP FY95)
  - Secure approval for water user fees for uses above 50 af/y.
2. Raise the profile and understanding of water and its value (domestic and export).
    - Meet with each legislator w/district specific reports.
  2. Maintain and improve GW/SW and WQ databases to support economic development.

### **Mid Priority**

1. Secure adequate general funds for full-time Dam Safety Engineer. Use Program Receipts for annual inspection of high hazard dams and new technician.
1. Defend state ownership of all water/ice against unreasonable federal reservation efforts.
1. Facilitate success of Alaska Water Management Council and its work groups.
  - Inventory/Data Priorities, Permit Coordination, Education, Wetlands GP
2. Gather sufficient matching funds to continue Water Education Program.
3. Inventory state owned water resources in the 1002 Area of ANWR. (CIP request FY93, FY94, FY95)
3. Resolve National Weather Service precipitation gage problem in arctic.
3. Update Annual Dam Safety Compliance Report to Gov/Leg.
  - Secure intern to update inventory
4. Ensure all water data bases (6) are current (30 days).



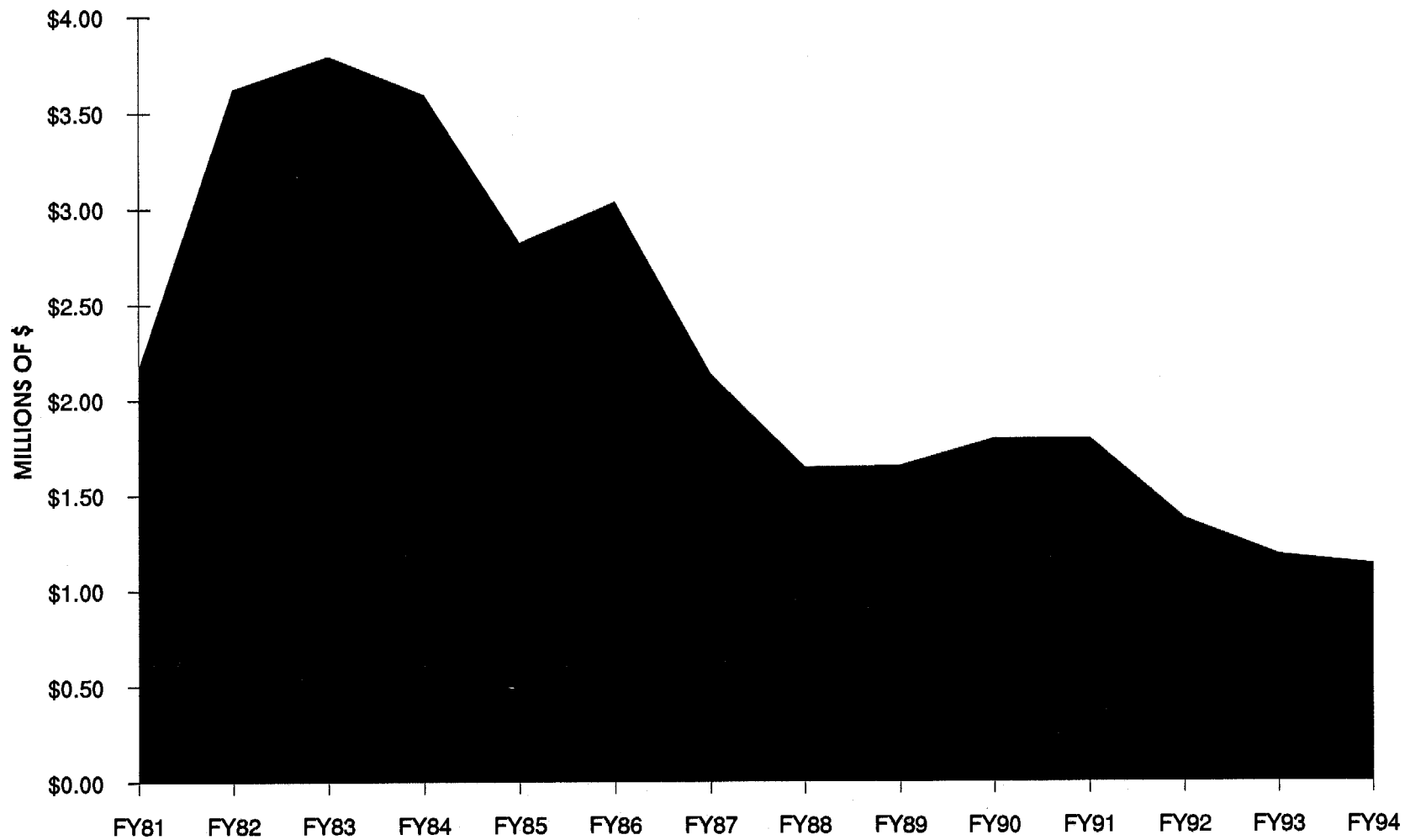
### **Low Priority**

1. Develop erosion mitigation program (CIP). Secure project specific funding.
2. Start State Water Management Strategy. Phase I is SE. (CIP) (US SCS)  
- Watershed Management Strategy (Ship Creek, Anchorage Hillside, Eagle River)
2. Secure funding to adjudicate instream reservation applications (ADF&G)

### **Accomplished but needs monitoring:**

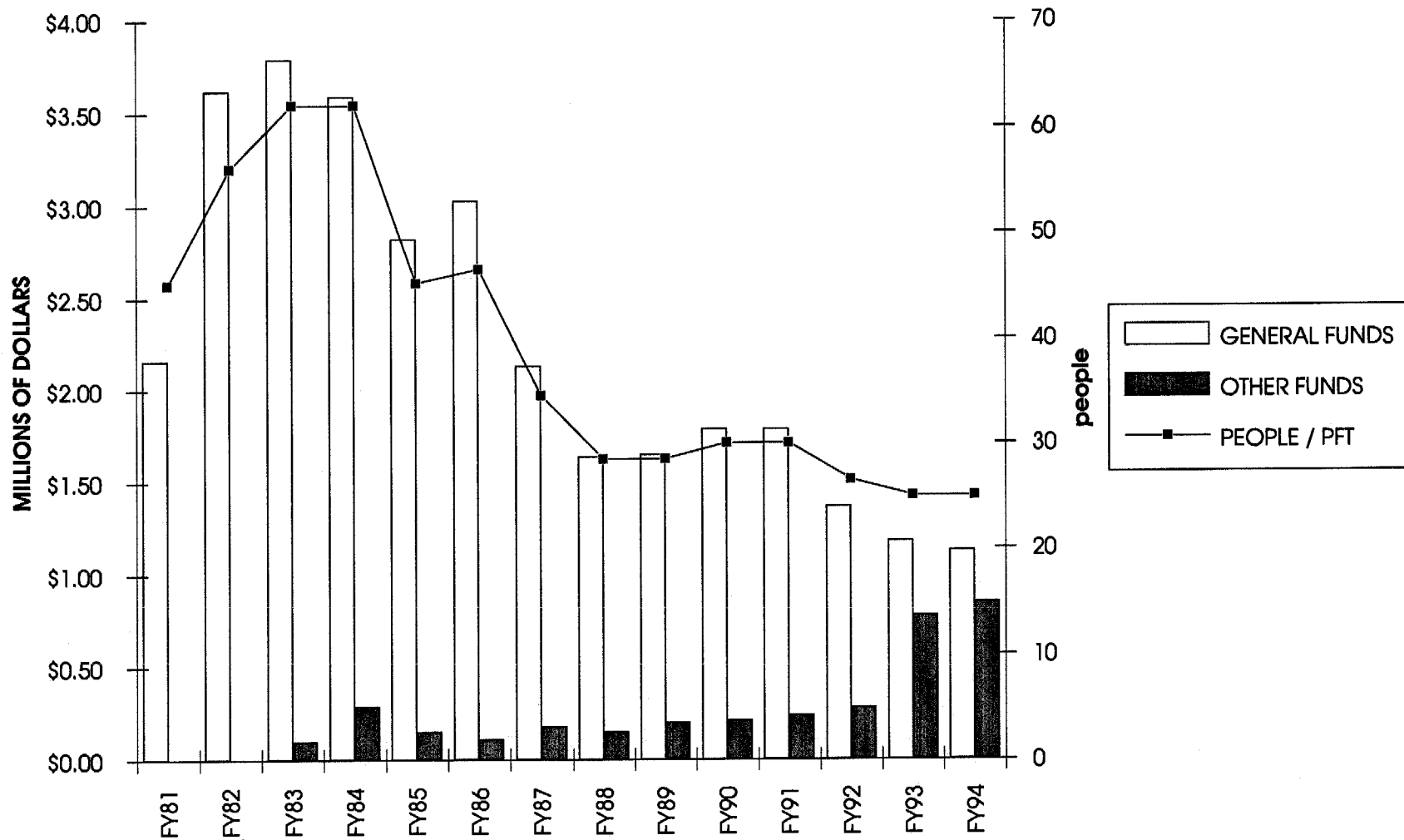
Maintain high level of cooperation with USGS Water Resources Section

### DIVISION OF WATER GENERAL FUND TRENDS





## DIVISION OF WATER



## **What is the budget history of water programs?**

Over the past ten years state water management programs have taken significant cuts (over 65%) in general funds resulting in a 75% reduction in personnel, have greatly increased their dependence on program and other receipts, yet have continued to face growing demand for services. In just the past two fiscal years the Division of Water has increased its "other funds" by over 300% through a detailed evaluation of services provided, cost analysis, management, and revenue enhancement. This does not include increases in productivity and other efficiencies resulting from professional management.

**Water Management** - In 1983 the water program had over 20 full time water adjudicators. With an ever growing increase in permitting demands this same program now has only 7.5 adjudicators. The result is a backlog of permitting actions in excess of 2,000. This permitting backlog is causing harm to a number of economic development projects. At the request of the Division, Commissioner Noah has directed that this not continue, and that in FY95 a reallocation of resources within the Division will be made to increase the number of staff in water adjudication and decrease staff in the research section.

**Title Navigability** - In Title Navigability, the state initially (FY81) made an investment of \$1 million. Yet since statehood less than 20 waterbodies have quieted title. Significant focus in the past has been developing legal precedents (what is navigable) in support of state efforts to secure quiet title to an estimated 14 million acres of submerged land. Now, with only a couple of full time staff, we have accelerated the quiet title effort and formally noticed all federal agencies that an initial group of 195 high priority, federally determined navigable waterways, will be filed in federal court for title. The first 3 complaints have been filed in federal court that the next batch of 5 are in process. In a couple of years we should have quiet title to the submerged lands associated with over 500 waterbodies.

**Dam Safety** - In the Dam Safety and Construction program, again the trend is the same. Increased demand in the face of steady decreases in general funds. The statutory requirements ensure public safety, and most projects that demand dams embrace our cooperative approach.

**Alaska Hydrologic Survey** - Fundamental to water management is knowledge of the resource. The Alaska Hydrologic Survey is the section responsible for gathering, interpreting, and disseminating this information. But this is not some scientific group disconnected to pressing management needs. We have taken a very close look at what this section is doing to ensure



it is not in competition with private consulting firms and have found the industry very supportive due to the Survey's scientific objectivity and professional reputation. But the demand for work is overwhelming and the staff is being reduced.

Hydrologists like most scientist specialize. With the recent layoffs, due to the manner in which they must occur under the contract, we have lost unique and difficult to replace specialized knowledge that is Alaska specific. This will result in higher project costs for the private sector as the information will still be required for project permitting.

An indication of the value of this unit is just one of many data bases within the Survey. The Well Log Data Base is worth more than \$40 million. With over 20,000 logs @ 100 average depth times an average of \$20 per foot = \$40 million. This data base averages more than one request per work day. In addition to the many project specific data bases, there are over half a dozen other data bases maintained by the Survey regularly used by citizens, business, and government agencies.

In the FY94 CIP the Division was funded for a Hydrologic Gaging Station Network Evaluation, a cooperative effort with USGS. This evaluation asks, Is it better to continue collecting data at existing network sites, or would more useful information be collected from new or different sites? The results of this evaluation are the basis for our FY95 Capital Budget Request to establish up to 12 new regional gaging stations in cooperation with USGS. What is the absolute minimum gaging we need to do to provide the minimum amount of regional indicators to facilitate project permitting? This is the most fundamental of tools needed by the Division to meet its statutory responsibilities. Without it many large projects could be delayed by more than 10 years due to the lack flow data.

Reviewing the funding trends of the programs within the Division of Water we conclude that:

1. General fund support has dropped considerably while expectations, required by law, have increased.
2. The amount of "other funds" raised to, in part, off-set the general fund reductions have softened the impact of budget cuts but have also significantly complicated the operation of these programs.
3. Significant efficiencies and cost recover programs have been identified and implemented.

4. We are doing more with less, but we have clearly crossed the line in our fiscal inability to meet statutory obligations. The (2000+) permitting backlog that has resulted in project delays and a slow down in economic activity are the price.

How is the FY95 budget different from FY94?

As a result of legislative reductions (-\$150.0) in general funds three positions with the Alaska Hydrologic Survey were laid off and one position transferred. This action was consistent with testimony before the House Finance Committee.

For FY95 we have essentially requested a status quo budget, however, we are suggesting some internal adjustments to meet the priority of reducing the water permitting backlog and strengthening the Dam Safety program in response to legislative and management concerns.

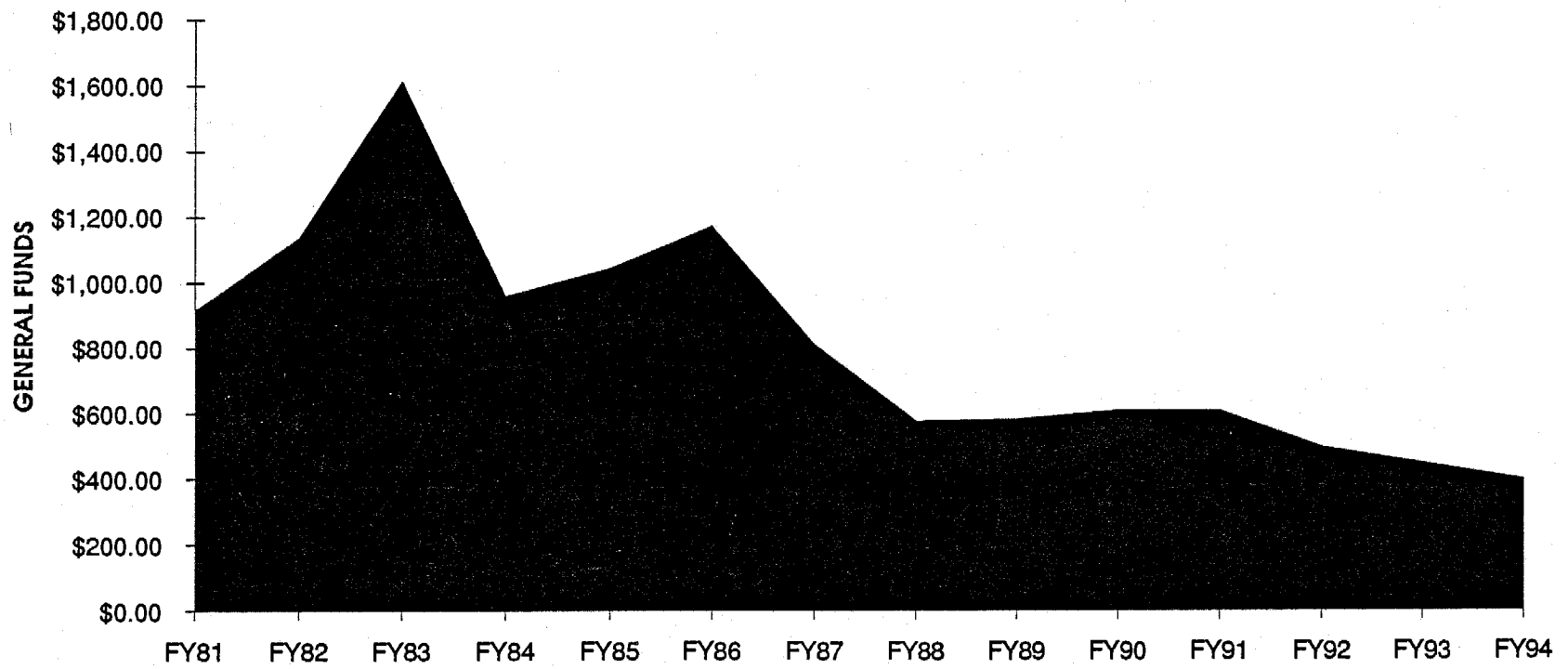
Specific actions recommended:

- Take \$120.0 in General Funds from the Hydrologic Survey Section  
Layoff 2 Hydrologists

- Reclassify positions establishing 2 entry level adjudicators
  - One in Anchorage
  - One in Fairbanks (other than North Slope permitting)

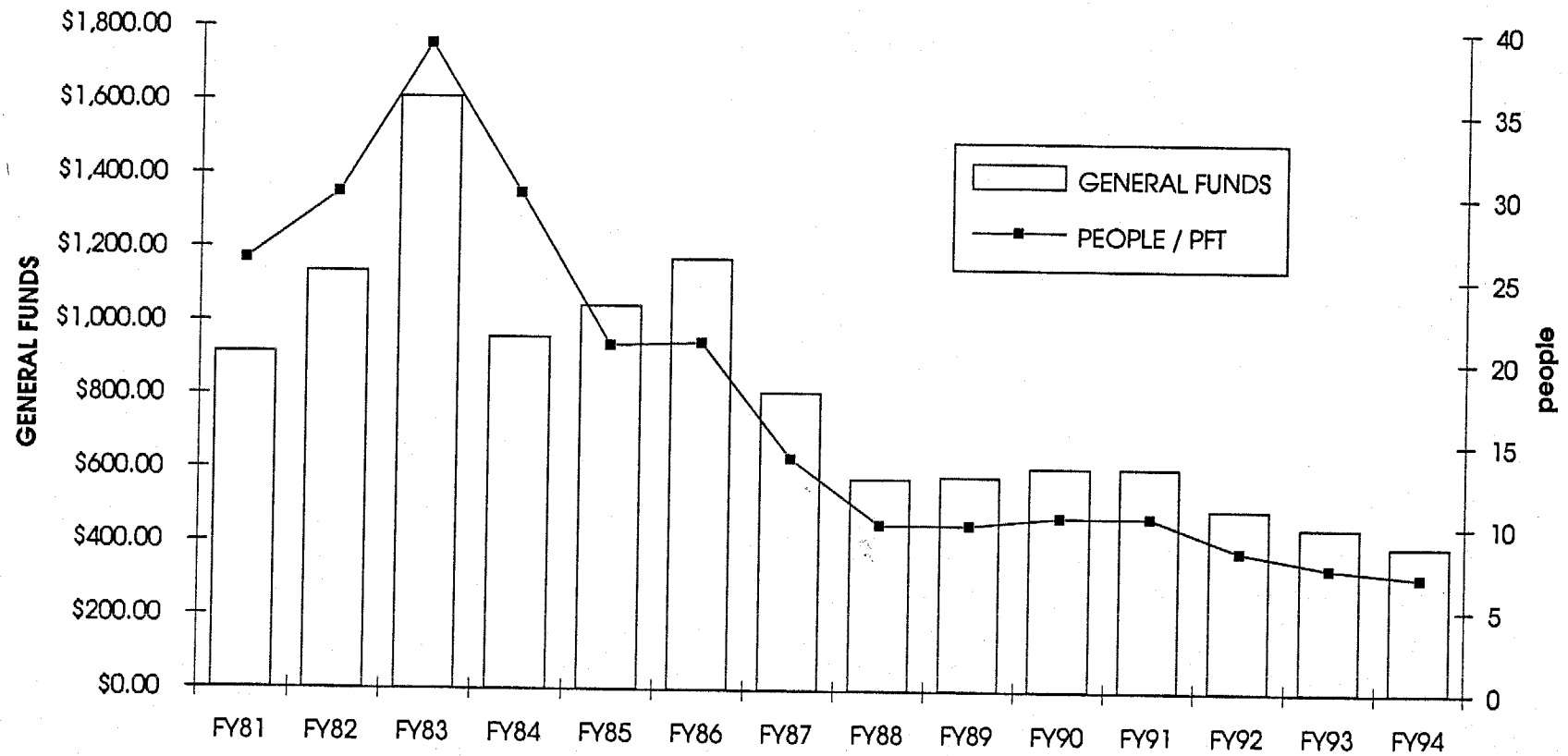
Allocate additional funds to Dam Safety to ensure adequate Personnel funding for the State Dam Safety Engineer. Program receipts in this section should be used for project related travel, permit coordination, and essential training to ensure skills are current with changing national standards.

# WATER MANAGEMENT & DEVELOPMENT





## WATER MANAGEMENT &amp; DEVELOPMENT



## WATER MANAGEMENT AND DEVELOPMENT

No significant quantity of water can be withdrawn, diverted, impounded, or used without a permit or certificate of appropriation- it's the law. This law is important to water users as it gives them legal standing to protect their economic investment. The permitting process is important to the state as it ensures this valuable resource is used wisely to encourage responsible economic development. Permits to use water are fundamental to any economic activity, from building a home to a new shore based seafood processor, operating a mine, or exploration of a new oil and gas field. Processing permits to use water must be accomplished in a reasonable time to not hinder or impede economic growth and diversification. The Water Management and Development Section (WMDS) receives close to 400 water use applications a year. However, due to significant reductions in staff due to general fund cuts there is now a backlog of over 2350 water use files requiring action.

The development and promulgation of water sale regulations is a necessary step in the State's effort to market and sell water. The sale of water, will encourage a new industry in Alaska, providing stable jobs, and develop a new tax base. Initially it will generate hundred of thousands of dollars in new revenues to the state. In the longer term it may generate up to 20 million dollars in new annual revenues in fees alone.

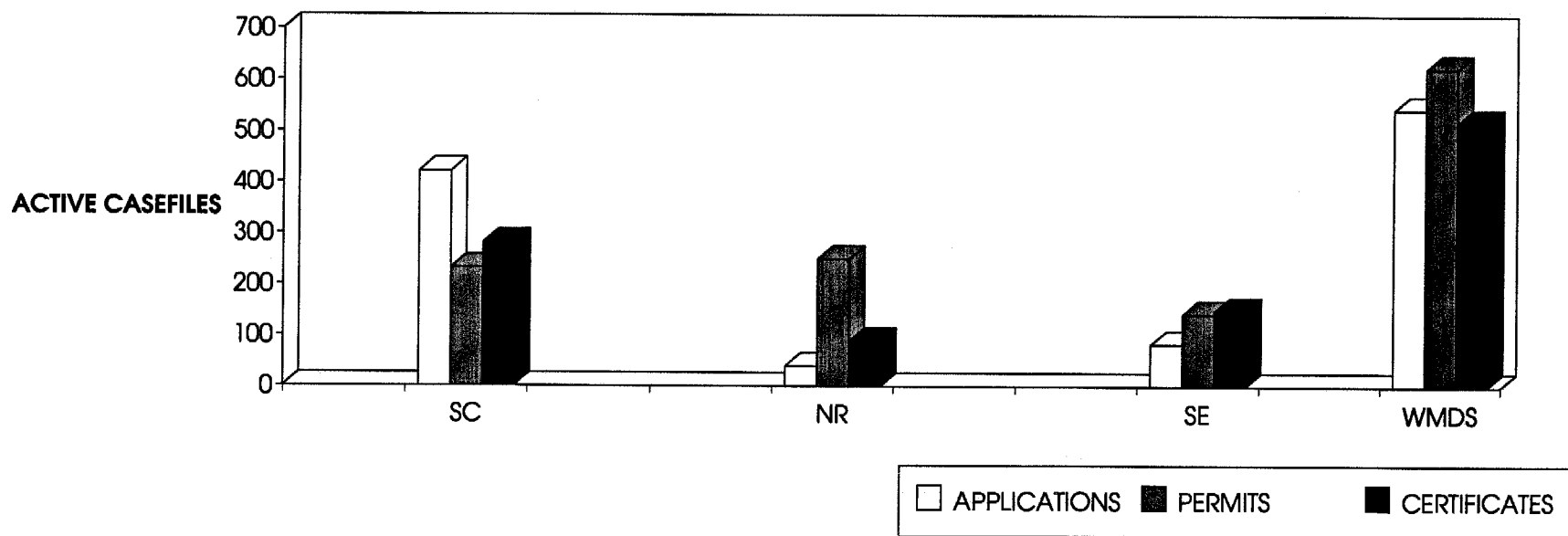
It is necessary that the people of the state, including its youth, recognize the importance of the role of Alaska's water in their economic future. The wise use of water is dependent on stewardship instilled in the youth of Alaska today.

- \* Accept and initiate 375 applications to use water (water rights and temporary water use)
- \* Issue 700 permits and certificates to appropriate water
- \* Issue 125 water use permits for the temporary use of water
- \* File maintenance of 16,084 water permits and certificates
- \* Monitor stipulations and conditions on 1800 permits and certificates
- \* Collect data such as site specific water use information, stream gage data, well level records, well logs, and plans and specifications on water diversion structures for 750 files

- \* Respond to complaints from the public, state, federal and local agencies regarding water use and misuse
- \* Provide public assistance and information on water rights law, water permitting process, and water resource information
- \* Respond to legislative inquiries, requests for information, status reports
- \* Work with the federal government to quantify their federal reserved water rights in areas of potential development
- \* Review, draft new, and amend regulations regarding the management and use of water
- \* Review and comment on proposed state, federal, local government statutes, regulations, ordinances and legislation concerning water use and management issues
- \* Develop the Alaska Surface Water Information System, a computer system used to store and retrieve surface water resource data (CIP project)
- \* Maintain and manage the annual water administration service fee system.
- \* Ensure that water is recognized for its economic potential while balancing environmental impacts.
- \* Adopt and implement regulations for the appropriation of water, sale of water, and water conservation fees in accordance with AS 46.15.035 and AS 46.15.037.
- \* Adopt bidding forms for the sale of water
- \* Prepare a standard contract form for the sale of water
- \* Prepare and submit applications for the appropriation of water to the state for the purpose of sale
- \* Sign MOU with the USFS regarding water sales within areas managed by them
- \* Promote the uniqueness of Alaska's water resources as a marketing tool
- \* Prepare for and conduct water sales



### WATER MANAGEMENT & DEVELOPMENT PENDING WATER RIGHT ACTIONS



# **BACKLOG UPDATE**

## **FY94**

### **Backlog Status (10/27/93)**

- 78 New applications received in FY94
- 259 Case files Processed (7/1/93 to 10/27/93)
- 181 Total Backlog Reduction to date

### **Backlog**

- 543 Applications Pending
- 541 Expired Permits requiring action
- 82 Permits that will expire in FY94
- 531 Certificates under review
- 230 Permits under review
- 65 Temporary Water Permit (TWP) applications anticipated FY94
- 176 Additional Water Rights Applications anticipated in FY94
- 2168 Total Backlog (anticipated)

### **Water Permitting Activity by Region**

#### **South Central Region**

- 170 Single Family Applications Pending (some dated 1985)
- 251 Commercial Applications Pending
- 506 Active permits
- 190 Expired permits requiring action
- 42 Permits to expire in FY94
- 58 Permits under review
- 9517 Certificates of Appropriation
- 281 Certificates under review
- 50 Temporary Water Use (TWP) Applications anticipated in FY94
- 180 New Water Right Applications anticipated in FY94

## **Southeast Region**

- 5 Single Family Applications
- 78 Commercial Applications Pending
- 205 Active permits
- 128 Expired Permits requiring action
- 14 Permits to expire in FY94
- 23 Permits under review
- 1447 Certificates of Appropriation
- 148 Certificates under review
- 10 Temporary Water Use Applications anticipated in FY94
- 30 New Water Rights Applications anticipated in FY94

## **Northern Region**

- 12 Single Family Applications Pending
- 27 Commercial Applications Pending
- 536 Active Permits
- 223 Expired Permits requiring action
- 26 Permits to expire in FY94
- 148 Permits under review
- 2406 Certificates of Appropriation
- 98 Certificates under review
- 35 Temporary Water Use Applications anticipated in FY94
- 40 New Water Rights applications anticipated in FY94

Commercial applications include: Industry/manufacturing, agriculture, mining, construction, hydroelectric, seafood processing, public water supplies (cities, towns, villages) logging, oil and gas exploration/development/construction, instream flow reservations, community water (subdivisions), and other large water users.

Certificates and Permits Under Review include: files where the Division has received a request for amendment, partial relinquishment, or full relinquishment.



## MAJOR PROJECTS

<u>FILE #</u>	<u>NAME, PROJECT, LOC., ETC.</u>	<u>Action</u>	<u>DEAD- LINE</u>	<u>COMMENTS ON NEEDS</u>
LAS 13044	City and Boro. of Juneau	Permit	ASAP	Adjudicate concurrent with A-J Project (Gold Creek) Additional Water
* LAS 13216	GSA; Fed. Bldg. cooling system	Permit	Spring 1993	As above, monitor as system develops. (Gold Creek) <b>Issued 6/93</b>
LAS 13128	Echo Bay; A-J Mine Project;	Permit	ASAP	Also, coord. w. CBJ permitting & mitigation, etc. (Gold Creek)
LAS 13129	Echo Bay; A-J Mine Project;	Permit	ASAP	Also, coord. w. CBJ permitting & mitigation, etc. (Sheep Creek)
ADL 44439, 100066	City and Boro. of Juneau	Cert. Amend.	ASAP	Partial revocation, transfer, etc. Public Water Supply (Gold Creek)
ADL 43152	AEL&P; hydro;	Cert. Amend.	ASAP	Partial revocation, transfer, etc. (Gold Creek)
LAS 13147	K-V; Kensington Mine project	Permit	Fall 1994	Coord. w. CBJ permitting, Dam Safety, etc.
LAS 13148	"	"	"	" Public Notice Complete 7/15/93
LAS 13149	"	"	"	" Public Notice Complete 7/15/93
aplns. pending	State of Ak.; potential water export sites	Permit	???	ASAP after regs in place; needed to secure benefits to public.
LAS 208	Armstrong-Keta; hatchery expansion	Permit Amend.	2/94	Amend old permit; new application for expansion Salmon hatchery
LAS 11649	Kerr; Thomas Bay floating lodge	Permit	Spring 1994	Recreational lodge
LAS 11335	Sitka Sound Seafoods fish buying scow	Permit	1/94 in use	Seafood processing

LAS 13366	Velikanje; placer mining; Hyder	Permit	Winter 1994	Placer mining activity
LAS 13666	KPC; Calder Bay float camp	Permit	2/94 in use	Logging camp
LAS 13900	Marsh; microhydro	Permit	4/94	Proposed small scale hydro development
ADL 44079	KPU; Beaver Falls hydro	Amend Cert., Permit	1/94	Parts of hydro system w.o. WR; hatchery w.o. WR.
LAS 11400-11405	City of Sitka; Baranof Warm Springs	Amend Permit	Winter 1994	Permit compliance key to other pending aplns. Public Water Supply
LAS 7141	Port Protection public water	Amend Permit	in use 1/94	extension of permit
LAS 7166	SE Ak. Sport fishing Adventures; lodge	Amend Permit	in use 1/94	extension of permit
LAS 12689	NSRAA; 17 1/2-Mi. Cr. incubation boxes	Permit	Winter 1994	Fishery enhancement
LAS 13097	DOT&PF; Brouillette's Cr. fish enhancement	Permit	in use Winter 1994	Project to mitigate for Haines airport expansion
LAS 13107	Cross & Young; microhydro	Permit	in use Fall/Winter	Possible energy savings for several families
LAS 13381	NSRAA; Shakuseyi Cr. incubation boxes	Permit	in use ASAP	Fishery Enhancement
LAS 13162	Williams/Savikko; Hohlkam Bay glacier ice harvest	Permit	Winter 1994	ACMP review coastal consistency
<u>33</u> Files	Mat-Su Borough	Permit	Winter 1994	Schools, firehalls, community centers
New apln	Rainbow Mining	Permit	Summer 1994	Placer Mining
ADL 80095	AL-VON Mining Company	Amend Permit	Summer 1994	Placer Mining
<u>12</u> Files	City of Unalaska	Amend Permit	Winter 1994	Dam safety, Public Water Supply

<u>6</u> Files	City of Soldotna	Apln or Revoke	ASAP	Coastal consistency, Public Water Supply
<u>2</u> Files	Southcentral Utilities	Cert	Winter 1994	Calculate quantity Public Water Supply
<u>2</u> Files	Eklutna Utilities public water	Permit	Winter 1994	Legal actions, Eagle River water supply expansion
LAS 13190	Sea Catch Inc	Permit	Spring 1994	quantify water use, evaluate meter records seafood processing
LAS 12791	Seasonal Seafood	Permit	Winter 1994	Public notice, respond to objections, seafood processing
LAS 12663	Fort Rich Fish Hatchery	Cert	Summer 1993	proposed expansion, Ship Creek Water (issued)
LAS 13378	Elmendorf Hatchery	Permit	Summer 1993	Additional quantity (issued)
TWP 92-17	Tesoro remediation	Amend Permit	Spring 1993	Expand project <b>Issued</b>
TWP 92-35	Petro Star hydro testing	Permit	Spring 1993	Coastal consistency <b>Issued</b>
LAS 14030	BP's Yukon Gold oil well	Permit	Summer 1993	Coastal consistency (issued)
LAS 13944	Arco's Colville well	Permit	Spring 1993	Exploration <b>TWP Issued</b>
<u>13</u> Files	Arco's Kuparuk Oil Field	Permit	Summer 1994	Maintain current production (issued)
<u>2</u> Files	Healy Clean Coal Project	Permit	Winter 1994	Proposed coal power plant waiting for COE action
<u>4</u> Files	Ft. Knox Gold Project	Permit	Winter 1994	Mental health lands
LAS 12853	Chena Hot Springs Resort	Cert	Fall 1994	Ownership transfer, new application needed (to be issued 12/93)
<u>6</u> Files	Northern Community Public Supply	Permit	Late Summer 1994	Permit or certificate
New apln	Sun Belt Water	Permit	Summer 1994	Coastal consistency, water export SE Alaska



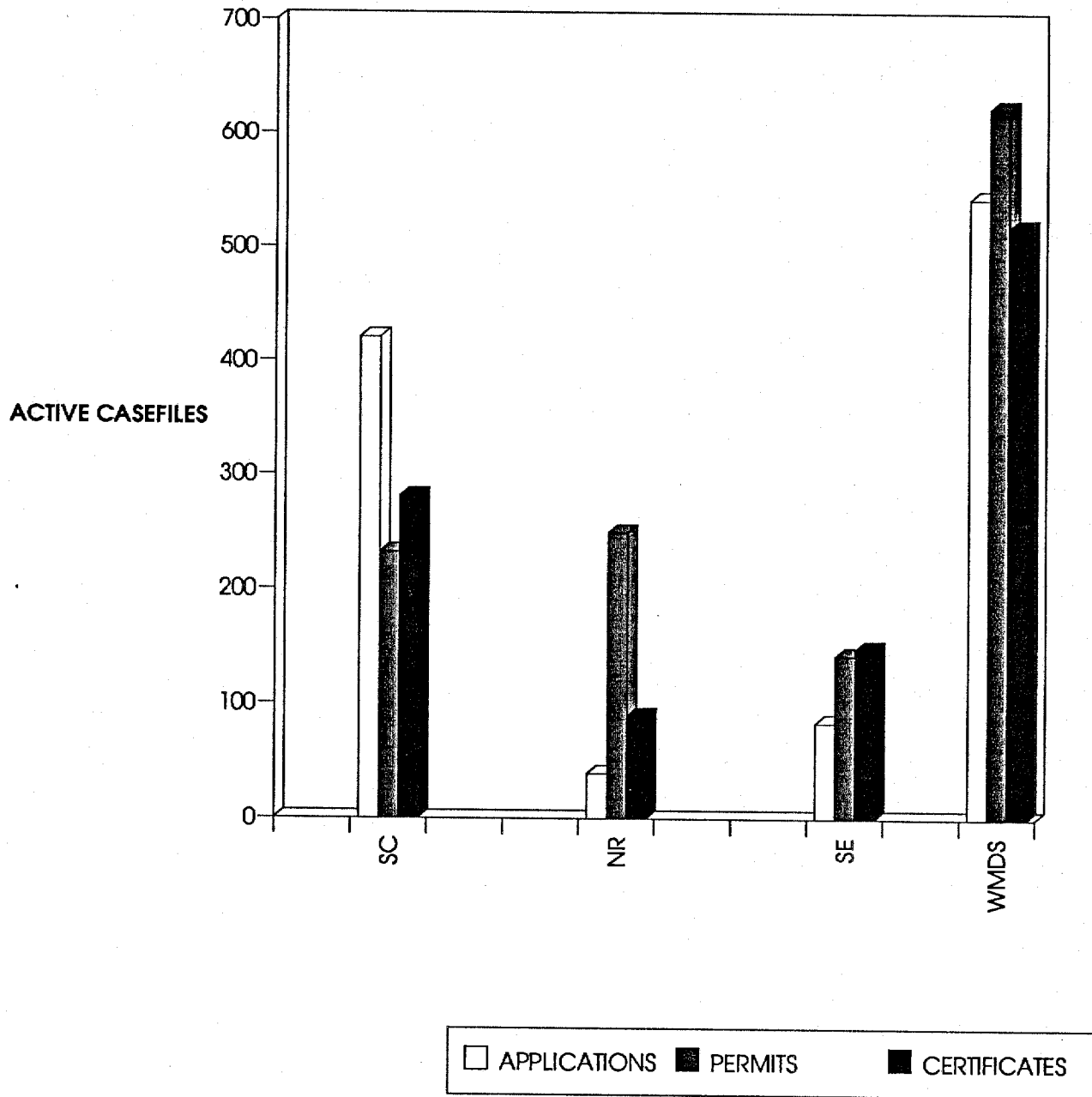
New aplns	City of Sitka	Permit	Summer 1994	Coastal consistency, potential export site
Temp. Water Use	Arco's Swanson River new well	Permit	Summer 1993	Coastal consistency (issued)
pending	New Elmendorf Medical Facility	Permit	Summer 1994	Determine senior water right holders actual water use
LAS 14099	Unalaska Hatchery relocation	Permit	Summer 1994	Coastal consistency
LAS 14069	Anchorage Courthouse expansion	Permit	Summer 1994	Coastal consistency
not assigned	Alyeska Prince Hotel snow making	Permit	Winter 1994	Gather stream flow data
LAS 13868	City of Seward New Small Boat Harbor	Permit	Summer 1994	Quantify water needs for associated uses
not assigned	Turnagain Road Reconstruction	Permit	Spring 1994	Coastal consistency
ADL 62233	Trident Seafood Corporation	Permit expired	Summer 1994	Change water source; new application (Sand Point)
Pending	Eyak Corporation Logging	Permit	Summer 1994	Coastal consistency logging camp
LAS 11813	Alyeska Pipeline Company	Permit	ASAP	Terminal facility amended permit additional water
<u>6</u> files	City of Cordova	Permit	Summer 1994	Amend permits, Public Water Supply
<u>2</u> files	Larson Bay public water	Cert and Permit	Winter 1994	Amend certificate city hydro develop
LAS 13864	UAA Business Education Bldg	Permit	Spring 1993	Respond to objection building cooling system <b>Issued</b>
<u>2</u> files	FAA Control Center	Permit	Now	permit extension (issued)
<u>2</u> files	City of Valdez	Cert	Now	field inspection and possible extension (issued)

LAS 13673	David Gottstein	Permit	Summer 1994	large home and garden
ADL 204276	Wasilla West Owners Assoc	Cert	Now	need to work on quantity of water use, community water
LAS 13976	International Shipping Services	Permit	ASAP	coastal consistency for new cold storage facility in Unalaska
LAS 13813	City of Palmer Public Water	Permit	Summer 1993	additional water supply (issued)
LAS 14049	City of Palmer	Permit	Summer 1993	Water for the Golf Course Club House (issued)
LAS 13849	Salamatof Native Association	Permit	Summer 1994	Retreat facility
LAS 13786	Village of Takotna	Permit	Summer 1994	Watering point, public water (conflict)
LAS 13680	Calista Corporation	Permit	Summer 1994	Nyac hydropower
LAS 13681	Calista Corporation	Permit	Summer 1994	Nyac hydropower, additional water source
<u>17</u> files	Tuluksak Mining	amend permits	ASAP	litigation
LAS 18598 & 18599	City of King Cove	aplns/ permits	Spring 1994	Proposed hydropower facility
pending	Iliamna- Newhalen- Nondalton	aplns/ permit	Summer 1994	Tazimina River hydropower project
<u>9</u> files	William Lorenson glacier ice	amend permits	Summer 1993	Glacier ice harvesting Prince William Sound (issued)
pending	Haines Light and Power	pre-apln permit	1994	proposed hydropower facility, FERC LIC. NEEDED
Las 11766	NSRAA Deer Lake fish bypass	Amend permit	Fall 1993	Fish enhancement project
pending	City of Petersburg	pre-apln	Fall 1993	Public water supply addition
ADL 44121	City of Saxmen	Cert. pending	ASAP	Public water supply

45 pending	ADF&G Instream flow reservations	Cert pending	ASAP	Fish habitat protection
LAS 14142 & 14143	Lake Clark Nat. Park NPS	aplns/ pending	Winter 1994	Park facilities
LAS 14136	Koncor Forest Products	apln/ pending	Summer 93	logging camp water supply (issued)
3 pending ID #	Alaska Power Systems Inc.	apln received	Summer 1994	Hydro project for the City of Akutan
LAS 13786 & 13560	City of Togiak	apln	ASAP	Public Water Supply
LAS 13146	Eyak Corporation	apln	Winter 1994	Power Creek Hydroelectric Project
Pending	Alyeska Prince Hotel (ski area)	apln pending	Fall 93	Snow making for resort expansion. Moose Meadow Creek
Pending	City of Cordova	apln pending	Spring 1994	Additional public water supply (Middle Arm)
4 pending	Valdez Fisheries Development Corp	apln/ permit	ASAP	Fish Hatchery, Solomon Gulch, Valdez Alaska
LAS 14113	Arctic Slope Regional Corp.	Permit	Winter 1994	Western Arctic Surface Coal Mine
LAS 6744	ARA/ Outdoor World	amend Permit	ASAP	Mckinley Chalets
LAS 14095	City of Koyuk	Permit	Winter 1994	Public Water Supply
LAS 14031	City of Salawik	Permit	Winter 1994	Public Water Supply
LAS 18592	City of St. Paul	Permit	Winter 1994	Public Water Supply
LAS 14500	City of Whitter	Permit	Winter 1994	Public Water Supply
LAS 14502 &14495	Village of Ivanof Bay	Permit	Winter 1994	Public Water Supply
Las !4248	City of Goodnews Bay	Permit	Winter 1994	Public Water Supply

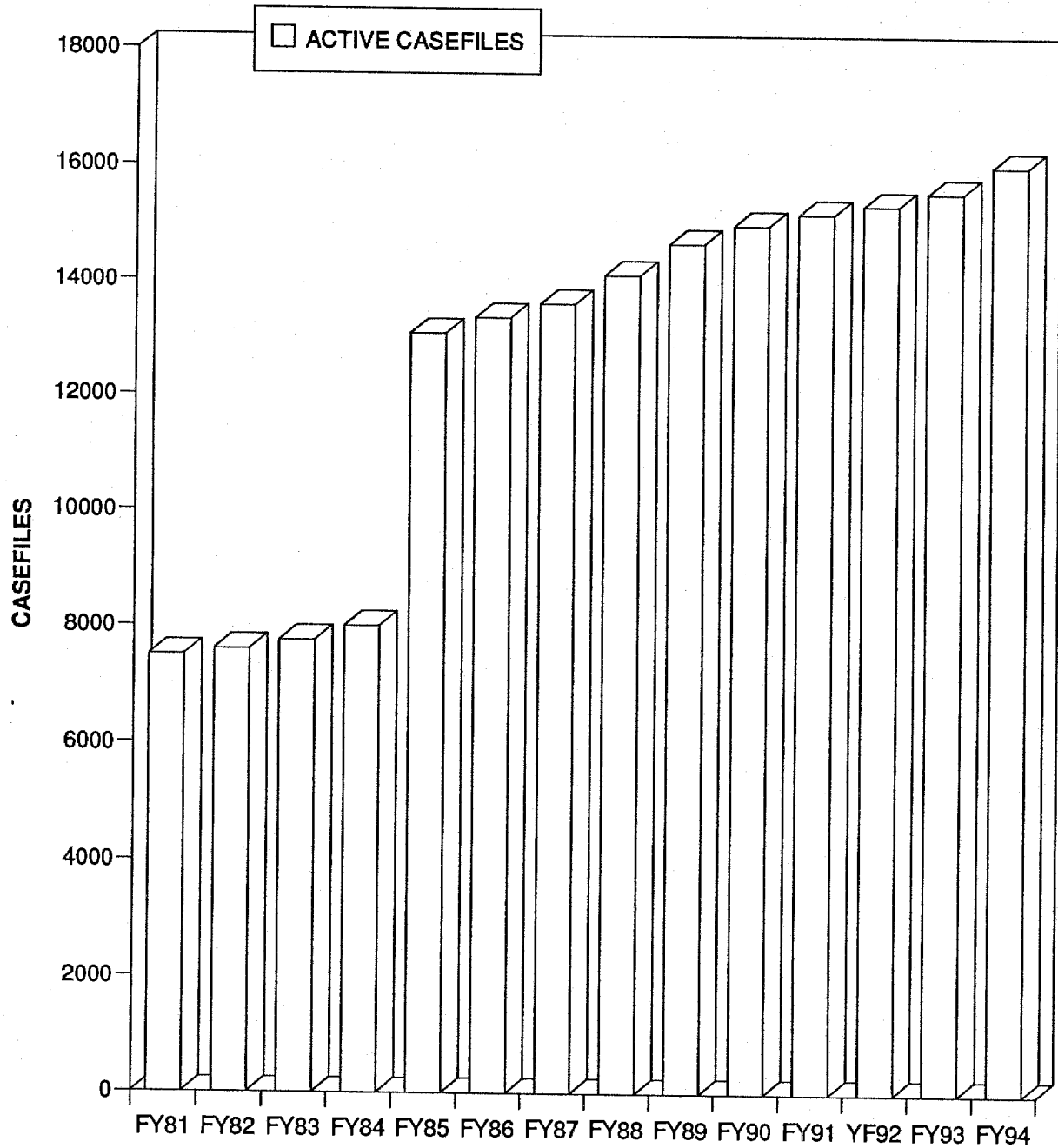
<b>LAS 14473</b>	<b>Kwik Log Suddivision</b>	<b>Permit</b>	<b>Spring 1994</b>	<b>Public Water Supply DEC, APUC Enforcement</b>
<b>LAS 14498</b>	<b>Alaska Best Water</b>	<b>Permit</b>	<b>Winter 1994</b>	<b>Bottle Water Company</b>
<b>LAS 14318</b>	<b>Wal-Mart Wasilla</b>	<b>Permit</b>	<b>Winter 1994</b>	<b>Department Store</b>
<b>LAS 14491</b>	<b>Auaunta</b>	<b>Permit</b>	<b>Winter 1994</b>	<b>Restaurant/ Meeting Facility, Palmer/Wasilla</b>
<b>Pending</b>	<b>Makushin Geothermal Power</b>	<b>Permit</b>	<b>Winter 1994</b>	<b>Proposed Geothermal Power Plant, Unalaska Area</b>
<b>Pending</b>	<b>Main Bay Hatchery</b>	<b>Permit</b>	<b>Winter/ Spring 1994</b>	<b>Hatchery Expansion</b>
<b>Pending</b>	<b>Black Bear Lake Hydro</b>	<b>Permit</b>	<b>Spring 1994</b>	<b>Proposed Hydroelectric Project</b>

# **WATER MANAGEMENT & DEVELOPMENT PENDING WATER RIGHT ACTIONS**

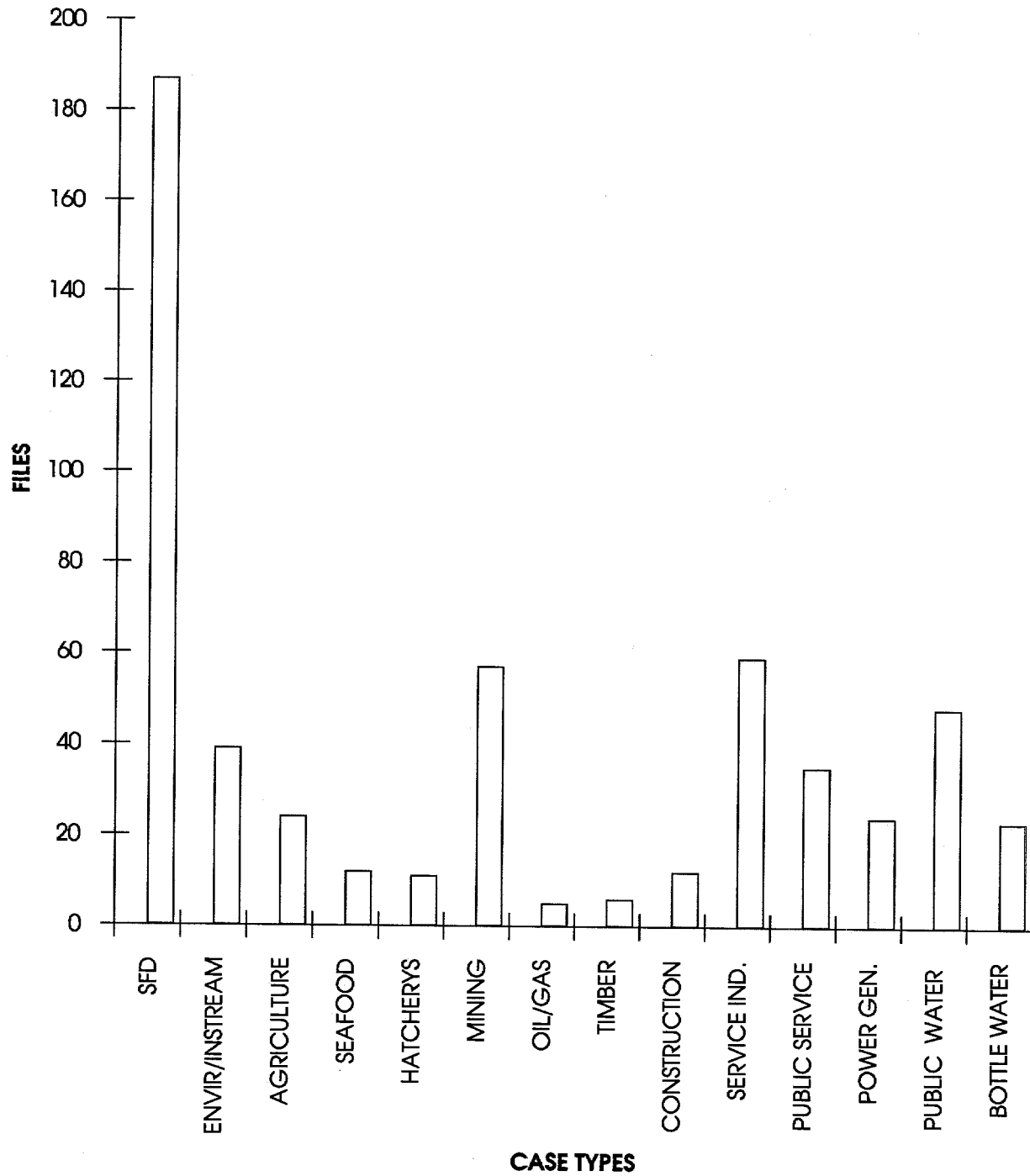




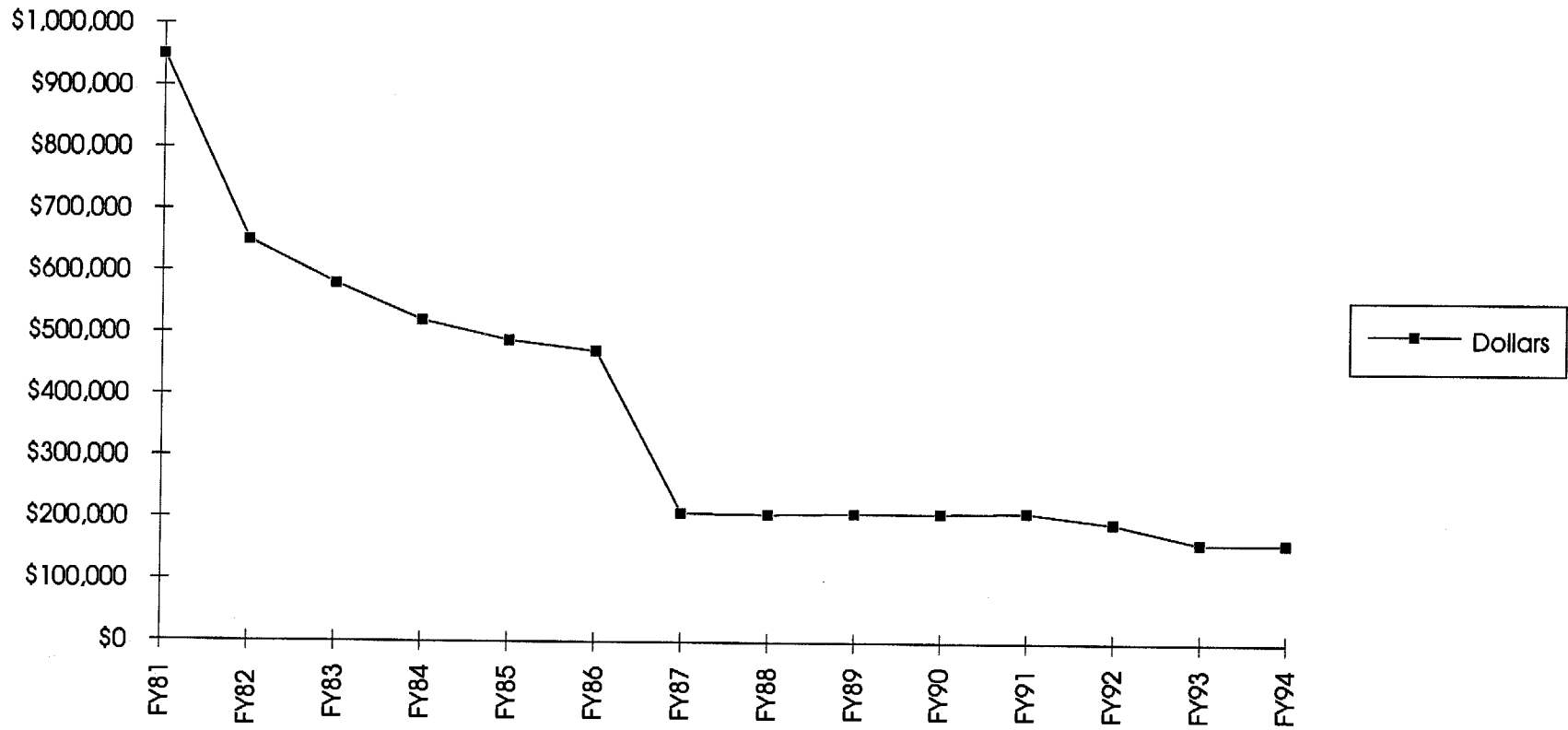
# WATER MANAGEMENT & DEVELOPMENT



**PENDING WATER RIGHT APPLICATIONS (TOTAL FILES 543)**



### Navigability, General Funding



# Navigability Short History

## FY 81

- ◆ Navigability Section was created in the Department of Natural Resources. This section contained:

Section Leader	2 Assistant Attorney Generals
3 Historians	2 Natural Resource Officers
3 Hydrologist	2 Clerical

Their function was to gather historical use and contemporary use information on as many Alaskan water bodies as possible. This effort was in response to the federal governments attempt to transfer state owned submerged lands to private ownership (largely native corporations). The highest priority was to develop litigation strategies to set standards for determining title navigability in federal court.

## FY 84

- ◆ Funding for AGO support was transferred to the Attorney General. DNR lost control over establishing litigation priorities. AG support dwindled to one part time Assistant Attorney General.

## FY 85

- ◆ State loses Slop Bucket Lake case in federal court. Float plane use cannot be used to show navigability for a water body.

## FY 86

- ◆ DNR and AGO wins the quiet title to Alagnak River, Nonvianuk river, Kukaklek Lake, and Nonvianak Lake. Clearly establishes state ownership of submerged lands in federal and native owned upland areas.

## FY 90

- ◆ U. S. Supreme Court decides the Gulkana Case in favor of Alaska. The standards are now used by most federal agencies in Alaska.
- ◆ Less than 20 water bodies have quieted title to the state.

## FY 92

- ◆ Division of Water created and Governor Hickel directed the Department of Natural Resources to assert Owner's rights to all navigable waters and RS 2477s. Governor directed AGO to work on these issues.
- ◆ Division of Water revises the standards for writing state navigability determinations and emphasizes the physical inspection of the water body prior to making a navigability determination.

## FY 93

- ◆ AGO and Division of Water gives all federal agencies notice of intent to file for the Quiet Title to the submerged lands beneath 195 lakes and streams.

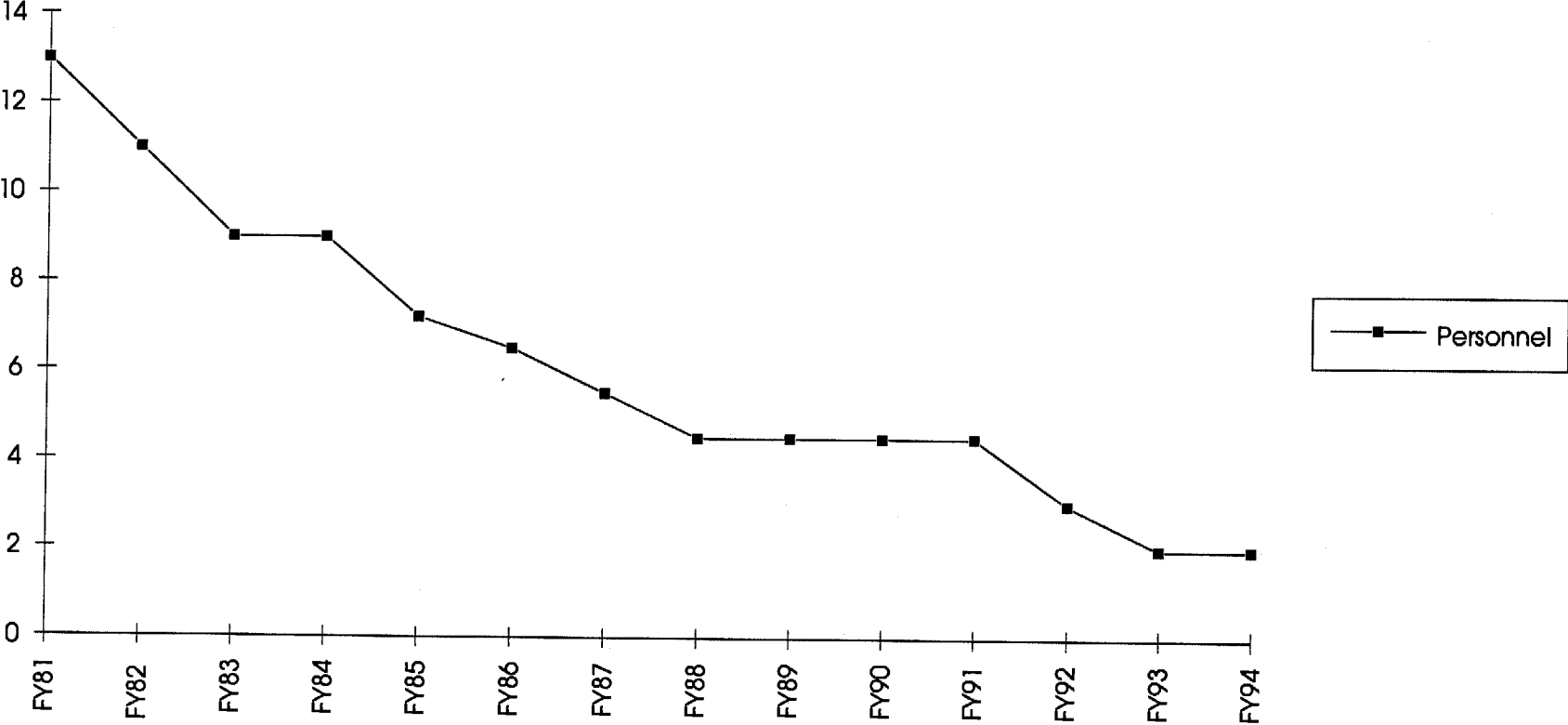
## FY 94

- ◆ Division of Water prepares a list of 300 additional water bodies for notice of intent to file for quiet title on high priority areas such as Trans AK Pipeline Corridor.

Begin quiet title process on 150+ F & G priority lakes and streams.

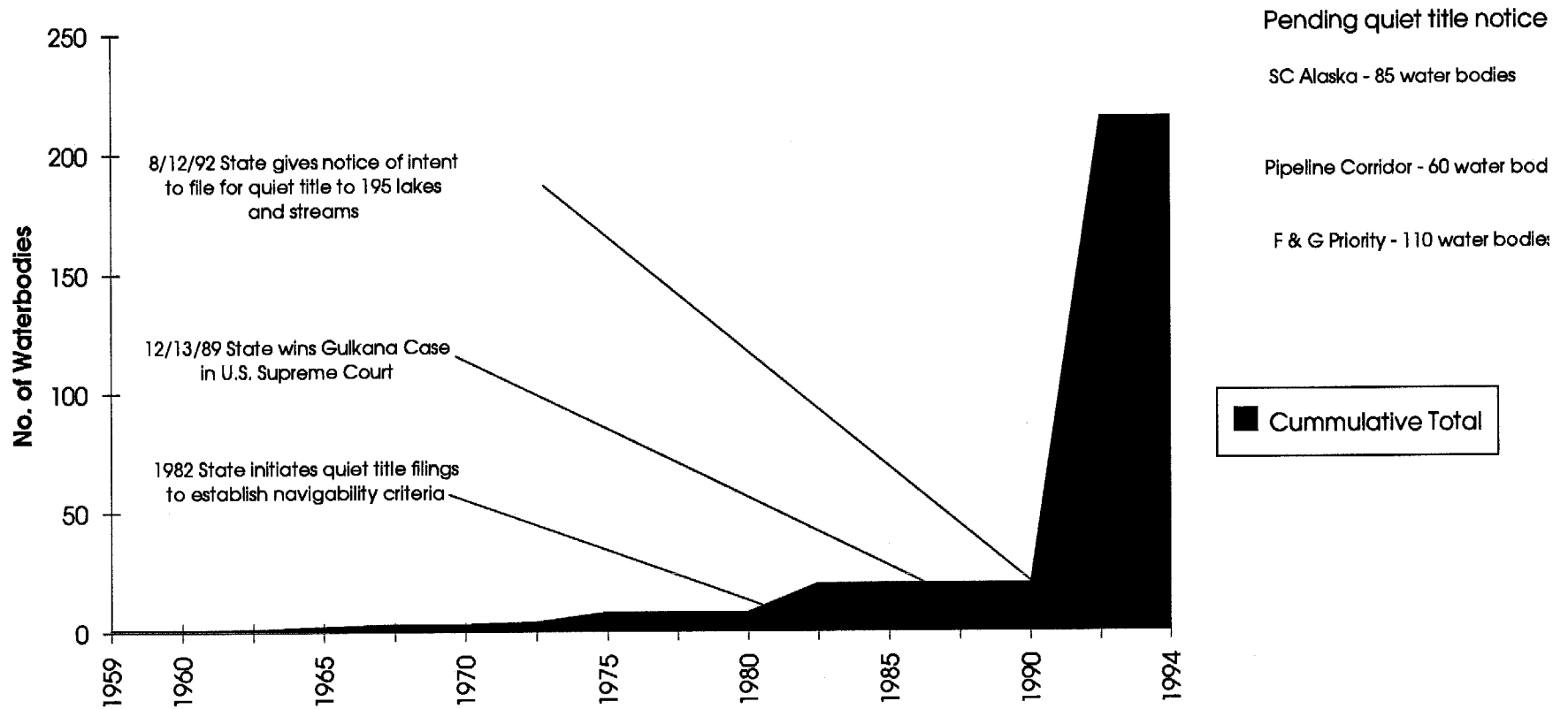
Attorney General files in federal court for the Quiet Title to 3 rivers on the list of 195.

Navigability Personell

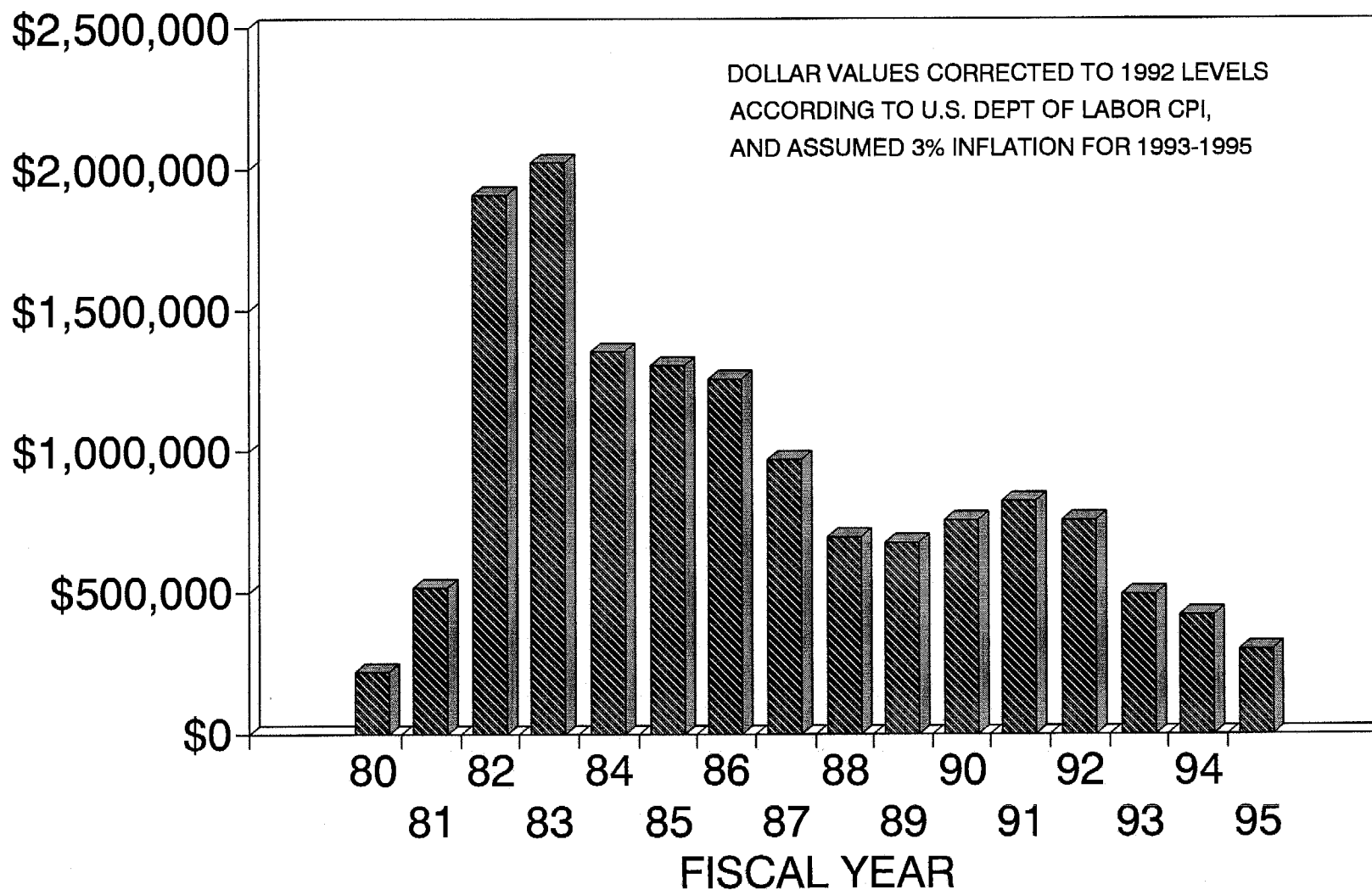




## Quiet Title Notices to Federal Agencies



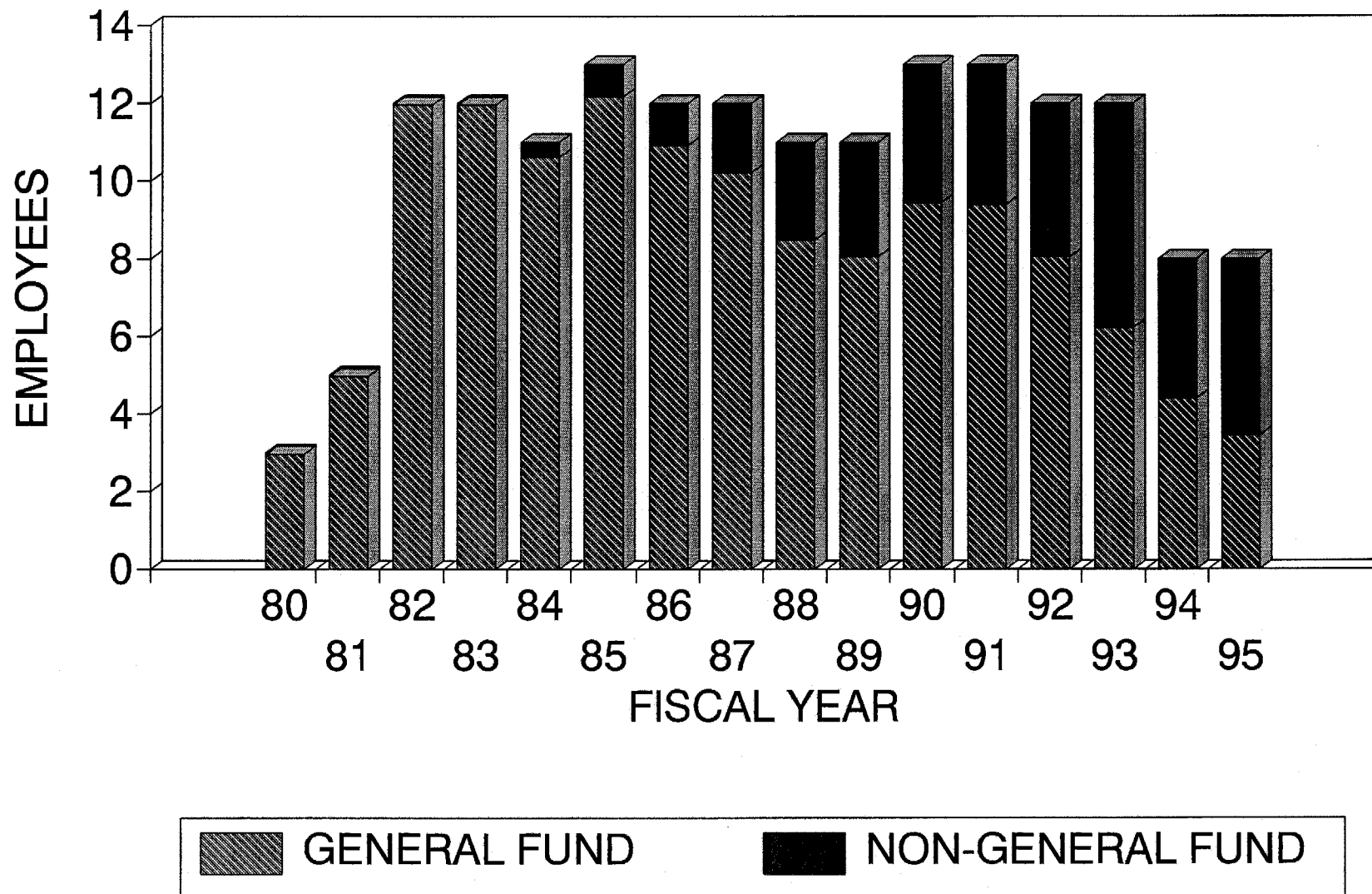
# HYDROLOGIC SURVEY GENERAL FUND BUDGET HISTORY



# HYDROLOGIC SURVEY

## NUMBER OF EMPLOYEES

NOTE: FY 85-94 have included voluntary LWOP periods by all AHS employees, and increased reliance on non-General Fund sources to maintain employment levels.



## FUNCTION & PURPOSE

According to AS 41.08 hydrologic data are declared to be in the public interest. Furthermore, DNR first function under this statute is;

*Systematic collection, recording, evaluation, and distribution of data on the quantity, location, and quality of water of the state in the ground, on the surface of the ground, or along the coasts, are in the public interest and necessary to the orderly domestic and industrial development of the state.*

The purpose of these functions are consistent with the management philosophy of the Department of Natural Resources, derived from the State Constitution which is to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest.

## **FY 95 EXPECTATIONS**

- 1) Completion and beginning of implementation of Alaska Statewide Network Evaluation project. This effort is aimed at installation of the most cost-effective, long-term gaging network designed to facilitate domestic and industrial development, within the public interest.
- 2) Maintain multiple water resources databases and respond to requests for data retrieval, including: WELTS, with 21,000+ well logs; ARID, with 15,000+ streams; ALID/lakes database; Nikiski ground-water database; Wind database; Turbidity database; AKWUDS water use database; Snow database.
- 3) Conduct ground-water and surface-water investigations with program receipts funding when investigations are consistent with function, purpose, and public interest.
- 4) Provide surface-water hydrologic data in defense of State's claim of title navigability.
- 5) Complete water-table and water-quality maps for Nikiski.
- 6) Provide technical information on a as needed basis to help solve recognized hydrologic problems encountered by managers, developers, industry, and home owners.

- 7) Provide hydrologic support for wetlands delineation and classification.
- 8) Continuation of technical assistance to DEC & DPOR for Indian Creek fuel spill.
- 9) Provide hydrologic assistance to AEA for rural small hydropower projects.



# AHS Project Tracking

November 29, 1993

## **Nome/Munter 7/1-6/30 & FY95?**

\$5.0 City of Nome/pvt (30%)

Monitor flow Moonlight Springs/asst dev of supplemental source dev.  
Inghram

## **Kenai GWTF/Munter 7/1-6/30**

\$10.0 Union Oil/Gas (50%)

Map GW flow directions and WQ patterns  
Maurer, Burgett, Allely, Petrik

## **Gambell/Munter 7/1-6/30 & potential \$8.0 in FY95**

\$12.0 City of Gambell/pvt (70%)

ID, protect rare freshwater source  
Noll, Carrick, Allely

## **St. Paul/Munter 7/1-6/30 & \$5-10.0 FY95?**

\$0.5 City of St. Paul (10%)

Eval supply potential of aquifer to support seafood processing expansion

## **Fish Creek/Ray 7/1-6/30**

\$5.0 ADF&G (40%)

Measure flow, collect sediment samples (Ft Knox)

## **Fbks Inter Airport/Ray 11/90-12/31/93**

\$0.0 ADOTPF (90%)

Collect chemistry data/new bioremediation technique

## **TMDL/Ray 7/1-6/30**

\$13.8 ADEC/EPA (50%)

Collect sediment data, determine if additional regulations are required

## **Minnie Street/Ray 3/93-on going**

\$neg pvt/MSLUG (unk)

Collect GW data, ID sources of contamination, bioremediation effort  
Coop USGS/Vohden

## **Usibelli/Ray 1/93-3/31/94**

\$8.0 Usibelli Coal Mine, Inc. (60%)

Monitor WQ Hoseanna Creek & GW wells Poker Flat Mine  
Collect data for regional basin report  
Vohden

## **EPA Reclamation/Ray 7/1/93-6/30/94**

\$16.0 ADEC (50%)

Monitor reclamation Birch Creek @ mile 101 Steese

## **AKWUDS/Petrik 10/1-12/3 & FY95**

\$3.4 USGS (95%) Annual Rpt

Publish annual water use data

## **Aquifer Vul/Noll 11/92-7/94 & FY95**

\$43.0 EPA/ADEC (10%)

GW vulnerability prediction method/apply to pilot project

## **Duck Creek Relocate/Noll 11/93-11/94**

\$22.9 FAA/CBJ (25%)

Eval GS SW interaction ensure no loss of fish habitat if creek relocated  
Ray, Voden

**DRAFT**

**Old Harbor/Carrick 7/1/93-7/1/94 (9/94)**

**\$17.5 AEA (30%)**

Invest. small hydro potential  
Ireland, Maurer

**Indian Creek/Maurer 8/93-6/94**

**\$32.9 ADEC (60%)**

Monitor, evaluate, interpret Indian spill impacts  
Munter, Carrick

**Network Eval(CIP)Inghram 10/93-10/94 & FY95?**

**\$200.0 CIP USGS match (15%)**

Eval data/design regional network for stream gaging

**Anchor Point/Allely 7/93-6/94**

**\$9.0 Anchor Point Safe Wter Corp. (20%)**

Determine annual yield of main water supply

**Nikiski/Munter 7/91-6/95**

**\$0.0 None (80%)**

Map water table & water quality at Nikiski industrial area  
Maurer, Petrik, Allely, Burgett

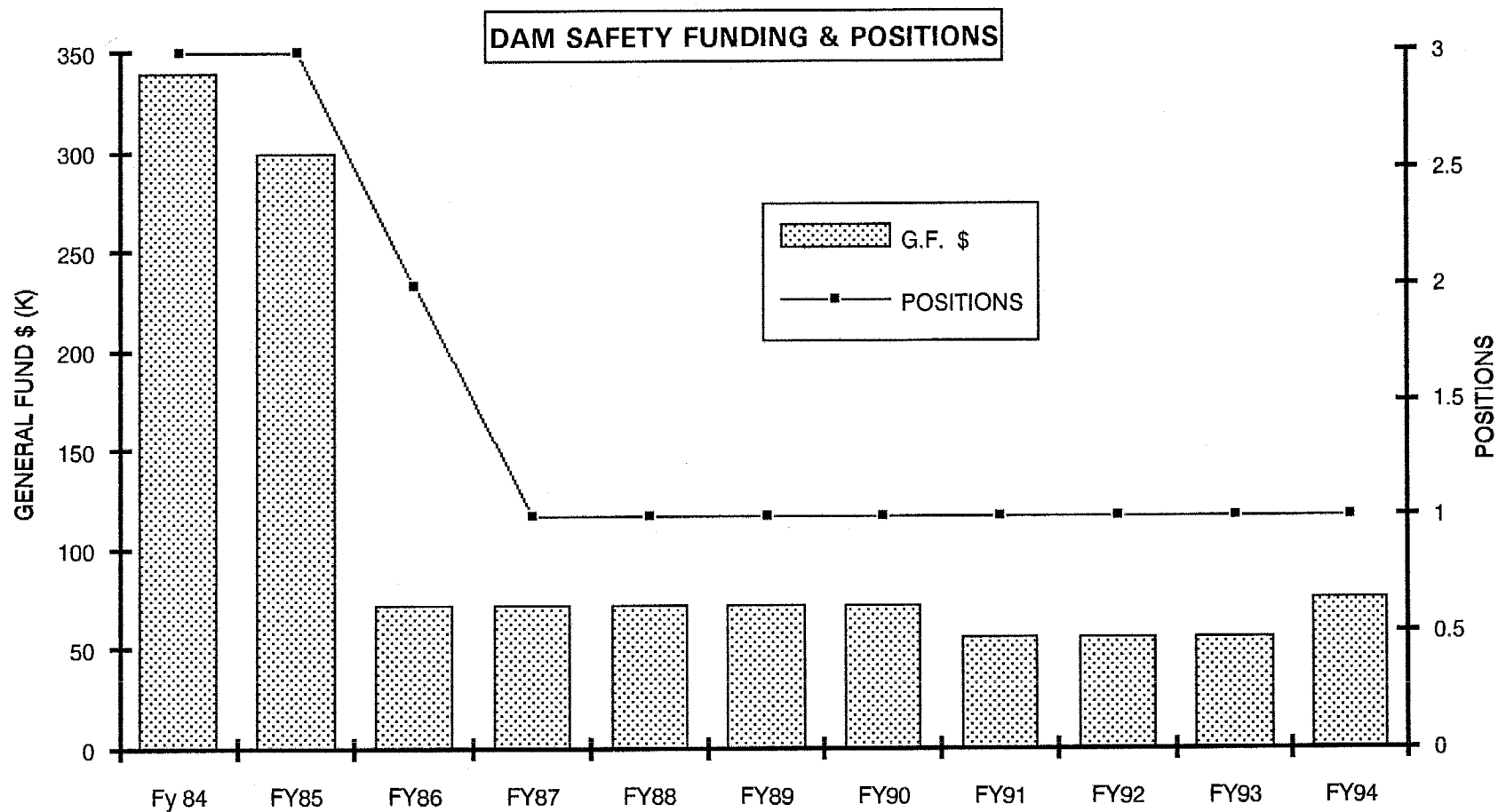
**Well Log Tracking System/Burgett 7/93-ongoing**

**\$2.0 Fees from info requests (40%)**

Catalog water well logs for GW projects  
Munter

**Armstrong-Keta**

**Title Nav/**



# PURPOSE AND FUNCTIONS OF THE DAM SAFETY PROGRAM

STATUTORY AND REGULATORY REFERENCES: AS 46.17, THE ALASKA DAM SAFETY ACT, AND 11 AAC 93, ARTICLE 3, DAM SAFETY

PURPOSE: THE DAM SAFETY PROGRAM PROVIDES PROTECTION TO LIVES, PROPERTY, AND NATURAL RESOURCES PLACED AT RISK BY DAMS.

## FUNCTIONS

1. MAINTAIN AN INVENTORY OF ALL JURISDICTIONAL DAMS UNDER AS 46.17
2. ISSUE PERMITS FOR THE CONSTRUCTION AND OPERATION OF NEW DAMS AND MODIFICATIONS TO EXISTING DAMS.
3. MONITOR THE CONSTRUCTION AND OPERATION OF DAMS.
  - A. INSPECTION OF CONSTRUCTION
  - B. INSPECTION OF EXISTING DAMS
  - C. OWNER PERIODIC DAM SAFETY INSPECTIONS
4. REVIEW AND APPROVE EMERGENCY ACTION PLANS FOR DAMS WHICH PLACE LIVES, PROPERTY, AND NATURAL RESOURCES AT RISK.

## EXPECTATIONS FOR FY 95

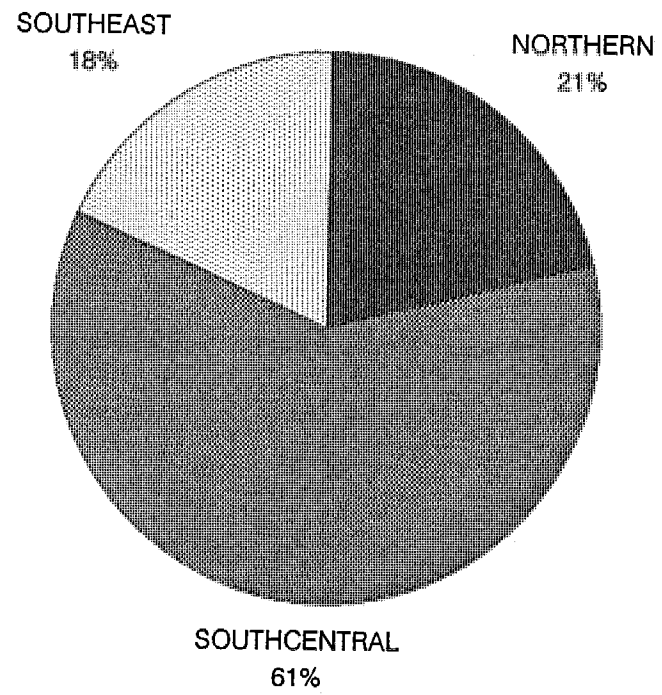
1. BEGIN MONITORING OF THE CONSTRUCTION OF THE FORT KNOX MINE TAILINGS STORAGE AND WATER SUPPLY DAMS.
2. ISSUE THE PERMIT TO CONSTRUCT THE AJ MINE SHEEP CREEK TAILINGS STORAGE DAM.
3. ISSUE THE PERMIT TO CONSTRUCT THE PETERSBURG CABIN CREEK WATER SUPPLY DAM.
4. COMPLETE EMERGENCY ACTIONS PLANS FOR CITY OF KODIAK DAMS.
5. BEGIN REVIEW OF THE NIXON FORK MINE TAILING STORAGE DAM.
6. BEGIN REVIEW OF THE NEW CITY OF UNALASKA DAM ON ICY CREEK.
7. MAINTAIN THE SCHEDULE OF PERIODIC DAM SAFETY INSPECTIONS.
8. COMPLETE AN UPDATE OF THE INVENTORY OF DAMS AS REQUIRED BY FEMA.

## CURRENTLY ACTIVE MAJOR DAM SAFETY PROJECTS

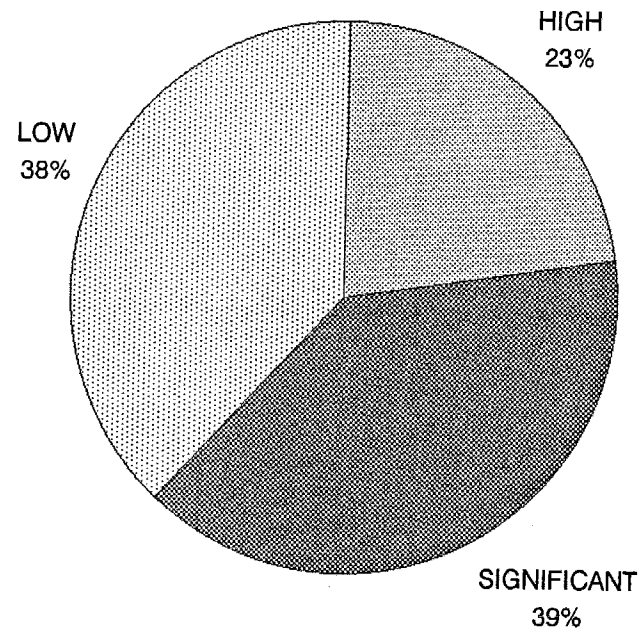
- FORT KNOX MINE TAILINGS STORAGE & WATER SUPPLY DAMS  
(REVIEW 95% COMPLETE)
- AJ MINE SHEEP CREEK TAILINGS STORAGE DAM  
(DRAFT PERMIT ISSUED)
- KENSINGTON MINE TAILINGS STORAGE & WATER SUPPLY DAMS  
(DESIGN STILL UNDER DEVELOPMENT)
- PETERSBURG CABIN CREEK WATER SUPPLY DAM  
(CONCEPTUAL PLANS REVIEWED AND APPROVED)
- CITY OF KODIAK DAMS (EMERGENCY ACTION PLANS)  
(WORKING WITH CITY ON DEVELOPMENT OF PLANS)
- NIXON FORK MINE TAILINGS STORAGE DAM  
(PRESENTATION OF REQUIREMENTS TO CONSULTANT)



### DAMS BY STATE REGION



### HAZARD CLASSIFICATION



HIGH = CLASS I (INSPECT EVERY 3 YEARS)  
SIGNIFICANT = CLASS II (INSPECT EVERY 3 YEARS)  
LOW = CLASS III (INSPECT EVERY 5 YEARS)