

**STATE OF ALASKA**  
**DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF LAND AND WATER MANAGEMENT**

**WATER MANAGEMENT ISSUES**

**CURRENT STATUS**

**F.Y. '84, No. 2**

**WATER MANAGEMENT AND PROCEDURES SECTION**

**APRIL 4, 1984**

## **DAM SAFETY**

The State of Alaska began developing a dam safety program in the mid-seventies in anticipation of the Corps of Engineers turning over dam inspection responsibility for non-federal dams to the state.

In 1979 the Department of Natural Resources (DNR) assumed responsibility for the Non-Federal Dam Inventory. The dam inventory was completed in 1981 classifying 175 dams according to the downstream hazard. Of these 175 dams, 122 are 10' or more in height or store 50 or more acre feet. The inventory identified 26 high hazard dams, 18 significant hazard dams, and 78 low hazard dams, of the 122 dams mentioned above.

Upon completion of the Dam Inventory, DNR assumed the responsibility of inspecting non-federal dams in Alaska.

DNR's Dam Safety Program is concerned with reviewing and permitting of new dam construction or modification and evaluating the operation, maintenance, and condition of the dams on a periodic basis.

The purpose of the program is to protect life, health, and property of the people and the State's natural resources.

This fledgling state program has received new impetus from the state legislature through an increase in appropriation from less than \$20,000 in Fiscal Year '83 to more than \$130,000 in Fiscal Year '84.

Most of the dams identified on the inventory have not had a formal inspection in the last four years and their condition is unknown. Some of the structures in the highest hazard category will be inspected this upcoming field season.

## **WATER RIGHTS**

There are several areas within Alaska that are experiencing water shortage problems due to over-development or a lack of accessible quality water. A major problem is continuing residential and industrial development in these areas without regard to water availability.

Some examples of water short areas within the state are: Hillside (Anchorage), Eagle River (Anchorage), Glennallen, Mendenhall Valley (Juneau), Auke Bay (Juneau), Lemon Creek (Juneau), North Kenai, and Ester Dome (Fairbanks). Coordination with DGGs for extensive studies of these areas has been started and their completion is essential.

The Southcentral District Office, in addition to adjudicating water rights cases, reviews feasibility studies, environmental impact statements, and FERC license applications for numerous hydro-electric projects within the area -- Susitna, Bradley Lake, Terror Lake, to name a few. They are also

involved in the Municipality of Anchorage's Eklutna Water Project. Several problem areas exist in this district, mainly Hillside, Eagle River, and new controversy over Potter Marsh State Game Refuge. Future plans are to continue hydro-electric project review; work with DGGs on hydrologic studies in the problem areas; and increase the District's field presence, within their budgetary and staffing limitations. During FY '83, 620 water rights permits and certificates were issued.

The Northcentral District Office spends the majority of their time on casefiles with a great emphasis on mining water rights. In FY '83, 272 field inspections and flyovers were conducted. Northcentral District's plans are to continue their field presence in various placer mining areas, water well monitoring with DGGs in potential problem areas near Fairbanks, and water availability studies for Pioneer and Eureka Creeks. In addition, they are working on a report that will correlate water use with various types of mining equipment. During FY '83, 454 water rights permits and certificates were issued.

The Southeast District Office is working in several problem areas that include Auke Bay, Mendenhall Valley, and Lemon and Salmon Creeks. They field-inspect all local casefile locations. Stream gauges have been placed in Lemon and Salmon Creeks and are being monitored. The Southeast District plans to reexamine issued grandfather water rights and evaluate their current status. If they are out of line with standards, the certificates will be revoked or amended to reflect actual beneficial use in compliance with the statutes. During FY '83, 185 water rights permits and certificates were issued.

The Water Management Section within the Division of Land and Water Management, is responsible for statewide policy development and program and coordination development. The section has been participating in revising the fee schedule for water rights applications as well as updating public education and awareness publications including fact sheets and the Water User's Handbook.

The Section, in coordination with the Attorney General's Office and the Southeast District Office, is initiating a basin wide adjudication of water rights within the Indian River Basin near Sitka. This will involve claimed federal reserved water rights of the U.S. Park Service and the U.S. Forest Service. It will be necessary to conduct the procedures through Superior Court in accordance with the McCarran Amendment, 43 USC 666(a), the provision allowing joinder of federal parties in state court and in the context of a general water rights adjudication. The Attorney General's Office advises that court adjudication can be initiated by filing a declaratory judgement suit.

At the same time, work is beginning with the Attorney General's Office to draft amendments to the Water Use Act to establish more explicit statutes for court adjudication to establish the Superior Court's duties and responsibilities and to set the limits of the Court's authority with respect to federal reserved water rights court adjudications.

In a related activity, work will soon begin on revising water management regulations to bring them into compliance with the Administrative Procedures Act.

## FEDERAL RESERVE RIGHTS/BASIN WIDE ADJUDICATION

The federal government is vested with reserved water rights on numerous federal land withdrawals in Alaska. Federal legislation establishing the reserves specifies the purposes of the reserved water rights and the enacting date establishes their priority date. These water rights include both diversionary and instream uses.

Of the 367.7 million acres in Alaska, federal reserve water rights exist on almost 60 percent of the land mass or over 215 million acres. From a miniscule 2.5 million acres of military land, to 50 and 75 million acres of land for national parks and fish and wildlife refuges respectively, certainly federal reserve water rights issues and problems have the potential to be large as well as complex.

In order for DNR to adequately manage the state's water and adjudicate water rights, it will ultimately be desirable to have the federal reserved water rights in the state inventoried, then quantified by appropriate federal management agencies. The state can then integrate federal water rights with state administratively adjudicated water rights. The federal government has indicated it will await requests from the states before initiating quantification of federal reserved water rights. To date, no quantification nor adjudication of these water rights has occurred, however, the State of Alaska is preparing to undertake the first basin wide adjudication at Sitka's Indian River involving federal reserve water rights. Adjudication of claimed federal reserved water rights will involve court adjudications.

DNR has requested the Attorney General to draft amendments to the Alaska Water Use Act to provide explicit procedures to conduct administrative and judicial basin wide adjudications.

## INSTREAM FLOW

Three main problem areas have developed since initial passage of the Water Use Act in 1966 which lead to passage of instream flow amendments to the Water Use Act in 1980. These problem areas include: (1) the need for a clear state administrative process for state adjudication of any claimed federal reserved instream water rights that might be asserted by the federal government, (2) the fishing industry and fishery management agencies expressed concern that there was no mechanism to legally establish water rights to maintain stream flows for fish habitat and production other than by establishing conditions on numerous DNR water rights permits, and (3) there was concern that depletions in water flow might affect water quality discharges from municipal treatment plants and mining operations.

Instream flow amendments were passed in 1980 and DNR began drafting implementing regulations in 1981. These regulations became effective in September 1983.

Uniquely, the Alaska statutes and regulations provide that both private individuals as well as governmental agencies can apply for, and be granted, water rights for instream purposes.

Alaska instream flow water rights may be obtained for:

1. fish and wildlife purposes,
2. recreation and park purposes,
3. navigation and transportation purposes, and
4. sanitary and water quality purposes.

#### WESTERN STATES WATER COUNCIL

The Western States Water Council (WSWC) was created in 1965 by the Governors at a Western Governor's Conference with the purpose of accomplishing effective cooperation among the participating states in planning for programs leading to integrated development by state, federal, and other agencies of their water resources. There are 12 full-member states: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming; represented on the council. Currently, Alaska, North Dakota, and South Dakota are associate members.

Alaska has participated as an observer at WSWC quarterly meetings since 1978 by various officials, including former Lt. Governor Terry Miller and staffs of the Departments of Natural Resources and Law. The July 1979 quarterly meeting was hosted by Alaska in Sitka. In Fiscal Year 1982, the State of Alaska joined WSWC as an associate member through funding by DNR. This allows Alaskan state officials to attend and observe meetings and receive Council literature, however, the State has no vote.

The WSWC is effective in researching, preparing, and communicating western state's positions on water related issues particularly as they involve Federal-State relations and disputes; such as federal reserve water rights, instream flows, water quality, water use and dam safety. Many court decisions and policy decisions are being made in the Lower 48 which will set a precedent for Federal-State roles in Alaskan water management. The WSWC has a full time staff that works on policy alternatives, presents Western States positions at congressional hearings and other meetings, and is available to provide assistance to member states. It may be more efficient to utilize the services available through the Council rather than developing staff in Alaska's government on some of these matters. A litigation repository of state court cases involving State-Federal water cases on reserved and non-reserved water rights is available to member states as well as a cost sharing program for water resource projects.

Representation through full, voting membership on this Council would formalize the inclusion of Alaska into this broad western power base representing better than one-fourth of the states. The council provides an important and much needed forum for establishing unified positions on federal water legislation and for bringing out the water problems of the western states and Alaska in particular. Each state may select three representatives for membership on the Council in addition to the Governor who is an ex-officio member. This membership could be of great benefit to several state agencies; in particular the Departments of Natural Resources, Environmental Conservation, and Law.

Each state contributes a one time initial membership fee of \$15,000, payable over three years, and an annual membership fee (assessed at \$19,500 for Fiscal Year 1984-85) which is expended to influence local, regional,

and national water policies and legislation. Noting that approximately one-third of the nation's freshwater supply is located within Alaska, direct participation on the Council by Alaska can further serve as a vehicle to insure that Alaska maintains its stewardship over its vast water resources.

#### **WATER-USE DATA SYSTEM**

The Alaska Water-Use Data System (AWUDS), in effect since 1977, is the direct result of the National Water-Use Information Program. This program, designed as a cooperative effort between the State and the Federal government, allow for the collection and compilation of water use data and the development and refinement of computerized water use data systems at both the State and Federal levels.

Alaska, having accomplishing the primary goal of developing its computerized water use data system looks now towards refinement of the program. A cooperative agreement with the U.S. Geological Survey will produce a comprehensive 5-Year Project Management Plan enabling the State to implement strategies and schedules for statewide collection efforts. Increased public awareness of water-use through information circulars and presentations identifying both state and federal needs will be stressed.

Efforts to collect, store, and disseminate municipal water-use data are presently underway and should be completed by mid-September. In addition to these data collection efforts, detailed water-use information on Alaska's industries; including seafood processing, mining, hydropower, agriculture, as well as public water supply and sewage treatment -- essentially all water use in Alaska -- will be documented. The information will then be available for use in policy formulation, river basin/regional planning, state/national planning, and economic development.

The goals of the program are for the standardization of water use data collection, computerization of the data, and improvement of data dissemination.

#### **WATER RESOURCES INVENTORY**

Together with the Division of Land and Water Management (DLWM), the Division of Geological and Geophysical Surveys (DGGS) has identified areas statewide that are threatened with water supply and water quality problems. With study areas prioritized by DLWM and DEC, DGGS conceived and prepared jointly with the U.S. Geological Survey, a five-year plan defining water resource inventory and management goals. This plan is known as "AWARE", for Alaska Water Resource Evaluation.

Basic elements of AWARE summarize current and proposed future plans for hydrologic data collection and study activities in Alaska.

A coordinated state and federal water resource inventory in Alaska is a major undertaking. The benefits gained through successful and cooperative efforts will result in more timely and sound resource management decisions.

## ALASKA WATER RESOURCES BOARD

The Alaska Water Resources Board was created by Article 3 of AS 46.15, the Water Use Act of 1966. The Board serves as an advisory group to the Governor on all matters relating to the use and appropriation of water in the State of Alaska.

The Board is charged by AS 46.15.220 to hold at least two meetings per year with one of these meetings being held in the State capital. The Water Resources Board functioned as an active group from the Water Use Act's passage until 1975. The Board did not meet in 1976 and 1977. In late 1977, a concerted effort was made to re-establish the Board as a citizen advisory group to provide input on an increasingly complex array of water resources issues facing the State. Governor Hammond made appointments to fill existing vacancies and the Board began meeting again in May 1978.

The Water Resources Board covers a wide range of topics at its meetings. In general, a presentation on a topic is given by an agency, industry or interest group representative, or member of the public followed by a discussion of the topic by the Board members. Action taken by the Board is usually in the form of a resolution to the governor, but the Board may also send a letter to the appropriate agency or informally discuss problems with agency representatives.

The required annual Juneau meeting has been held in the spring when a principal activity of the Board has been to review pending or proposed legislation affecting water resources. The Board attempts to hold the other meetings at different parts of the state in order to be better in touch with the regional water problems and to afford residents of all areas of the state an opportunity to voice their water resources concerns to the Board.

More recently, the Board has addressed itself to matters relating to administrative efficiency on the part of agencies dealing with the public and to policy matters that may cut across agency lines. At the March 1980 meeting, the Board assumed the responsibility of the State Water Quality (208) Planning Advisory Committee.

No funds were allocated to the Board for FY '83 or FY'84. Due to lack of funds, the Board did not meet from April 1982 to July 1983. In August 1983, sparked by the interest of the new Sheffield administration, the Board held a meeting in Anchorage. This meeting enabled new administration officials to meet with the Board and determine if the Board should continue meeting. It was decided that the Board plays a vital role in Alaska's water management and funding for the Board for FY'85 was requested.

Two resolutions were passed at the August 1983 meeting. One encouraged DNR to obtain funding to adequately staff the new Instream Flow Program. The other requested the Attorney General's Office to review the dam safety statutes and regulations to determine their adequacy to administer an Alaskan Dam Safety Program.

At the March 1984 meeting held in Juneau, the Board passed seven resolutions. Three resolutions requested funding from the legislature for the Dam Safety Program, full membership in the Western States Water Council and additional funding for the Oil Spill Contingency Fund. Two resolutions requested DNR to draft legislation for Dam Safety and Basinwide Adjudication, and the last resolution requested DNR and the Governor to consider the effect that new filing fees for water rights may have on the Water Rights Program and the Well Log Collection Program.

The next Water Board meeting will be held October 2nd and 3rd, 1984, in Fairbanks and will have placer mining water quality issues as its central theme.

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April 4, 1984