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STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

BILL SHEFFIELD GOVERNOR

MAR 25 1985

POUCH M
JUNEAU, ALASKA 99811
PHONE: 907-465-2400

March 19, 1985

The Honorable Arliss Sturgulewski, Chair
Senate Resources Committee
Pouch V (MS 3100)
Juneau, AK 99811

Dear Senator Sturgulewski:

Recently, the Resources Committee requested that we prepare new language for SB 95 which would place the responsibility for periodic dam safety inspections on dam owners. We have revised Section 46.17.050 to reflect the direction of the Resources Committee and a copy of the revised section is attached.

The revised Section 46.17.050 places the responsibility for periodic dam safety inspections on the dam owner. The very specialized nature of dam safety requires that the engineer who performs the inspection be approved in advance by the Commissioner of the Department of Natural Resources. This will insure that engineers with experience and expertise in dam safety inspections do the work. We will provide the qualification requirements for engineers in the regulations which will be promulgated under the proposed legislation. Without strict control on the engineers, we can create the potential for extreme risk to the public, as unqualified engineers may be selected by the dam owners based on cost alone. The revised language also reserves the right for the Commissioner to conduct any additional inspections as may be required. The additional staff inspections are necessary to monitor compliance with recommendations of the periodic dam safety inspections and other required owner inspections, to check owner-performed periodic dam safety inspections, and to investigate alleged violations of statutes and regulations. The remainder of the section is unchanged from the original draft.

We would like to point out that the philosophy represented by the revised language is a departure from that which the department has pursued in the past. We also would not be surprised by some objection from dam owners to the transfer of the cost of the periodic dam safety inspections. Further, more than 90 percent of dams covered by SB 95 are owned by municipalities and are used principally for public and industrial water supplies. The burden of paying for these periodic inspections could significantly impact these municipalities, especially the smaller ones. However, we agree with the committee's initiative because it places the burden on the user, resembles the state of the art as reflected by Pennsylvania and FERC programs, and will most certainly lower the financial burden to state government.

The Honorable Arliss Sturgulewski, Chair

Page 2

March 19, 1985

Due to the importance of the proposed Dams Safety Legislation to the safety of Alaskans placed at risk by dams, we would like to urge favorable consideration of SB 95. It is not a question of whether or not dams are going to fail, but whether the state will recognize its responsibility for public safety for non-federal dams. We must provide the necessary protection for the public through an adequate dam safety program to lower the odds on loss of lives and property and damage to natural resources.

We appreciate the continuing interest and assistance of the Senate Resources Committee in drafting dam safety legislation for the protection of Alaska's citizens. Please feel free to call on us for any assistance you require in the future.

Sincerely,



Esther C. Wunnicke
Commissioner

cc: Tom Hawkins
Mike Frank
L. A. Dutton
Water Resources Board

Sec. 46.17.050 INSPECTIONS. The commissioner shall cause each dam and reservoir subject to this chapter to be inspected by the owner at least once every five years. The inspections must be performed by an engineer qualified in dam design, construction, and safety and approved in advance by the commissioner. The owner must provide the commissioner with inspection reports subject to the approval of the commissioner and which are consistent with regulations promulgated under this chapter. The commissioner may require a dam and reservoir to be inspected more often than once every five years if the dam and reservoir have been classified as high or significant hazard potential or has been found to be an unsafe dam as a result of a dam safety inspection and the unsafe conditions have not been corrected. The commissioner may perform additional inspections as deemed necessary to protect lives, property, and natural resource. (The department shall inspect at least once every five years every dam and reservoir subject to this chapter.) Upon receipt of a written complaint alleging that the person or property of the complainant is endangered by the construction, enlargement, repair, alteration, maintenance, or operation of a dam or reservoir, the department shall physically inspect the dam or reservoir, unless the data, records, and inspection reports on file with the department are adequate to determine that the complaint has no foundation.

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

POUCH M
JUNEAU, ALASKA 99811
PHONE:

February 11, 1985

The Honorable Arliss Sturgulewski
Chair, Senate Resources Committee
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Sturgulewski:

I am writing to clarify the intent of several points within SB 95, (supervision of dams and reservoirs).

Our present dam safety regulations, promulgated under AS 46.15, direct the department's approval of design and construction for all dams in the state, both federal and non-federal. Unfortunately, these current regulations do not affect other areas such as operation and maintenance, where safety considerations are equally important. Revised regulations, resulting from this bill, will effect a comprehensive dam safety program, extending from initial design to daily operation. In addition, the proposed legislation limits the scope of our program to non-federal dams to prevent duplicating federal dam safety programs. The size of dams covered under the proposed legislation is unchanged from that covered by the existing regulations.

Presently the Federal Energy Regulatory Commission (FERC) regulates Alaska Power Authority dams and other large power dams, approximately twenty, in the state. Our activities will not duplicate FERC activities; as appropriate, though, we will work with FERC to insure that the state's interests in dam licensing and regulation are protected.

Our major effort with the aid of the proposed legislation will continue to be to identify and require repair of unsafe dams, which is presently more than 90% of the State's dam safety effort. The proposed legislation will give us the clear legal authority to perform this important public safety function. We intend to continue to set priorities by hazard class and to concentrate our efforts on those which can cause loss of life and property. In addition, through inspections, we can identify and correct problems before failure of the dam and save the owner the expense of being faced with a total failure instead of a repair.

I am also attaching proposed language regarding entry onto the dam and premises by the commissioner.

The interest, support and assistance of the Senate Resources Committee is appreciated in drafting this important public safety legislation to protect Alaska's citizens.

Sincerely,

Esther C. Wunnicke

EC
Esther C. Wunnicke
Commissioner



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

January 24, 1985

The Honorable Don Bennett
President of the Senate
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Senator Bennett:

ATTACHED → Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill relating to dam safety. The bill comes as a result of the Alaska Water Resources Board resolution 84-4, dated March 14, 1984, recommending review of the existing statutory authority under which dams in the state are regulated by the Department of Natural Resources, division of land and water management.

Currently there are 175 dams on Alaska's dam inventory. In 1981 the U.S. Department of the Army, Corps of Engineers, ended its dam safety program for non-federal dams in Alaska. There are but 20 federal dams in Alaska. The remaining dams are covered under a minimal dam safety program the Department of Natural Resources, division of land and water management, established through regulations. The department adopted 11 AAC 93 under a provision of the Alaska Water Use Act, at AS 46.15.080, which gives the commissioner authority to regulate water diversions. About half of the 50 states have enacted specific dam safety legislation, but most of these states did so in response to dam failures resulting in loss of life and extensive property damage. Clearly it would be advantageous for Alaska to have a well-founded, comprehensive dam safety statutory scheme and program in effect to prevent such tragedies from occurring here. The attached bill is based on the Model Law for State Supervision of Safety of Dams and Reservoirs drafted by the United States Committee on Large Dams of the International Commission on Large Dams.

Section 2 contains the body of the bill, which creates a new chapter 17 for AS 46. New AS 46.17.010 first states the purpose of the chapter. It then makes the supervision

of safety of dams and reservoirs the responsibility of the Department of Natural Resources, which is directed to employ a qualified engineer experienced in the design and construction of dams and reservoirs to direct the dam safety program. A new AS 46.17.040 would make it unlawful for anyone to construct, enlarge, repair, alter, remove, maintain, operate or abandon any dam or reservoir, as defined in the bill, except upon application to and approval of the department. To ensure that dams and reservoirs remain safe once constructed, the department is directed in a new AS 46.17.050 to inspect dams and reservoirs covered under the bill at least once every five years. To ensure that it can make adequate inspections, the department is given authority to enter the private property on which the dam or reservoir is located as might be necessary to make the inspection. In addition, the department is allowed in a new AS 46.17.110 to enter into cooperative management agreements with municipal corporations and other state and federal agencies to effectuate its responsibilities under the bill. To ensure that the state's action in inspecting and regulating the operation of dams or reservoirs does not shift the liability of the private owner to the state for loss of life or property damage due to the dam's or reservoir's failure, AS 46.17.120 bars any action against the state based on any purported act or omission of a state agent or employee connected with the dam safety program.

Section 1 of the bill amends AS 11.56.800(a), dealing with the crime of making a false report. A new paragraph (4) will make it a crime to file a false report with the Department of Natural Resources concerning the condition of a dam or reservoir. Additional criminal sanctions are also contained in sec. 2 of the bill in a new AS 46.17.100, which would make it a class A misdemeanor to violate any provision of AS 46.17 or lawful order the department issues under AS 46.17.

Given the importance of a good dam safety program to the citizens of Alaska, I urge your favorable action on this measure.

Sincerely,



Bill Sheffield
Governor

STATE OF ALASKA 1985 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date: _____

REQUEST

Bill/Resolution No.: 95
Title: Dam Safety

Sponsor: _____
Requestor: _____
Date of Request: _____

FISCAL DETAIL

Agency Affected: Natural Resources
Program Category Affected: NRMEC

BRU, Program or Subprogram(s) Affected:
Land and Water Management

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 85	FY 86	FY 87	FY 88	FY 89	FY 90
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: Attach a separate page if necessary

The legislation, which establishes in statute dam safety authorities, does not require new funding.

Prepared By: Ned Farquhar Ned Farquhar Phone: 465-2400
Division: Commissioner's Office Date: 4 January 1985

Approved by Commissioner: Naim D. Ahmed, Deputy Date: 4 January 1985
Agency: Natural Resources

Distribution (by Agency preparing fiscal note):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

7/1/84

Resolution No. 84-4

DAM SAFETY AUTHORITY

The State Constitution, Article VII Sections 3 and 4, mandates that the legislature promote and protect the public health and welfare of its citizens. It is recognized that existing statute, AS 46.15.080(2) specifies state responsibility only for the adequacy of the construction of water diversions (dams).

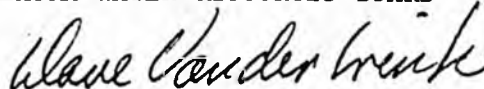
The "Model Law for State Supervision of Safety of Dams and Reservoirs," by the United States Committee on Large Dams, sets forth the criteria for an adequate state dam safety program. The objective is safety and the protection of areas below a dam from the consequences of a failure of a dam and the untimely release of its reservoir contents.

THE ALASKA WATER RESOURCES BOARD requests that the Commissioner of Natural Resources direct the Division of Land and Water Management, in conjunction with the Attorney General's Office, to undertake:

- a. A comprehensive review of existing statutes and regulations (11 AAC 93.150-200) related to dam safety relative to the "Model State Dam Safety Law."
- b. Propose legislation, if necessary, to provide the citizens of the state with a viable dam safety program and protection from the hazards of unsafe dams.

ADOPTED this 14th day of March, 1984

ALASKA WATER RESOURCES BOARD



David Vanderbrink, Chairman

Alaska State Legislature

ARLISS STURGULEWSKI, Chairman
BETTYE FAHRENKAMP, Vice Chairman
JACK COGHILL
DICK ELIASON
VIC FISCHER
RICK HALFORD
FRED ZHAROFF



POUCH V
JUNEAU, ALASKA. 99811
(907) 465-4807

Senate Committee on Resources

MEMORANDUM

February 7, 1985

TO: All Members
Senate Resources Committee

FROM: Senate Resources Staff *A*

RE: SB 95 "An Act relating to supervision of safety of dams and reservoirs; and providing for an effective date."

SB 95 "An Act relating to supervision of safety of dams and reservoirs; and providing for an effective date", would provide the Department of Natural Resources (DNR) with the statutory responsibility to supervise the safety of all non-federal dams in Alaska.

Since 1981, DNR has been conducting dam inspections and has been responsible for regulation of all non-federal dams. The department has operated under regulations (11 AAC 93) adopted under its general powers granted under AS 46.15 Alaska Water Use Act. The present regulations are unclear and do not provide for a comprehensive dam safety program.

SB 95 would make DNR responsible for the supervision of safety of dams; require DNR approval for construction, repair and modification of dams; require DNR to inspect dams at least every five years; and provide the ability to enter private property for inspections. In addition, the state would be protected from liability as a result of an inspection and it would be a crime to report false information to DNR regarding the condition of a dam.

Since DNR is currently engaged in the regulation of dams and has staff assigned, there is no fiscal impact of this bill other than those appropriations contained in DNR's existing budget. In FY 84, the dam safety budget was \$133.7 (including \$40.0 contractual) the FY 85 budget is \$216.3 (including \$138.7 contractual).

DNR has two full-time and two part-time staff plus contractual services to regulate the 102 dams covered by this bill. (There are an additional 20 federal dams regulated by the Federal Government and 55 small dams regulated under DNR water rights procedures.) DNR plans to inspect all dams at least every five years.

fh:bh

STATE OF ALASKA THE LEGISLATURE

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907.465.3800

LEGISLATIVE AFFAIRS AGENCY LEGISLATIVE REFERENCE LIBRARY

May, 1986

Copies of minutes listed below were originally included in this file. The minutes are available on the STAIRS date base CM 14. In order to save space copies of minutes have not been left in the files.

Jeanie Henry

SENATE RESOURCES COMMITTEE,	2/2/85,	1:30
" "	2/11/85,	2:15
" "	3/27/85,	1:40

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

POUCH M
JUNEAU, ALASKA 99811
PHONE: 907-465-2400

April 9, 1986

APR 10 1986

The Honorable Jan Faiks
The Honorable John Sackett
Alaska State Legislature
P.O. Box V
Juneau, Alaska 99811

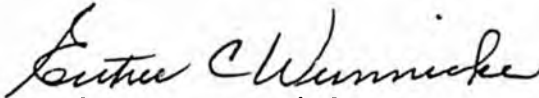
Dear Senators Faiks and Sackett:

I am writing to suggest the enclosed amendment to SB 95, relating to dam safety, which is currently referred to your committee. Our proposed amendment would allow the commissioner the flexibility of requiring the dam owner to cover the expense of inspecting the owner's dam for safety if and when state funds are not available. Recent budget reductions in our dam safety inspection program now amplify the advisability of this amendment.

The department is confident that our five year inspection program schedule can be met at the current funding level. However, as funding levels decrease, this amendment would ensure that this important public safety program can continue.

Please let me know if I might provide additional information.

Sincerely,


Esther C. Wunnicke
Commissioner

Enclosure

cc: Senator Sturgulewski
Senator Halford
Tom Hawkins
Kyle Cherry

DEPARTMENT OF NATURAL RESOURCES

April 9, 1986

Suggested Amendment to CSSB 95 (Jud)

Amend Sec. 46.17.050 to read as follows:

Sec. 46.17.050. INSPECTIONS. At least once every five years, the commissioner shall inspect or require an inspection by the owner of every dam and reservoir subject to this chapter. The commissioner may inspect or require the owner to inspect a dam or reservoir more frequently than every five years to protect public safety.

STATE OF ALASKA

JUN 17 1985
BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF LAND AND WATER MANAGEMENT

POUCH 7-005
ANCHORAGE, ALASKA 99510-7005
PHONE: (907) 561-2020

December 20, 1985

The Honorable Arliss Sturgulewski
Alaska State Senate
2957 Sheldon Jackson Street
Anchorage, AK 99508

Re: CSSB 95, Dam Safety

Dear Senator Sturgulewski:

Recently we had the opportunity to discuss CSSB 95 and SB 150 with Senator Halford. Below we have addressed his concerns with the Resource Committee Substitute for SB 95. Due to our desire to completely respond to Senator Halford's concerns with SB 150, we will be sending you a similar letter on SB 150 in the near future when we have all the necessary information.

We propose the following changes in CSSB 95:

Section 46.17.040 - Delete the subsection (b) in its entirety and renumber (c) to (b) and (d) to (c). The concern which prompted subsection (b) will be covered in the revised definition of a "dam," Section 46.17.900(3).

Section 46.17.050 - Delete the second sentence in its entirety and substitute "The commissioner may inspect a dam or reservoir more frequently than every five years to protect public safety."

Section 46.17.060 - Delete the first sentence in its entirety and substitute:

In taking an action under this chapter, the commissioner, after giving two weeks written notice and being refused the right of entry, may seek a search warrant to allow inspection of the dam or reservoir. The commissioner, after being refused inspection of drawings, operational records, or other information concerning a dam or reservoir may seek an administrative subpoena compelling production of the drawings, operational records or other information.

Leave the last sentence unchanged.

Arliss Sturgulewski
December 20, 1985
Page 2

Section 46.17.120 - Senator Halford expressed concern that while this section appeared to provide ample protection for the state, it doesn't leave much recourse for a dam owner to seek remedy in the courts in the event a negligent action or inaction on the part of the state causes the dam owner to suffer unnecessary or unreasonable damages.

In researching Senator Halford's concern regarding the state being held liable for some of its actions in dam safety work, we contacted James Doody, Chief, Division of the Safety of Dams, State of California. The language in this section was essentially taken from the United States Committee on Large Dams Model State Dam Safety Law, which was taken from the California Dam Safety Law. Mr. Doody stated that by virtue of the type of work dam safety is, such language and sovereign immunity is necessary to avoid inviting legal actions against the state. Further, such language is required to protect dam safety employees from personal liability.

One must recognize that the state is acting in the interest of the public placed at risk below a dam. The public may not be deriving any benefit from the dam, and on the contrary, a hazard exists by virtue of their being placed at risk. The only reason the state would ever take control of a dam or order the owner to breach a dam would be that an imminent danger existed to the public. The imminent danger would be the fault of the owner, either through action or inaction. Suggesting that the burden be shifted to the state in the case of imminent danger relieves the owner of his due responsibility and will cause any agency or state employee to be reluctant to take drastic action for the greater public good. One cannot reasonably expect the state be treated as an individual under law when it is acting in its best judgment to protect the public from a hazard (the presence of a dam) created by a dam owner for the owner's benefit.

We share Senator Halford's concern with this section, and if the section can be worded in some way that provides essential protection to the state and its employees and at the same time provides reasonable protection for dam owners from negligent state actions, the bill would be greatly improved. Possibly you will want to have the Department of Law or Legislature's attorneys review this section to see if other wording is practical.

Section 46.17.120 should remain unchanged, unless acceptable alternative wording can be developed.

Arliss Sturgulewski
December 20, 1985
Page 3

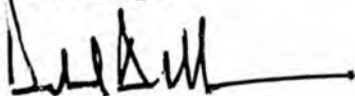
Section 46.17.900(3) - Delete the sentence in its entirety and substitute:

dam means any artificial barrier and appurtenant works which may impound or divert water and (A) that has or will have an impounding capacity at maximum water storage elevation of 50 acre-feet and is at least 10 feet in height measured from the lowest point at either toe of the dam to the crest of the dam or (B) that is at least 20 feet in height measured from the lowest point at either toe of the dam to the crest of the dam or (C) that the commissioner has made a positive determination that the dam poses a threat to lives and property.

Senator Halford's comments were very useful, and with the exception of Section 46.17.120 we have incorporated them in the new language we have suggested. Due to the critical need for this legislation, we urge your continued support of this important public safety measure.

Comments on SB 150 will be forwarded to you when our information is complete.

Sincerely,



hw Tom Hawkins
Director

cc: Senator Faiks
Senator Sackett
Senator Rodey
Senator Halford
Commissioner Wunnicke

COMMITTEE REPORT
SENATE

FURTHER: JUDICIARY
FINANCE

1/25/85

Date _____

Mr. President

The Committee on RESOURCES considered SB 95

supervision of safety of dams and reservoirs; efd.

and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass
- do pass with attached amendment(s)
- replace with/or adopt CS for SB 95 (RESOURCES)
- new title _____
- same title and recommends _____
- and attached a "LETTER OF INTENT" NEW FISCAL NOTE
- reports it back without recommendation
- recommends referral to _____ Committee

MEMBERS SIGNING
DO PASS

[Handwritten signatures]

MEMBERS HAVING
OTHER RECOMMENDATIONS

Rick Halford do NOT Pass

Aulis Stupakowski
Chairman
Do Pass
Chairman recommendation

IN THE SENATE

SENATE BILL NO. 55
IN THE LEGISLATURE OF THE STATE OF ALASKA
FOURTEENTH LEGISLATURE - FIRST SESSION
A BILL

TITLE: For an Act entitled:
"An Act relating to supervision of safety of dams and
reservoirs; and providing for an effective date."

TEXT: BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 11.56.800(a) is amended to read:

(a) A person commits the crime of making a false
report if the person knowingly

(1) gives false information to a peace
officer with the intent of implicating another in a crime;

(2) makes a false report to a peace officer
that a crime has occurred or is about to occur; OR

(3) makes a false report or gives a false
alarm that a fire or other incident dangerous to life or
property calling for an emergency response has occurred or
is about to occur; or

(4) makes a false report to the
Department of Natural Resources concerning the condition
of a dam or reservoir under AS 46.17.010 -- 46.17.130.

* Sec. 2. AS 46 is amended by adding a new chapter to
read:

CHAPTER 17. SUPERVISION OF SAFETY OF DAMS AND
RESERVOIRS.

Sec. 46.17.010. PURPOSE. It is the purpose of
this chapter to provide for the regulation, supervision,
and periodic inspection by the commissioner of privately
or state owned dams, reservoirs, and appurtenant works
in order to ensure that the design, construction,
enlargement, alteration, repair, maintenance, operation,
and removal of dams and reservoirs is consistent with the
protection of life and property.

Sec. 46.17.020. ADMINISTRATION AND STAFFING. The
supervision of the safety of dams or reservoirs is the
responsibility of the commissioner. The commissioner shall
employ a licensed and qualified engineer, experienced in
the design and construction of dams and reservoirs, and
other employees necessary for performing the duties outlined
in this chapter. The commissioner may contract with
engineering consultants not employed by the state when
necessary to assist in the performance of its duties under

this chapter.

Sec. 46.17.030. REGULATIONS AND ORDERS. The commissioner shall adopt regulations and issue orders necessary for carrying out the provisions of this chapter.

Sec. 46.17.040. APPROVAL REQUIRED. (a) Except in the performance of routine maintenance and operations not affecting structure safety, no person may construct, enlarge, repair, alter, remove, maintain, operate or abandon a dam or reservoir without the approval of the commissioner.

(b) The owner of a dam or reservoir that was constructed or was in operation before the effective date of this Act shall file an application with the commissioner for the approval of the dam or reservoir, in accordance with regulations adopted by the commissioner.

(c) Nothing in this chapter exempts an applicant under this section from the requirements of other statutes.

Sec. 46.17.050. INSPECTIONS. The commissioner shall inspect at least once every five years every dam and reservoir subject to this chapter. Upon receipt of a written complaint alleging that the person or property of the complainant is endangered by the construction, enlargement, repair, alteration, maintenance, or operation of a dam or reservoir, the commissioner shall physically inspect the dam or reservoir, unless the data, records, and inspection reports on file with the commissioner are adequate to determine that the complaint has no foundation.

Sec. 46.17.060. ENTRY UPON PRIVATE PROPERTY. In taking any action under this chapter, the commissioner, after giving two weeks' written notice to the owner, may enter the dam or reservoir premises as necessary for inspection purposes. If the commissioner has reason to believe the dam or reservoir may be unsafe or presents an imminent threat to life or property, the commissioner may enter the dam or reservoir premises without notice.

Sec. 46.17.070. DETERMINING DANGER. In determining whether a dam or reservoir or proposed dam or reservoir constitutes or would constitute a danger to life or property, the commissioner shall, at a minimum, consider the possibility that the structural integrity of the dam or reservoir might be endangered by overtopping, seepage, settlement, erosion, cracking, earth movement, earthquakes, or the failure of bulkheads, flashboards, gates, or conduits. If the commissioner determines that the dam or reservoir is unsafe, the commissioner shall order the owner to take action the commissioner considers necessary to ensure the protection of life and property.

Sec. 46.17.080. INJUNCTION AND DAMAGES. With the assistance of the attorney general, the commissioner may seek an injunction and damages in the enforcement of its orders

or the provisions of this chapter.

Sec. 46.17.090. JUDICIAL REVIEW. A final action of the commissioner under this chapter is subject to judicial review as provided in the Administrative Procedure Act, AS 44.62.

Sec. 46.17.100. VIOLATION OF THIS CHAPTER IS A MISDEMEANOR. A person who knowingly violates a provision of this chapter, or knowingly violates the terms of an approval, order, regulation, or requirement of the commissioner made under this chapter, or knowingly obstructs, hinders, or prevents the commissioner from performing duties under this chapter, is guilty of a class A misdemeanor; upon conviction, the person is punishable by imprisonment under AS 12.55.135(a), or by a fine of not more than \$10,000, or by both. Each day that a violation continues constitutes a separate offense.

Sec. 46.17.110. OTHER GOVERNMENT AGENCIES. (a) A municipal corporation organized under AS 29 may not regulate, supervise, inspect, or provide for the regulation, supervision, or inspection of a dam or reservoir in this state, or provide for the construction, maintenance, operation, or removal or abandonment of them, or limit the size of a dam or reservoir or the amount of water that may be stored in them, if its action would conflict with the powers and duties vested in the commissioner. The commissioner may enter into co-operative agreements with municipal corporations and other state and federal agencies to effectuate the purpose of this chapter.

(b) This chapter does not apply to a federally owned or operated dam or reservoir.

(c) Nothing in this chapter affects the powers of the Department of Environmental Conservation or the Department of Fish and Game.

Sec. 46.17.120. ACTION AGAINST STATE FOR DAMAGES. No person may bring an action against the state, or the commissioner, for the recovery of damages caused by the partial or total failure of a dam or reservoir, or by the operation of a dam or reservoir, or by an act or omission in connection with any of the following:

(1) approval of the construction of a dam or reservoir, or approval of flood-handling plans during or after construction;

(2) issuance or enforcement of orders relating to maintenance or operation of the dam or reservoir;

(3) control or regulation of the dam or reservoir;

(4) measures taken to protect against failure of the dam or reservoir during an emergency; or

(5) investigations or inspections authorized under this chapter.

Sec. 46.17.130. DUTIES OF OWNER. Nothing in

this chapter relieves an owner of a dam or reservoir of the duties or liabilities incident to the ownership or operation of the dam or reservoir.

Sec. 46.17.900. DEFINITIONS. In this chapter, unless the context requires otherwise,

(1) "alterations" or "repairs" means only those alterations or repairs which may directly affect the safety of the dam or reservoir, as determined by the commissioner;

(2) "appurtenant works" includes structures such as spillways, either in a dam or separate from it; a reservoir and its rim; low level outlet works; and water conduits such as tunnels, pipelines, or penstocks, whether running through the dam or through its abutments;

(3) "commissioner" means the commissioner of the Department of Natural Resources;

(4) "dam" includes any artificial barrier and appurtenant works which may impound or divert water and (A) which has or will have an impounding capacity at maximum water storage elevation of 50 acrefeet or more, or (B) which is or will be 10 feet or more in height measured from the lowest elevation at the downstream toe of the artificial barrier to the crest elevation of the barrier but excluding any spillway;

(5) "enlargement" means an alteration to an existing dam or reservoir which raises or is capable of raising the water storage elevation of the water, or which increases the quantity of water impounded by the dam or reservoir;

(6) "owner" means a person who owns, controls, operates, maintains, manages, or proposes to construct a dam or reservoir, and includes the following:

(A) the state and its agencies and political subdivisions;

(B) a public utility; and

(C) the appointed or authorized agents, employees, lessees, receivers or trustees of any owner;

(7) "person" means the same as in AS 01.10.060, and, in addition, includes the state and its agencies and political subdivisions;

(8) "reservoir" means any basin appurtenant to a dam, which may impound water.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.070(c).

Alaska State Legislature

ARLISS STURGULEWSKI, Chairman
BETTYE FAHRENKAMP, Vice Chairman
JACK COGHILL
DICK ELIASON
VIC FISCHER
RICK HALFORD
FRED ZHAROFF



POUCH V
JUNEAU, ALASKA. 99811
(907) 465-4907

Senate Committee on Resources

MEMORANDUM

March 26, 1985

TO: All Members
Senate Resources Committee

FROM: Staff
Senate Resources Committee

RE: March 27, 1985 Meeting Agenda

The Senate Resources Committee will have the following bills back before them on March 27:

SB 95 "An Act relating to supervision of safety of dams and reservoirs; and providing for an effective date."

SB 35 "An Act creating the Nelchina Public Use Area."

SB 11 "An Act relating to the fisheries business tax."

Packets have previously been distributed on all three of these bills. Please bring these bill packets to tomorrow's meeting.

Alaska State Legislature

SB 95

ARLISS STURGULEWSKI, Chairman
BETTYE FAHRENKAMP, Vice Chairman
JACK COGHILL
DICK ELIASON
VIC FISCHER
RICK HALFORD
FRED ZHAROFF



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Senate Committee on Resources

M E M O R A N D U M

March 27, 1985

TO: Senate Resource Committee Members

FROM: Senate Resource Committee Staff *MZ*

RE: CS FOR SENATE BILL 95 "An Act relating to supervision of safety of dams and reservoirs; and providing for an effective date"

With one exception, the proposed committee substitute for SB 95 that is before the committee is the same as the bill that the committee voted to pass out and then decided to hold because of concerns about placer mining dams.

A new section (b) has been inserted on page 2. This section would empower the Commissioner of Natural Resources to establish, by regulation, minimum safety standards for low hazard dams under 20 feet in height. It would specify that mining dams are in this category and that such dams would be exempt from requirements of prior approval before construction as long as they met the minimum safety standards.

I have discussed this proposed change with Helen Warner of the Alaska Miner's Association. Though the miners have some reservations about anything done by regulation, she felt this would solve the miner's earlier objections. She said that the miners realize the need for this bill as a public safety issue.

Original sponsor: Rules/Governor

1 IN THE SENATE

BY THE RESOURCES COMMITTEE

2 CS FOR SENATE BILL NO. 95 (Resources)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FOURTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to supervision of safety of dams and
7 reservoirs; and providing for an effective date."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 11.56.800(a) is amended to read:

10 (a) A person commits the crime of making a false report if the
11 person knowingly

12 (1) gives false information to a peace officer with the
13 intent of implicating another in a crime;

14 (2) makes a false report to a peace officer that a crime
15 has occurred or is about to occur; [OR]

16 (3) makes a false report or gives a false alarm that a fire
17 or other incident dangerous to life or property calling for an emer-
18 gency response has occurred or is about to occur; or

19 (4) makes a false report to the Department of Natural
20 Resources concerning the condition of a dam or reservoir under AS 46.-
21 17.

22 * Sec. 2. AS 46 is amended by adding a new chapter to read:

23 CHAPTER 17. SUPERVISION OF SAFETY OF DAMS AND RESERVOIRS.

24 Sec. 46.17.010. PURPOSE. It is the purpose of this chapter to
25 provide for the regulation, supervision, and periodic inspection by
26 the commissioner of privately or state owned dams, reservoirs, and
27 appurtenant works in order to ensure that the design, construction,
28 enlargement, alteration, repair, maintenance, operation, and removal
29 of dams and reservoirs is consistent with the protection of life and

1 property.

2 Sec. 46.17.020. ADMINISTRATION AND STAFFING. The supervision of
3 the safety of dams or reservoirs is the responsibility of the commis-
4 sioner. The commissioner shall employ a licensed and qualified engi-
5 neer, experienced in the design and construction of dams and reser-
6 voirs, and other employees necessary for performing the duties out-
7 lined in this chapter. The commissioner may contract with engineering
8 consultants not employed by the state when necessary to assist in the
9 performance of its duties under this chapter.

10 Sec. 46.17.030. REGULATIONS AND ORDERS. The commissioner shall
11 adopt regulations and issue orders necessary for carrying out the
12 provisions of this chapter.

13 Sec. 46.17.040. APPROVAL REQUIRED. (a) Except in the perfor-
14 mance of routine maintenance and operations not affecting structure
15 safety, a person may not construct, enlarge, repair, alter, remove,
16 maintain, operate or abandon a dam or reservoir without the approval
17 of the commissioner.

18 (b) The commissioner shall adopt regulations under AS 46.17.030
19 to establish minimum safety standards for specified classes of low
20 hazard dams up to 20 feet high, including mining dams. Dams in these
21 classes constructed to the minimum standards do not require separate
22 prior approval.

23 (c) The owner of a dam or reservoir that was constructed or was
24 in operation before the effective date of this Act shall file an
25 application with the commissioner for the approval of the dam or
26 reservoir, in accordance with regulations adopted by the commissioner.

27 (d) Nothing in this chapter exempts an applicant under this
28 section from the requirements of other statutes.

29 Sec. 46.17.050. INSPECTIONS. The commissioner shall inspect at

1 least once every five years every dam and reservoir subject to this
2 chapter. Upon receipt of a written complaint alleging that the person
3 or property of the complainant is endangered by the construction,
4 enlargement, repair, alteration, maintenance, or operation of a dam or
5 reservoir, the commissioner shall physically inspect the dam or reser-
6 voir, unless the data, records, and inspection reports on file with
7 the commissioner are adequate to determine that the complaint has no
8 foundation.

9 Sec. 46.17.060. ENTRY UPON PRIVATE PROPERTY. In taking an
10 action under this chapter the commissioner, after giving two weeks'
11 written notice to the owner, may enter the dam or reservoir premises
12 as necessary for inspection purposes. If the commissioner has reason
13 to believe the dam or reservoir may be unsafe or presents an imminent
14 threat to life or property, the commissioner may enter the dam or
15 reservoir premises without notice.

16 Sec. 46.17.070. DETERMINING DANGER. In determining whether a
17 dam or reservoir or proposed dam or reservoir constitutes or would
18 constitute a danger to life or property, the commissioner shall, at a
19 minimum, consider the possibility that the structural integrity of the
20 dam or reservoir might be endangered by overtopping, seepage, settle-
21 ment, erosion, cracking, earth movement, earthquakes, or the failure
22 of bulkheads, flashboards, gates, or conduits. If the commissioner
23 determines that the dam or reservoir is unsafe, it shall order the
24 owner to take action the commissioner considers necessary to ensure
25 the protection of life and property.

26 Sec. 46.17.080. INJUNCTION AND DAMAGES. With the assistance of
27 the attorney general, the commissioner may seek an injunction and dam-
28 ages in the enforcement of the commissioner's orders or the provisions
29 of this chapter.

1 Sec. 46.17.090. JUDICIAL REVIEW. A final action of the commis-
2 sioner under this chapter is subject to judicial review as provided in
3 the Administrative Procedure Act, AS 44.62.

4 Sec. 46.17.100. VIOLATION OF THIS CHAPTER IS A MISDEMEANOR. A
5 person who knowingly violates a provision of this chapter, or knowing-
6 ly violates the terms of an approval, order, regulation, or require-
7 ment of the commissioner made under this chapter, or knowingly ob-
8 struct, hinders, or prevents the commissioner's agents or employees
9 from performing duties under this chapter, is guilty of a class A
10 misdemeanor; upon conviction, the person is punishable by imprisonment
11 under AS 12.55.135(a), or by a fine of not more than \$10,000, or by
12 both. Each day that a violation continues constitutes a separate
13 offense.

14 Sec. 46.17.110. OTHER GOVERNMENT AGENCIES. (a) A municipal
15 corporation organized under AS 29 may not regulate, supervise, in-
16 spect, or provide for the regulation, supervision, or inspection of a
17 dam or reservoir in this state, or provide for the construction,
18 maintenance, operation, or removal or abandonment of them, or limit
19 the size of a dam or reservoir or the amount of water that may be
20 stored in them, if its action would conflict with the powers and
21 duties vested in the commissioner. The commissioner may enter into
22 cooperative agreements with municipal corporations and other state and
23 federal agencies to effectuate the purpose of this chapter.

24 (b) This chapter does not apply to a federally owned or operated
25 dam or reservoir.

26 (c) Nothing in this chapter affects the powers of the Department
27 of Environmental Conservation or the Department of Fish and Game.

28 Sec. 46.17.120. ACTION AGAINST STATE FOR DAMAGES. A person may
29 not bring an action against the state, the commissioner, or agents or

1 employees of the state, for the recovery of damages caused by the par-
2 tial or total failure of a dam or reservoir, or by the operation of a
3 dam or reservoir, or by an act or omission in connection with any of
4 the following.

5 (1) approval of the construction of a dam or reservoir, or
6 approval of flood-handling plans during or after construction;

7 (2) issuance or enforcement of orders relating to mainte-
8 nance or operation of the dam or reservoir;

9 (3) control or regulation of the dam or reservoir;

10 (4) measures taken to protect against failure of the dam or
11 reservoir during an emergency; or

12 (5) investigations or inspections authorized under this
13 chapter.

14 Sec. 46.17.130. DUTIES OF OWNER. Nothing in this chapter re-
15 lieves an owner of a dam or reservoir of the duties or liabilities
16 incident to the ownership or operation of the dam or reservoir.

17 Sec. 46.17.900. DEFINITIONS. In this chapter, unless the con-
18 text requires otherwise,

19 (1) "alterations" or "repairs" means only those alterations
20 or repairs that may directly affect the safety of the dam or reser-
21 voir, as determined by the commissioner;

22 (2) "appurtenant works" includes structures such as spill-
23 ways, either in a dam or separate from it; a reservoir and its rim;
24 low level outlet works; and water conduits such as tunnels, pipelines,
25 or penstocks, whether running through the dam or through its abut-
26 ments;

27 (3) "dam" includes any artificial barrier and appurtenant
28 works that may impound or divert water and (A) that has or will have
29 an impounding capacity at maximum water storage elevation of 50 acre-

1 feet or more, or (B) that is or will be 10 feet or more in height
2 measured from the lowest elevation at the downstream toe of the arti-
3 ficial barrier to the crest elevation of the barrier but excluding any
4 spillway;

5 (4) "commissioner" means the commissioner of natural re-
6 sources;

7 (5) "enlargement" means an alteration to an existing dam or
8 reservoir that raises or is capable of raising the water storage
9 elevation of the water, or that increases the quantity of water
10 impounded by the dam or reservoir;

11 (6) "owner" means a person who owns, controls, operates,
12 maintains, manages, or proposes to construct a dam or reservoir, and
13 includes the following:

14 (A) the state and its agencies and political subdivi-
15 sions;

16 (B) a public utility; and

17 (C) the appointed or authorized agents, employees,
18 lessees, receivers or trustees of any owner;

19 (7) "person" has the meaning given in AS 01.10.060, and, in
20 addition, includes the state and its agencies and political subdivi-
21 sions;

22 (8) "reservoir" means a basin appurtenant to a dam that may
23 impound water.

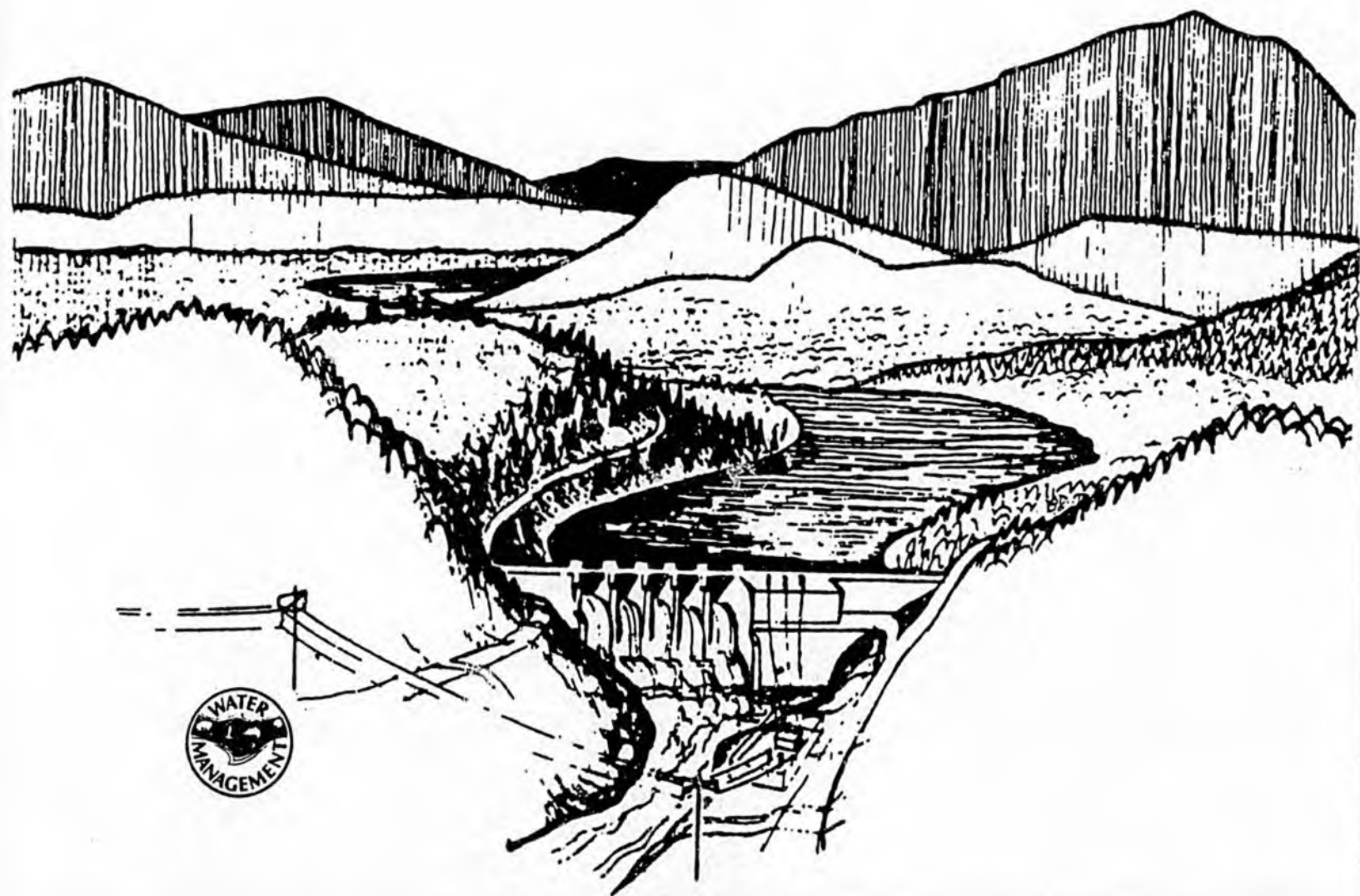
24 * Sec. 3. This Act takes effect immediately in accordance with AS 01.-
25 10.070(c).



Alaska Department of
**NATURAL
RESOURCES**

Improving The Safety Of Our State's Dams-- Progress Report And Projections

October 1984



**Progress Report
and
Projections for the Dam Safety Program**

Shortly after Tom Hawkins' appointment as Director of the Division of Land and Water Management (DLWM), he sent a decision memo to Commissioner Wunnicke concerning DNR's responsibility for safety of dams (Decision Memo March 10, 1983).

A summary of the issues at hand were:

- *A hazardous situation had been noted in our files (Switzer Dams), but no formal inspection had ever been conducted.
- *The regulations were vague and did not clearly define authority and liability.
- *Dam safety budget and staffing were not providing adequate public safety for dams.

The options were:

- *Develop an effective program within DLWM staffed with a licensed engineer having at least three years experience in design, construction, and investigation of dams. For more sophisticated work, consultants could be contracted.
- *Repeal the regulation and cancel the program altogether.
- *Move the program to another agency within the state.

Since the latter two options were not within the public's best interest, and the state has some liability by virtue of approval of water diversions, it was determined that the dam safety program should be developed within DLWM where regulating authority and staffing existed.

At that time DLWM began to develop a dam safety program.

Efforts were given to:

- *Rallying support from the state legislature with the report Status of the Alaska Dam Safety Program, April 1983, and support from Water Board members by having speakers William Bivins, Dam Safety Chairman of the Federal Emergency Management Agency, and Harland Moore, Chief Engineer for the Army Corps of Engineers, Alaska District, at the Alaska Water Board meetings in March of 1984, and
- *Corresponding with the Alaska delegation on federal dam safety legislation by:
 1. Expressing our needs and concerns about dam safety regulation, and
 2. Developing a program in line with up-coming legislation (Senate Bill 1739), and
- *Working with the Federal Emergency Management Agency in proposing program elements.

The result of these and other efforts lead to the following achievements:

- *Budget: Special attention was given to dam safety by Governor Sheffield in his budget address (1/12/84). For FY 85 the legislature earmarked \$133,700 for contracting qualified engineers to inspect dams.
- *Staffing: A licensed professional engineer was added to our staff on April 6, 1984, who had six years of experience with dams.
- *Contracting: Contracting procedures were developed in the spring of 1984 and used in selecting consulting engineers with world class expertise in dam safety investigation.
- *Inspections: Formal dam safety inspections have been and are being conducted by highly qualified engineers to bring our files up to date and to insure the safety of high and significant dams¹. A contract was awarded to Charles T. Main on June 15, 1984 to conduct safety inspection of six dams.
- *Switzer Creek Dams: On July 12, 1984 these high hazard dams were professionally inspected and one dam was identified as unsafe. Action is being taken to correct the situation.
- *Dam safety legislation: New legislation has been drafted to address the deficiencies of the existing statute and is presently being reviewed.

Our staff is working to continue to move the dam safety program ahead. We are projecting the following accomplishments:

- *Continue to process applications to construct or modify a dam.
- *Update all files with correct information.
- *Insure that owners of dams take action to comply with recommendations.
- *Continue formal and special inspections by contracting professional services.
- *Further economize the expense of routine intermediate inspections by training in-house staff to conduct inspections of lower risk dams².
- *Encourage owner's responsibility by providing educational information on dam safety operation and maintenance, and prompting owners to conduct their own routine informal inspection³.
- *Coordinate with the Department of Transportation materials testing lab for use and services of their facilities.

*Provide technical support to district offices on limited bases.

*Establish a revolving fund to assist owners when making costly repairs to their dams or administrate public funds for emergency projects such as Lowell Creek diversion in Seward and Chester Lake, Dam rehabilitation in Metlakatla.

*Coordinate with the Federal Emergency Management Agencies programs to support state dam safety activities.

*Participate in the Association of State Dam Safety Officials.

*Coordinate with the State of Alaska Emergency Services in development of emergency action plans.

*Develop training and facilitate professional licensing for all staff engineers.

*Keep abreast with federal dam safety legislation.

*Coordinate with tsunami center in Palmer for prompt identification of location and magnetude of earthquake activities.

*Coordinate with the Federal Energy Regulator Commission (FERC) to avoid duplications of inspection efforts.

Foot Notes: Federal Guideline for Dam Safety, June 25, 1979 recommends:

1. **Formal and special inspections.** A formal inspection is required to verify the safety and integrity of a dam and it should not exceed five years. A special inspection should be performed immediately after the dam has passed unusually large floods or experienced significant earthquakes. Inspections should be conducted under the direction of qualified licensed professional engineers. The inspection team should be chosen on a site-specific basis considering the nature and type of dam.

2. **Intermediate inspections** should be performed on an annual basis, but at least biennially, where there is a high probability that dam failure could result in loss of life. Personnel for inspection should be by technically qualified engineers, experienced in the operation and maintenance of dam.

3. **Informal inspections** should be a frequent observation of the dam and its operation and maintenance the inspections could be performed satisfactorily by an employee at the project and a detailed checklist of items to be inspected may be provided.

**ARTICLE 3.
DAM SAFETY AND CONSTRUCTION**

Section

- 150. Dam safety
- 160. General requirements
- 165. Dam measurement
- 170. Construction of large dams
- 180. Construction of medium-sized dams
- 190. Construction of small dams
- 200. Fee for dam construction permit

11 AAC 93.150. **DAM SAFETY.** Sections 150 – 200 of this chapter do not in any way limit or restrict the amount or character of data that may be required by the commissioner from the owner of any dam, whether new or existing, for the administration of AS 46.15. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020	AS 46.15.080
AS 46.15.040	AS 46.15.135
AS 46.15.060	AS 46.15.180
AS 46.15.070(f)	

11 AAC 93.160. **GENERAL REQUIREMENTS.** (a) No person may begin the construction, enlargement, alteration, or repair of a dam 10 feet or more in height, or storing 50 acre-feet or more of water, without first submitting an application on a form provided by the commissioner, submitting plans as required by this section, paying the fees required by sec. 200 of this chapter, and receiving a certificate of approval for the proposed work. "Alteration or repair" means only an alteration or repair that directly affects the safety of the dam or reservoir and does not mean routine maintenance.

(b) Plans must be prepared on a good grade of scale-stable tracing material. Tracings must be reproducible by standard duplicating processes. Plans and drawings must be of sufficiently large scale and must have enough views with suitable dimensions to allow for complete review and analysis of the proposed project. After reviewing the information, the commissioner will notify the applicant in writing whether or not changes must be made.

(c) Plans must include the following:

(1) plans for a water measuring device that is capable of accurately measuring the total flow

of the stream below the reservoir or the rate of discharge at the outlet works;

(2) a topographic map of the dam site showing the location of the proposed dam by township, range, section, and quarter section, and the location of the spillway, outlet works, borings, test pits, and material pits;

(3) a profile along the dam axis showing the locations, elevations, and depths of borings or test pits, including logs of any bore holes or test pits; and

(4) a maximum cross-section of the dam showing elevation and width of crest, slopes of upstream and downstream faces, thickness of erosion control structures, location of cutoff and bonding trenches, and elevations, size, and type of outlet conduit, valves, and operating mechanism. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020	AS 46.15.100
AS 46.15.080	AS 46.15.180

11 AAC 93.165. **DAM MEASUREMENT.** The height of a dam is measured as the vertical distance from the natural bed of the watercourse of the downstream toe of the barrier, as determined by the commissioner, or from the lowest elevation of the outside limit of the barrier, if it is not across a watercourse, to the maximum storage elevation. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020

11 AAC 93.170. **CONSTRUCTION OF LARGE DAMS.** (a) This section applies to large dams, which are dams that are twenty feet or more in height or have a storage capacity of 100 acre-feet or more.

(b) The following information must be submitted along with the plans and specifications required under sec. 160 of this chapter:

(1) formulas and assumptions used in the design criteria, test results, and detailed construction specifications;

(2) hydrologic data used in the development of flood forecasting for the drainage area;

(3) a physical analysis and a permeability analysis of the materials used in the embankment and a stability analysis of the structure;

(4) an evaluation of earthquake effects in seismic zones III and IV (see the U.S. Army Corps of Engineers' publication TM 5-809-10/NAVFCA P-335/AFM 88-3, Chapter 13, April 73);

(5) a complete seepage analysis;

(6) the type, location, and sizing of the outlet works;

(7) the type, location, and records of the hydrometeorological gauges appurtenant to the project;

(8) foundation data and information on geological features, including logs of borings, geologic maps, profiles, and cross-sections and reports of foundation stability; and

(9) detailed drawings of the spillway, including a curve showing discharge in cubic feet per second versus gauge height of the reservoir storage pool level, the formulas used in making the curve, detailed plans of the spillway structure, cross-sections of the channel leading to and from the spillway, and the spillway profile.

(c) All specifications submitted must include provisions, acceptable to the commissioner, for adequate supervision by a registered professional engineer during the period of construction. The supervising engineer shall devise a schedule of

incremental inspections and submit his findings in writing to the commissioner within 15 days after each inspection.

(d) In addition to the review of the dam construction plans required under sec. 160 of this chapter and (b) and (c) of this section, the work in progress must be inspected before placing any fill material following clearing and excavation of the foundation, before placing backfill around the outlet conduit following installation of the conduit, before beginning to store water following completion of construction and at such other times as determined necessary by the commissioner. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.100
AS 46.15.080 AS 46.15.180

11 AAC 93.180. **CONSTRUCTION OF MEDIUM-SIZED DAMS.** (a) This section applies to medium-sized dams, which are dams that are at least 10 feet in height but less than 20 feet in height, or have a storage capacity of at least 50 acre-feet but less than 100 acre-feet.

(b) The requirements of this section are in addition to those in sec. 160 of this chapter.

(c) Before approving the proposed work, the commissioner will, in his discretion, require the applicant to submit any of the plans or drawings listed in sec. 170(b)(9) of this chapter.

(d) The analysis and construction requirements for large dams under sec. 170(b)(1) – (8) and (c) of this chapter are recommended, but not required, for medium-sized dams.

(e) In addition to the review of the dam construction plans required under sec. 160 of this chapter and this section, the work in progress must be inspected before placing any fill material following clearing and excavation of the foundation, before placing backfill around the outlet conduit following installation of the conduit, before beginning to store water following completion of construction, and at other times determined necessary by the commissioner. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.180
AS 46.15.080 AS 46.15.250
AS 46.15.100

11 AAC 93.190. CONSTRUCTION OF SMALL DAMS. This section applies to small dams, which are dams under 10 feet in height and having a storage capacity of less than 50 acre-feet. No additional permit or approval from the commissioner is needed to construct a small dam as long as such authorization already is included in a permit or certificate to appropriate water issued under sec. 120 or 130 of this chapter. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.180

11 AAC 93.200. FEE FOR DAM CONSTRUCTION PERMIT. (a) The fee for a permit to alter or repair an existing dam is based on an estimate made by the commissioner of the costs of inspections to be made by his duly authorized representative.

(b) The fee for a permit to construct a new dam is based on the proposed storage capacity. For a permit to enlarge an existing dam and storage reservoir, the fee is based on the proposed increase in storage capacity. The fee schedule is as follows:

(1) for a storage capacity of 50 acre-feet or more but less than 100 acre-feet, \$250 plus \$5 for each additional acre-foot or part of one over the first 50 acre-feet;

(2) for a storage capacity of 100 acre-feet or more but less than 500 acre-feet, \$500 plus \$1 for each acre-foot or part of one over the first 100 acre-feet;

(3) for a storage capacity of 500 acre-feet or more but less than 1,000 acre-feet, \$900 plus 50¢ for each acre-foot or part of one over the first 500 acre-feet;

(4) for a storage capacity of 1,000 acre-feet or more, \$1,150 plus 15¢ for each acre-foot or part of one over the first 1,000 acre-feet; in no case, however, will the fee be more than \$5,000. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.080

ARTICLE 4. TEMPORARY WATER USE

Section

210. Temporary water use

220. Simplified procedure to appropriate

11 AAC 93.210. TEMPORARY WATER USE.

(a) Simplified procedures to authorize the temporary use of water, as provided in sec. 220 of this chapter, will be followed if the use of water continues for less than two consecutive years and the water applied for is not otherwise appropriated.

(b) No water right or priority is established by a temporary water use permit issued under sec. 220 of this chapter. Water so used is subject to appropriation by others. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.040
AS 46.15.070(f)

11 AAC 93.220. SIMPLIFIED PROCEDURE TO APPROPRIATE.

(a) Application for a temporary water use permit must be made on a form provided by the commissioner.

(b) An application must include

(1) the filing fee as set out in the fee schedule prepared by the commissioner;

(2) a map indicating the location of the property, the take point, and the point of use.

(c) The commissioner will notify the Alaska Departments of Fish and Game and Environmental Conservation of a proposed temporary appropriation. At the applicant's expense, the commissioner will, in his discretion, give additional notice by posting or by publication in the local newspaper if the proposed appropriation is likely to affect the water rights of other persons or the public interest.

(d) The commissioner will, in his discretion, consider any pertinent information in deciding whether to issue or deny a temporary water use permit. The reason for the decision will be furnished to any person who is denied a temporary water use permit and to any person who has filed an objection.

(e) A temporary water use permit will, in his discretion, be issued subject to conditions, including suspension or termination, which he considers necessary to protect the water rights of other persons or the public interest.

(f) Denial of an application under this section does not preclude the applicant from applying for a permit under sec. 40 of this chapter. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.070(f)
AS 46.15.040 AS 46.25.100

**ARTICLE 5.
PREFERRED USE**

Section

- 230. Preferred use status
- 240. Application for preferred use status
- 250. Commissioner's decision on preferred use status
- 260. Issuance of a permit to appropriate for preferred use

11 AAC 93.230. PREFERRED USE STATUS. Preferred use status allows the use of water for a preferred use when adequate water is not available from the same source to supply all lawful appropriators. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.150

11 AAC 93.240. APPLICATION FOR PREFERRED USE STATUS. An applicant for preferred use status shall provide the commissioner written evidence that establishes, to the satisfaction of the commissioner, that

(1) the use of water is for a public water utility which serves the general public as defined by AS 42.05.701(2)(A) and AS 42.05.701(5);

(2) the available water supply is or will be inadequate in quantity to satisfy the needs of the applicant; and

(3) water conservation measures are or will be employed to minimize damages to prior appropriators as a result of preferred use status. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.150

11 AAC 93.250. COMMISSIONER'S DECISION ON PREFERRED USE STATUS. (a) If the commissioner determines that additional information is required to rule on an application, he will, in his discretion, require the submission of additional evidence, hold hearings, or provide for investigative studies.

(b) Denial of an application for preferred use status does not preclude the applicant from applying for other water rights under secs. 40 - 140 of this chapter. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.090
AS 46.15.040 AS 46.15.135
AS 46.15.060 AS 46.15.150
AS 46.15.070(f) AS 46.15.180

11 AAC 93.260. ISSUANCE OF A PERMIT TO APPROPRIATE FOR PREFERRED USE.

(a) If the commissioner grants an applicant preferred use status under sec. 250 of this chapter, the commissioner will issue a permit to appropriate for preferred use when

(1) notice has been given under sec. 80 of this chapter; and

(2) the applicant has submitted to the commissioner either certified copies of any compensation agreements or any court orders directing the payment of compensation.

(b) If there are no compensation agreements or orders and if scarce water conditions have resulted in the need for immediate action, the commissioner will

(1) order the posting of a bond by the applicant in an amount considered necessary to compensate prior lawful appropriators of record for damages sustained as the result of the reallocation; and

(2) order reallocation of available water among all users; these orders will continue in effect until an agreement on compensation is arrived at as provided in (a) of this section or until the scarce water condition is over. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020
AS 46.15.150

ARTICLE 6. ENFORCEMENT

Section

270. Enforcement
280. Emergency actions
290. Commissioner's orders

11 AAC 93.270. **ENFORCEMENT.** A violation of a provision of this chapter, a lawful order of the commissioner issued under this chapter or AS 46.15, or a term or condition of a permit or certificate issued under this chapter is subject to corrective action under secs. 280 - 290 of this chapter. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.180
AS 46.15.100 AS 46.15.250

11 AAC 93.280. **EMERGENCY ACTIONS.**

(a) If the commissioner finds that a person is causing, engaging in, or maintaining a condition or activity that involves the use of a water resource and that presents an imminent or present danger to the health, safety or welfare of the people of the state, or with the exception of changes in water quality, to the resource itself, the commissioner will, in his discretion

(1) order the person immediately to discontinue, abate, or alleviate the condition or activity; or

(2) take any other action considered necessary to alleviate the emergency.

(b) The owner of the property or the operator of the improvement or other condition that causes the emergency may be held liable for the costs associated with remedial action taken under this section, including the cost of any work done to make safe a water use structure or its appurtenances. If the person fails to make payment within 90 days, costs may be recovered by the state from the person in an action in superior court. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020 AS 46.15.180
AS 46.15.080 AS 46.15.250

11 AAC 93.290. **COMMISSIONER'S ORDERS.** (a) In order to protect the public interest the commissioner will, in his discretion, after notice and hearing, issue any of the following orders:

(1) an order prescribing construction and other engineering modifications of works or structures but not waiving the responsibility of the applicant to apply for and receive appropriate state or federal regulatory permits or licenses;

(2) a cease and desist order to any person who, by means including free-flowing wells or drainage into lower strata underground, wastes water without putting it to a beneficial use;

(3) a cease and desist order to any person substantially interfering with the appropriation of water the right to which was granted under the provisions of this chapter; and

(4) a cease and desist order to any person appropriating water without a permit, including uses exempted by 11 AAC 93.920, if the commissioner determines the unauthorized appropriation to be adversely affecting the right of prior appropriators or the public interest.

(b) If he considers it necessary to prevent or rectify a violation of this chapter, the commissioner will obtain a court order authorizing him to seize or remove structures or works of appropriation. (Eff. 12/29/79, Reg. 72; am 9/11/83, Reg. 87)

Authority: AS 46.15.010 AS 46.15.180
AS 46.15.020 AS 46.15.250

ARTICLE 7. APPEALS

Section

300. Appeal to the commiss.

11 AAC 93.300. **APPEAL TO THE COMMISSIONER.** (a) Any person who believes that he has been aggrieved by a delegated decision or order of the commissioner may, within 30 days after the date that the decision or order was mailed or personally served, appeal to the commissioner for a modification or reversal of the decision or order.

(b) Before making a decision, the commissioner may order the taking of additional evidence or the holding of a hearing if he determines that more information is necessary to rule on the appeal or if the appellant requests permission to present further information. (Eff.

2/8/67, Reg. 23; am 12/29/79, Reg. 72)
 Authority: AS 46.15.020 AS 46.15.135
 AS 46.15.070(e) AS 46.15.180

ARTICLE 8. GENERAL PROVISIONS

Section

- 910. Change of address
- 920. Exemptions
- 930. Procedure for the change of appropriations
- 940. Procedure on abandonment and forfeiture
- 950. Recording of instruments
- 960. Disclaimer of liability
- 970. Definitions

11 AAC 93.910. CHANGE OF ADDRESS.
 (a) All applicants, permit holders, and certificate holders shall promptly notify the commissioner of any change of mailing address. Failure by an applicant or permit holder to comply with this requirement is sufficient cause for discontinuance of the water appropriation procedure under secs. 40 – 140 of this chapter and closure of the case file.

(b) Correspondence and notification sent under provisions of this chapter will be sent to the last address on file with the commissioner. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020
 AS 46.15.070
 AS 46.15.120

11 AAC 93.920. EXEMPTIONS. Any person using less than a significant amount of water as defined in sec. 970 of this chapter is not guilty of a misdemeanor for appropriating water without a permit. However, any person using less than a significant amount of water acquires no water right or priority unless an application is filed and a permit or certificate is issued in accordance with secs. 40 – 140 of this chapter. Water used without a permit or certificate is subject to appropriation by others and the use of water without a water right is subject to curtailment in order to supply water to lawful appropriators of record. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72)

Authority: AS 46.15.020
 AS 46.15.180

11 AAC 93.930. PROCEDURE FOR THE CHANGE OF APPROPRIATIONS. (a) Any person who desires to change an appropriation, including a change in the location of a take point, depth of taking, nature of use, or place of use and the addition of take points, shall apply for permission to make the change on a form available from the commissioner.

(b) In determining whether a proposed change will be approved, the commissioner will consider its effect on the water rights of other persons and the public interest.

(c) The commissioner will, in his discretion, if he determines that the proposed change will not adversely affect the water rights of other persons or the public interest, issue a temporary permit to make the change. If any person claiming to be injured by the change files an objection within one year after the date the change was made, the commissioner will, in his discretion, if it appears necessary to protect the water rights of other persons, or the public interest, temporarily suspend the order permitting the change. After notice and hearing, the commissioner will, in his discretion, confirm, modify, or rescind the order granting the permit. If no objection is filed within one year, the change will become permanent, and the commissioner will issue an amended permit or certificate to represent the water right as changed.

(d) The commissioner will, in his discretion, if he is uncertain as to the effect of the proposed change on the water rights of other persons or the public interest, give notice, receive objections, and hold a hearing as provided in secs. 80, 90, and 110 of this chapter. The application may be granted and the change allowed unless an objector shows that injury will occur to a valid water right, or unless the commissioner finds that the proposed change will adversely affect or impair the public interest, or that the appropriation proposed to be changed has been abandoned or forfeited. A change may be granted in part or subjected to conditions in order to avoid injury to the water rights of other persons or the public interest. The commissioner will issue an amended permit or certificate to represent the water right as changed. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.020
 AS 46.15.160
 AS 46.15.185

11 AAC 93.940. PROCEDURE ON ABANDONMENT AND FORFEITURE. (a) If the commissioner has reason to believe that all or part of an appropriation has been abandoned or forfeited, he will conduct a preliminary investigation. If the investigation supports a finding that the beneficial use of the water has been wholly or partially abandoned or forfeited, the certificate holder will be notified that the commissioner intends to cancel his certificate for nonuse to the extent of the nonuse. The revocation notice will be sent by certified mail.

(b) The holder has 60 days from the day the notice of revocation was mailed to file objections to a preliminary determination of nonuse. Upon receipt of a timely filed objection from the holder, the commissioner will, in his discretion, take additional evidence or hold a hearing before making a final determination. If no objections are filed within the time period, the determination becomes final.

(c) Based on all the evidence, the commissioner will make a final determination after the close of the response period or, if a hearing is held, after the close of the hearing. The holder will be notified of the decision by certified mail sent to the last known address on record with the division.

(d) An appropriation that is found to be abandoned or forfeited under this section reverts to the state and the water becomes unappropriated. The commissioner will record any final determination or decision that declares an appropriation abandoned in whole or in part at the recorder's office in the district where the appropriation was located. In addition, the commissioner will, in his discretion, secure a court order for the removal of the works of appropriation.

(e) In order to implement this section the commissioner will, in his discretion, require a record of use to be submitted on a specified regular basis. (Eff. 12/29/79, Reg. 72; am 9/11/83, Reg. 87)

Authority: AS 46.15.020
AS 46.15.140
AS 46.15.160

11 AAC 93.950. RECORDING OF INSTRUMENTS. The holder of a water right issued

under this chapter shall record his certificate in the recorder's office in the district where the appropriation is located to guarantee priority against adverse claimants. (Eff. 12/29/79, Reg. 72; am 9/11/83, Reg. 87)

Authority: AS 46.15.020
AS 46.15.160
AS 46.15.170

11 AAC 93.960. DISCLAIMER OF LIABILITY. The State of Alaska and the department, its agents, and employees are not liable for any claims arising out of activities conducted under a letter of entry, permit, or certificate issued under this chapter by the holder or owner of it or any third party. Neither this chapter nor any letter of entry, permit, or certificate issued under it is intended as a waiver of sovereign immunity. (Eff. 12/29/79, Reg. 72)

Authority: AS 46.15.010
AS 46.15.020

11 AAC 93.970. DEFINITIONS. Unless the context indicates otherwise, in this chapter

(1) "adjudication" means the administrative determination of the validity and amount of a water right and includes the settlement of conflicting claims among competing lawful water users of record;

(2) "certificate of appropriation" means an instrument granting the owner the right to appropriate water, subject to the terms and conditions contained in it;

(3) "certificate of approval" means a certificate issued by the commissioner for the operation of a dam or reservoir and listing restrictions imposed by the commissioner;

(4) "commissioner" means the commissioner of the Department of Natural Resources or his delegate;

(5) "dam" means any artificial structure, together with appurtenant works, used for the purpose of impounding water; no obstruction in a canal used to raise, lower, or divert water from it and no fill or structure determined by the commissioner to be designed primarily for highway or railroad traffic is considered a dam;

(6) "dam owner" means any corporation (whether public, cooperative or otherwise), company, individual, association of individuals, their lessees, trustees, or receivers appointed by a court or government agency that owns, controls, operates, maintains, manages, or has initiated construction of a dam or reservoir;

(7) "declaration of appropriation" or "grandfather right" means a formal claim to a water right acquired by law before July 1, 1966, in existence on that date, and filed with the department within the designated filing period;

(8) "department" means the Department of Natural Resources;

(9) "division" means the division of forest, land, and water management within the Department of Natural Resources;

(10) "ground water" is any water, except capillary moisture, beneath the land surface or beneath the bed of a stream, lake, reservoir, or other body of surface water within the boundaries of the state, whatever may be the geologic formation or structure in which the water stands, flows, percolates, or otherwise moves;

(11) "permit to appropriate water" means an instrument granting the holder the right, limited to a definite period of time and subject to the terms and conditions contained in it, to construct works necessary to the appropriation of water and to establish a beneficial use;

(12) "priority" as between lawful appropriators means that first in time is first in right;

(13) "public interest" means public interest as determined by the criteria set out in AS 46.15.080;

(14) "significant amount of water" means any use of 5,000 or more gallons of water in a single day from a single source, or the regular daily or recurring seasonal use of 500 or more gallons of water per day for 10 days or more per year from a single source, or any water use that may adversely affect the water rights of other appropriators or the public interest;

(15) "storage capacity" means the total storage capacity in acre-feet at the maximum water storage elevation;

(16) "water storage elevation" means the maximum elevation of the water surface that can be obtained by the dam or reservoir without flow in the spillway;

(17) "well" means an artificial opening or artificially altered natural opening more than 18 feet in vertical depth below land surface, however made, by which ground water is sought or through which ground water flows under natural pressure or is artificially withdrawn, except that this definition does not include holes or shafts drilled or dug for the purpose of exploration or production of oil, gas, or valuable minerals unless the hole or shaft is actually used for the production of water;

(18) "certificate of reservation" means an instrument granting a reservation of water subject to the terms and conditions contained in it;

(19) "instream flow" means an instantaneous flow rate of water through a stream during specified periods of time, from a designated location upstream to a designated location downstream, required to support an application to reserve water for one or more permissible purposes, as determined by an appropriate study;

(20) "reservation of water" means to appropriate water for maintaining a specified instream flow or level of water at a specified point on a stream or water body or in a specified part of a stream or water body for specified periods of time and for one or more permissible purposes,

(21) "methodology" means the scientific or technical procedures used to quantify water;

(22) "water body" means surface water in a depression of land, including intragravel water or sloughs, which is supplied from drainage, upwellings, springs, or groundwater;

(23) "stream" means any body of flowing water, including a river, creek, tributary, fork,

and rivulet. (Eff. 2/8/67, Reg. 23; am 12/29/79, Reg. 72; am 9/11/83, Reg. 87)

Authority: AS 46.15.020 AS 46.15.133
AS 46.15.040 AS 46.15.145
AS 46.15.080

CHAPTER 94.
TRAPPING CABIN CONSTRUCTION
PERMITS

Article

- 1. Applicant Qualifications
(11 AAC 94.010–11 AAC 94.030)
- 2. Conditions of Permit
(11 AAC 94.210–11 AAC 94.260)
- 3. Renewal and Termination
(11 AAC 94.310–11 AAC 94.330)
- 4. General Provisions (11 AAC 94.410)

ARTICLE 1.
APPLICANT QUALIFICATIONS

Section

- 10. Application for permit
- 20. Cabin location
- 30. Issuance of permit

11 AAC 94.010. APPLICATION FOR PERMIT. (a) Application for a trapping cabin construction permit must be made on a form provided by the division and must include the following:

(1) a declaration that each of up to three cabins is needed for the applicant's operation of an established trapline;

(2) evidence that the applicant has a current, valid state trapping license;

(3) evidence of the applicant's regular use of the established trapline, such as tax returns or fur receipts showing previous income derived from trapping, or official records of the Department of Fish and Game, or signed statements by witnesses or officers of the Department of Fish and Game or the division of fish and wildlife protection of the Department of Public Safety;

(4) identification of the established trapline and each cabin site on a United States Geologic Survey Map, 1:63360 scale or its equivalent;

(5) an agreement by the applicant to assume full responsibility for forest fire protection, the cabin structure and area within 150 feet of it, and full liability for any damages resulting from his negligence; and

(6) the notarized signature of the applicant.

Fact Sheet:

**DAM SAFETY, CONSTRUCTION and
MODIFICATION in ALASKA**



Alaska Department of
**NATURAL
RESOURCES**

Division of Land and Water Management
September 1984

**WHO IS ULTIMATELY RESPONSIBLE FOR THE SAFETY
OF DAMS IN ALASKA?**

Old English common law, on which our legal system is based, holds that the capture of water in itself is a hazardous activity. Therefore, whoever captures the water is liable for any damages caused. In almost all cases, the dam owner is responsible.

TO WHOM DOES THIS FACT SHEET APPLY?

Any person undertaking the construction, enlargement, alteration, repair or takes out of service a dam either 10 feet or more in height or impounding 50 acre-feet or more of water, must submit the appropriate application together with plans and specifications to the State of Alaska, Department of Natural Resources, Division of Land and Water Management. A "person" includes:

- An individual
- Partnership
- Association
- Public or private corporation
- State agency
- State political subdivision

**HOW IS THE HEIGHT AND WATER VOLUME OF A DAM
MEASURED?**

- If the dam is across a watercourse, its height is measured vertically from the natural bed of the water-course of the downstream toe of the dam to the maximum storage elevation.
- If the dam is not across a watercourse, its height is measured from the lowest elevation of the outside limit of the dam to the maximum storage elevation.

Water volume is always expressed by the acre-foot unit, which is the volume that would cover one acre to a depth of one foot. Since water volume, rather than land coverage, is the measured quantity, a pond, two feet deep, covering a one-half acre land area, would also be one acre-foot in volume. State engineers will assist in determining the exact water volume.

**WHAT ARE THE REQUIREMENTS TO BUILD OR
MODIFY A DAM?**

- File an "Application for Permit to Construct or Modify a Dam" that includes complete plans and specifications. Forms may be obtained at the Division of Land and Water Management District offices listed on the reverse side of Fact Sheet.
- The owner will be notified in writing whether or not changes must be made.
- When the application is approved, construction may begin.

During construction, the state will inspect the work to make sure the dam is being built according to the approved plans and specifications. When the dam is completed and the state is satisfied as to its safety, the owner is issued a water rights certificate that allows him to store water according to certain terms, such as specified water level.

Articles 2 and 3 of the Alaska Administrative Code (11 AAC 93.040 through 200) clearly detail all procedures governing the permitting process. Copies of the code are available at any Division of Land and Water Management district office.

ARE OTHER PERMITS REQUIRED?

In most cases water rights permits are required for a water diversion or impoundment. These may be obtained through the Division of Land and Water Management's district offices in your area. The permit itself is not a water right, but is issued to cover the period of developing the water source and constructing the dam. Once use of the dam begins, and water quantity actually used is established, a certificate of appropriation can then be issued. This certificate is the legal document which actually conveys the water rights.

WHAT OTHER AGENCIES MIGHT REQUIRE PERMITS AND COORDINATION?

- ° Dept. of Environmental Conservation
- ° Alaska Dept. of Fish and Game
- ° U.S. Fish and Wildlife Service
- ° U.S. Corps of Engineers
- ° Federal Energy Regulatory Commission
- ° U.S. Forest Service
- ° Local Governments

HOW MUCH ARE PERMIT FEES?

The fee for a permit to alter or repair an existing dam is based on an estimate made by the Department of Natural Resources of the costs of inspections to be made. The fee for a permit to construct a new dam is based on the proposed storage capacity. For a permit to enlarge an existing dam and storage reservoir, the fee is based on the proposed increase in storage capacity. The fee schedule is found in the Alaska Administrative Code (11 AAC 93.200) and ranges from a minimum of \$250 for 50 acre-feet to a maximum of \$5,000 for 26,666 acre-feet.

DOES THE STATE PERFORM SAFETY INSPECTIONS?

Yes, in an effort to protect the public from present or future hazards related to the storage of water, the state provides technical assistance to owners and conducts periodic inspection of dams.

CAN THE STATE TAKE ACTION TO CORRECT UNSAFE DAMS?

Alaska maintains a statewide inventory of dams and classifies them according to how often they should be inspected based on height, size of reservoir, and location in relation to population and property. Should it be determined that the structure is unsafe, the state has authority to require that the owner correct the unsafe condition. The owner is responsible for the safe operation and maintenance of the dam in all cases.

Additional information available for construction of dams or development of micro-hydro energy may be obtained from the following sources:

- ° Division of Land and Water Management
- ° U.S. Soil Conservation Service
- ° Guidelines for the Design and Construction of Small Embankment Dams
Division of Safety of Dams
P.O. Box 308
Sacramento, California 95802
- ° Design of Gravity Dams
U.S. Dept. of the Interior
Bureau of Reclamation
1376 Denver Federal Center
Denver, Colorado 80225
- ° Hydroelectric Commercialization Kit
State of Alaska
Division of Community Development
949 E. 36th Street, 4th Floor
Anchorage, Alaska 99508

**DEPARTMENT OF NATURAL RESOURCES
DIVISION OF LAND AND WATER MANAGEMENT
DIVISION, DISTRICT AND AREA OFFICES**

Division of Land and Water Mgmt.
555 Cordova Street, 4th Floor
Pouch 7-005
Anchorage, Alaska 99510
Phone: 276-2653

Southcentral District
3601 C Street, 10th Floor
Pouch 7-005
Anchorage, Alaska 99510
Phone: 276-2653

Southeastern District
400 Willoughby Avenue
Pouch MA
Juneau, Alaska 99811
Phone: 465-3400

Northcentral District
4420 Airport Way
Fairbanks, Alaska 99701
Phone: 497-2243

Mat-Su Area Office
Century Plaza, Suite 202
P.O. Box 874008
Wasilla, Alaska 99687
Phone: 376-4595

Draft

Introduced: 1/25/85
Referred: Resources, Judiciary
and Finance

BY THE RULES COMMITTEE BY
REQUEST OF THE GOVERNOR

1 IN THE SENATE

2 SENATE BILL NO. 95

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FOURTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to supervision of safety of dams and
7 reservoirs; and providing for an effective date."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. AS 11.56.800(a) is amended to read:

10 (a) A person commits the crime of making a false report if the
11 person knowingly

12 (1) gives false information to a peace officer with the
13 intent of implicating another in a crime;

14 (2) makes a false report to a peace officer that a crime
15 has occurred or is about to occur; [OR]

16 (3) makes a false report or gives a false alarm that a fire
17 or other incident dangerous to life or property calling for an emer-
18 gency response has occurred or is about to occur; or

19 (4) makes a false report to the Department of Natural
20 Resources concerning the condition of a dam or reservoir under AS 46.-

21 17.010 -- 46.17.140: ¹³⁰

22 * Sec. 2. AS 46 is amended by adding a new chapter to read:

23 CHAPTER 17. SUPERVISION OF SAFETY OF DAMS AND RESERVOIRS.

24 Sec. 46.17.010. PURPOSE. It is the purpose of this chapter to
25 provide for the regulation, supervision, and periodic inspection by
26 the ^{COMMISSIONER} ~~department~~ of privately or state owned dams, reservoirs, and
27 appurtenant works in order to ensure that the design, construction,
28 enlargement, alteration, repair, maintenance, operation, and removal
29 of dams and reservoirs is consistent with the protection of life and

1 property.

2 Sec. 46.17.020. ADMINISTRATION AND STAFFING. The supervision of
3 the safety of dams or reservoirs is the responsibility of the ~~depart-~~^{Commissioner}
4 ~~ment~~. The ~~department~~^{Commissioner} shall employ a licensed and qualified engineer,
5 experienced in the design and construction of dams and reservoirs, and
6 other employees necessary for performing the duties outlined in this
7 chapter. The ~~department~~^{Commissioner} may contract with engineering consultants not
8 employed by the state when necessary to assist in the performance of
9 its duties under this chapter.

10 Sec. 46.17.030. REGULATIONS AND ORDERS. The ~~department~~^{Commissioner} shall
11 adopt regulations and issue orders necessary for carrying out the
12 provisions of this chapter.

13 Sec. 46.17.040. APPROVAL REQUIRED. (a) Except in the perfor-
14 mance of routine maintenance and operations not affecting structure
15 safety, no person may construct, enlarge, repair, alter, remove,
16 maintain, operate or abandon a dam or reservoir without the approval
17 of the ~~department~~^{Commissioner}.

18 (b) The owner of a dam or reservoir that was constructed or was
19 in operation before the effective date of this Act shall file an
20 application with the ~~department~~^{Commissioner} for the approval of the dam or reser-
21 voir, in accordance with regulations adopted by the ~~department~~^{Commissioner}.

22 (c) Nothing in this chapter exempts an applicant under this
23 section from the requirements of other statutes.

24 Sec. 46.17.050. INSPECTIONS. The ~~department~~^{Commissioner} shall inspect at
25 least once every five years every dam and reservoir subject to this
26 chapter. Upon receipt of a written complaint alleging that the person
27 or property of the complainant is endangered by the construction,
28 enlargement, repair, alteration, maintenance, or operation of a dam or
29 reservoir, the ~~department~~^{Commissioner} shall physically inspect the dam or

CO, ~~up~~
~~AD~~

is this necessary
throughout

1 reservoir, unless the data, records, and inspection reports on file
2 with the ^{commissioner} department are adequate to determine that the complaint has
3 no foundation.

4 Sec. 46.17.060. ENTRY UPON PRIVATE PROPERTY. In taking any
5 action under this chapter, the ^{Commissioner} department's agents or employees may
6 enter the dam or reservoir premises as may be necessary. } Provide
notice
except
emergencies

7 Sec. 46.17.070. DETERMINING DANGER. In determining whether a
8 dam or reservoir or proposed dam or reservoir constitutes or would
9 constitute a danger to life or property, the ^{Commissioner} department shall, at a
10 minimum, consider the possibility that the structural integrity of the
11 dam or reservoir might be endangered by overtopping, seepage, settle-
12 ment, erosion, cracking, earth movement, earthquakes, or the failure
13 of bulkheads, flashboards, gates, or conduits. If the ^{Commissioner} department
14 determines that the dam or reservoir is unsafe, ^{The commissioner} it shall order the
15 owner to take action the ^{Commissioner} department considers necessary to ensure the
16 protection of life and property.

17 Sec. 46.17.080. INJUNCTION AND DAMAGES. With the assistance of
18 the attorney general, the ^{Commissioner} department may seek an injunction and dam-
19 ages in the enforcement of its orders or the provisions of this chap-
20 ter.

21 Sec. 46.17.090. JUDICIAL REVIEW. A final action of the ^{Commissioner} depart-
22 ment under this chapter is subject to judicial review as provided in
23 the Administrative Procedure Act, AS 44.62.

24 Sec. 46.17.100. VIOLATION OF THIS CHAPTER IS A MISDEMEANOR. A
25 person who knowingly violates a provision of this chapter, or knowingly
26 violates the terms of an approval, order, regulation, or require-
27 ment of the ^{Commissioner} department made under this chapter, or knowingly ob-
28 structs, hinders, or prevents the ^{Commissioner} department's agents or employees
29 from performing duties under this chapter, is guilty of a class A

1 misdemeanor; upon conviction, the person is punishable by imprisonment
2 under AS 12.55.135(a), or by a fine of not more than \$10,000, or by
3 both. Each day that a violation continues constitutes a separate
4 offense.

5 Sec. 46.17.110. OTHER GOVERNMENT AGENCIES. (a) A municipal
6 corporation organized under AS 29 may not regulate, supervise, in-
7 spect, or provide for the regulation, supervision, or inspection of a
8 dam or reservoir in this state, or provide for the construction,
9 maintenance, operation, or removal or abandonment of them, or limit
10 the size of a dam or reservoir or the amount of water that may be
11 stored in them, if its action would conflict with the powers and
12 duties vested in the ^{commissioner} department. The ^{commissioner} department may enter into co-
13 operative agreements with municipal corporations and other state and
14 federal agencies to effectuate the purpose of this chapter.

15 (b) This chapter does not apply to a federally owned or operated
16 dam or reservoir.

17 (c) Nothing in this chapter affects the powers of the Department
18 of Environmental Conservation or the Department of Fish and Game.

19 Sec. 46.17.120. ACTION AGAINST STATE FOR DAMAGES. No person may
20 bring an action against the state, ^{The Commissioner} ~~the department, or agents or em-~~
21 ployees of the state, for the recovery of damages caused by the par-
22 tial or total failure of a dam or reservoir, or by the operation of a
23 dam or reservoir, or by an act or omission in connection with any of
24 the following:

25 (1) approval of the construction of a dam or reservoir, or
26 approval of flood-handling plans during or after construction;

27 (2) issuance or enforcement of orders relating to mainte-
28 nance or operation of the dam or reservoir;

29 (3) control or regulation of the dam or reservoir;

1 (4) measures taken to protect against failure of the dam or
2 reservoir during an emergency; or

3 (5) investigations or inspections authorized under this
4 chapter.

5 Sec. 46.17.130. DUTIES OF OWNER. Nothing in this chapter re-
6 lieves an owner of a dam or reservoir of the duties or liabilities
7 incident to the ownership or operation of the dam or reservoir.

8 Sec. 46.17.900. DEFINITIONS. In this chapter, unless the con-
9 text requires otherwise,

10 (1) "alterations" or "repairs" means only those alterations
11 or repairs which may directly affect the safety of the dam or reser-
12 voir, as determined by the ^{Commissioner} ~~department~~;

13 (2) "appurtenant works" includes structures such as
14 spillways, either in a dam or separate from it; a reservoir and its
15 rim; low level outlet works; and water conduits such as tunnels,
16 pipelines, or penstocks, whether running through the dam or through
17 its abutments;

18 (3) "dam" includes any artificial barrier and appurtenant
19 works which may impound or divert water and (A) which has or will have
20 an impounding capacity at maximum water storage elevation of 50 acre-
21 feet or more, or (B) which is or will be 10 feet or more in height
22 measured from the lowest elevation at the downstream toe of the arti-
23 ficial barrier to the crest elevation of the barrier but excluding any
24 spillway;

25 (4) ³ "department" means the ^{Commissioner} ~~Department~~ of Natural Resources; ^{Com of the}

26 (5) "enlargement" means an alteration to an existing dam or
27 reservoir which raises or is capable of raising the water storage
28 elevation of the water, or which increases the quantity of water
29 impounded by the dam or reservoir;

1 (6) "owner" means a person who owns, controls, operates,
2 maintains, manages, or proposes to construct a dam or reservoir, and
3 includes the following:

4 (A) the state and its agencies and political subdivi-
5 sions;

6 (B) a public utility; and

7 (C) the appointed or authorized agents, employees,
8 lessees, receivers or trustees of any owner;

9 (7) "person" means the same as in AS 01.10.060, and, in
10 addition, includes the state and its agencies and political subdivi-
11 sions;

12 (8) "reservoir" means any basin appurtenant to a dam, which
13 may impound water.

14 * Sec. 3. This Act takes effect immediately in accordance with AS 01.-
15 10.070(c).

DAM SAFETY

WHAT IS DAM SAFETY?

- ~ Dam safety is a comprehensive program to protect lives, property, and natural resources placed at risk by the construction of a dam.
- ~ Proposed dams are technically reviewed and approved prior to construction.
- ~ Existing dams receive regular periodic inspections for safety.

WHAT IS THE STATE'S RESPONSIBILITY FOR DAM SAFETY?

- ~ The State of Alaska, under its police powers to provide for public safety, is responsible for regulation of non-federal dams.

WHAT IS DNR'S AUTHORITY TO REGULATE DAMS?

- ~ AS 46.15, Alaska Water Use Act
- ~ 11 AAC 93, Dam Safety and Construction

IS THIS AUTHORITY ADEQUATE TO PROVIDE FOR A COMPREHENSIVE DAM SAFETY PROGRAM?

- ~ The present statutory and regulatory authorities are not clear and do not provide for a comprehensive dam safety program which will adequately protect lives, property, and natural resources.
- ~ Proposed legislation has been sent to the Governor providing for a comprehensive dam safety law for Alaska based on the United States Committee on Large Dams' Model State Dam Safety Law.

WHAT ARE THE MAJOR PROVISIONS OF THE PROPOSED BILL?

- ~ Makes DNR responsible for the supervision of safety of dams. Pg. 2 line 2
- ~ Requires DNR approval for construction, repair or modification of a dam. Pg. 2 line 13
- ~ Requires DNR to inspect dams at least every five years. Pg. 2 line 24
- ~ Gives DNR authority to enter property on which the dam is located for inspection. Pg 3 line 4
- ~ Protects the state from liability as a result of inspection and regulatory functions. Pg 4 line 19
- ~ Makes it a crime to report false information to DNR concerning the condition of a dam. Sec. 1

WHO CONSTRUCTS DAMS IN ALASKA AND FOR WHAT PURPOSE?

~ Dams are constructed by:

- 1) municipalities
- 2) private individuals
- 3) industry and miners
- 4) Alaska Power Authority
- 5) federal agencies
- 6) aquaculture associations

~ Dams are used for:

- 1) public and industrial water supplies
- 2) hydroelectric power
- 3) flood control
- 4) recreation

HOW MANY DAMS ARE THERE IN ALASKA AND WHO REGULATES THEM?

~ There are 177 dams currently on the Alaska Dam Inventory.

- 1) 55 are very small dams regulated under DNR water rights procedures
- 2) 122 come under the criteria for scheduled dam safety inspections
 - a) 20 of these are regulated by FERC cooperatively with DNR
 - b) 102 are regulated exclusively by DNR

WHO IS LIABLE FOR DAMAGE CAUSED BY A DAM?

~ The owner of the dam is liable for the damage.

WHAT IS THE HISTORY OF THE DAM SAFETY PROGRAM IN ALASKA?

- ~ During the late 1970's and early 1980, the Corps of Engineers developed an inventory and performed several Phase I (visual) inspections on non-federal dams.
- ~ In 1981, DNR took over the regulation of non-federal dams.

WHAT PERSONNEL ARE ASSIGNED TO THE DAM SAFETY PROGRAM?

- ~ Technical Engineer, Range 21 -- full time
- ~ Engineering Assistant II, Range 16 -- full time
- ~ Hydrologist I, Range 14 -- part time
- ~ Natural Resource Manager III, Range 22 -- part time (general supervision)

WHAT ARE SOME OF THE FUNCTIONS OF THE DAM SAFETY PROGRAM?

- ~ Safety inspections of dams.
- ~ Maintenance of a dam inventory.
- ~ Review and approval of new dams and modifications or repairs of existing dams.
- ~ Technical assistance to owners.

WHAT ARE SOME OF THE RECENT MAJOR ACCOMPLISHMENTS OF THE DAM SAFETY PROGRAM?

- ~ Safety inspections completed under professional services contracts for 8 dams.
- ~ Contracts let for the safety inspection of an additional 13 dams during FY '85.
- ~ Development of proposed dam safety legislation.
- ~ Membership in the Association of State Dam Safety Officials.

WHAT ARE THE FREQUENCIES PROPOSED FOR PERIODIC DAM SAFETY INSPECTIONS?

- ~ Three years for high and significant hazard dams.
- ~ Five years for low hazard dams.

WHO WILL DO THE INSPECTIONS AND WHAT DO THE INSPECTIONS COST?

- ~ High and significant hazard dams will be inspected by contracting with engineering consultants at approximately \$8,000 per dam. (The national average is \$10,000 per dam.)
- ~ Low hazard dams will be inspected by DNR staff at approximately \$4,000 per dam. (This includes personal services.)

WHAT ARE RECENT BUDGET FIGURES FOR THE DAM SAFETY PROGRAM?

FY 84	133.7	(40.0 contracted inspections)
FY 85	216.3	(138.7 contracted inspections)

DNR LEGISLATIVE STAFF BRIEFING
JANUARY 1985

BRIEFING TOPIC: WATER RIGHTS AND DAM SAFETY

DATE AND TIME: Friday, February 1, 1985, 2:00-2:30 p.m.

DIVISION CONTACT (Name and phone): L. A. Dutton, Chief, Water Management,
Division of Land and Water Management, 265-4317

OTHER DNR STAFF PRESENT (Names and phones):

BRIEFING OUTLINE (Narrative and figures):

I. Water Appropriations

Most of the resources under DLWM's Water Management programs are committed to the adjudication of water rights applications which include a broad range of uses such as: a single family home using up to 500 gallons a day; a municipal public water supply using millions of gallons a day; a seasonal seafood operator using large quantities of water; an impoundment for electric generation; a placer mining operation; and an agency requesting a minimum flow on a stream to guarantee the existence of a salmon run.

Alaska is experiencing water shortages and water contamination in many areas. Notable examples are Eagle River, Anchorage Hillside, Fairbanks, Chena Ridge at Fairbanks, Mendenhall Valley near Juneau, Wasilla, and the North Slope.

Instream flow reservations assure enough water exists in a stream or lake for fish and wildlife, recreation, navigation, and water quality. These reservations will become more important as conflicts arise from resource development. A reservation is being adjudicated for the Terror River salmon as a result of the Terror Lake hydro project.

Concerns raised by prior appropriators and the general public about water shortages and water allocation problems are on the rise statewide. Water shortages experienced by homeowners in Eagle River during the 1984 summer exemplify the problems. Prior appropriators in Homer, North Kenai, Juneau's Auke Bay, and Anchorage's Hillside area

DNR LEGISLATIVE STAFF BRIEFING, continued
 Briefing Topic: Water Rights and Dam Safety

have voiced complaints of interference with their water rights and water supply. Objections from the public notice of proposed appropriations for major subdivisions and developments are increasing statewide from prior appropriators and the general public. Private citizens are having difficulty quantifying and applying for reservations for instream water use, due largely to the lack of basic ground water, surface water, and water quality data. Finally, as interest in water supply and water rights increases, complaints from all sectors are being voiced to adjudicate water rights in a more timely manner.

Casefile Status

	No. of Files	FY '84
New Applications	934	
Apln's Processed	1211	
Apln's Pending	702	
		FY '85 Year to Date as of 11/30/84
New Applications	730	
Apln's Processed	668	
Apln's Pending	869	

DNR LEGISLATIVE STAFF BRIEFING, continued
Briefing Topic: Water Rights and Dam Safety

II. Federal Reserved Water Rights

Federal Reserved water rights may exist wherever there is a federal reservation -- e.g., a military base or a national forest, park, or wildlife refuge. These rights must be adjudicated to assure an equitable allocation of available water supplies among all appropriators. Federal law (McCarren Amendment) provides for the adjudication of federal reserved rights in state court.

The proposed legislation amending and expanding the Alaska Water Use Act (AS 46.15) will provide for the efficient and orderly adjudication of federal reserved water rights in state superior court, and administrative adjudication of non-federal water rights for a hydrologic basin when shortages occur.

Indian River near Sitka is the first federal reserved water right adjudication started in the state and the only one underway. There are few involved parties and only surface water is being used so the adjudication should not be a complex one.

DNR LEGISLATIVE STAFF BRIEFING, continued
Briefing Topic: Water Rights and Dam Safety

III. Water Resource Planning

To assure that water resources receives appropriate consideration in the state's overall land and resource planning efforts, the Water Management Section of DLWM participates in the development of statewide, regional, and management plans. The planning process serves as the mechanism whereby water related issues and conflicts are adressed; and policies guiding future water management are proposed. Coordination is provided between DNR's Regional Office water staffs, other government agencies, and DLWM's Resource Allocation Section (the planning office) for plan input and review. Water use data is provided for inclusion in the plans as part of the resource analysis.

The Water Management Section coordinates DLWM's review of the Division of Geological and Geophysical Surveys' "AWARE 5-Year Plan". The plan prioritizes and schedules DGGs's hydrologic studies and water resources evaluation projects for providing DLWM's water resource managers with information essential to water resource planning and management. Each DNR regional office water staff meets annually with Water Management and DGGs representatives to review, priortize, and schedule water resource studies proposed in the AWARE plan.

The Alaska Water Use Data System, a part of the water resource planning effort, is a joint DNR-USGS effort to collect water use data statewide to determine existing levels and types of water use. This data will ultimately be used to project water demands which will be a valuable planning tool for future water management and the identification of sites suitable for settlement and development.

While attempting to collect water use data, the Water Management Section has encountered reluctance and poor response from several of the public water suppliers. Consequently, water use data is sketchy or lacking for many areas. It is essential that the state obtain this information for the purposes of determining future water demands and management, and to assist in settlement and development sitings. Poor public response is attributed to not understanding the practical benefits that comprehensive water use data and analysis can provide. Increased direct contact with public water suppliers and better informing local citizens, through public meetings and use of publications and the media, is needed to improve the public's understanding of the water use data program.

DNR LEGISLATIVE STAFF BRIEFING, continued
Briefing Topic: Water Rights and Dam Safety

IV. Western States Water Council

Alaska became a full-member of the Western States Water Council in July 1984. The Council, whose membership includes 13 states west of the Mississippi, is an arm of the Western Governors Association and provides an important forum for establishing uniform states' positions on federal water related legislation and for dealing with federal agencies. The Council provides numerous other services including a source for water management information, a legal repository for water cases, and hosts various water related seminars and symposiums. The Council meets quarterly in January, April, July, and October.

In addition to the governor, who serves as an ex-officio member, each state is entitled to three representatives appointed by and serving at the pleasure of the governor. Alaska's representatives, although not yet formally appointed, are expected to be Attorney General Norman C. Gorsuch, Department of Law; Commissioner Richard A. Neve', Department of Environmental Conservation; and Commissioner Esther C. Wunnicke, Department of Natural Resources.

At the present time, DLWM's Water Management Section within DNR plays a coordinating role in maintaining Alaska's membership and representation and serves as a principal contact point in Alaska for the Council.

Alaska will host the Western States Water Council's 79th Quarterly meeting in July, 1985. The meeting is scheduled for July 18 and 19 at the Sheraton Anchorage Hotel.

V. Alaska Water Resources Board

The Governor's water advisory body, the Water Resources Board, meets twice annually to discuss water issues, take testimony, and develop recommendations for wise water resource use statewide. The Water Management Section is responsible for organizing the Board's meetings and for providing administrative and clerical support for the Board. The Board will meet in Juneau, March 5-7, 1985.

DNR LEGISLATIVE STAFF BRIEFING, continued
Briefing Topic: Water Rights and Dam Safety

VI. Dam Safety

Of the 177 inventoried dams in Alaska, about 120 are state jurisdictional dams and 20 of these are regulated by the Federal Energy Regulatory Commission. The remaining 100 dams are regulated exclusively by DNR. An ongoing dam safety inspection program initiated in 1984 provides for inspecting these dams once every five years. The high and significant hazard dams are being inspected by private engineering firms under contract to the state. The level of expertise and quality of the inspections are high. Low hazard dams are inspected by DNR staff. During FY '84, 11 dams were inspected throughout the state. Only one of these dams had a major safety problem. Most safety problems identified are operational and maintenance related. An additional 10 dams will be inspected in FY '85 and the remaining state regulated dams will be inspected during the next three years.

While Alaska's dams have been neglected for several years since the Corpsof Engineers ended their program of inspections of non-federal dams, inspections by DLWM have failed to identify any serious problems with one or two exceptions. Most of the problems identified called attention to the need for improved operation and maintenance procedures. One of the real benefits at this point in time is the identification of these problems before they become serious and endanger life and property as well as require large expenditures by the owners for remedial work. One exception has been the Switzer Creek No. 2 Dam near Juneau which was constructed without approved plans and specifications and has serious problems with regard to accepted engineering and construction standards.

The proposed dam safety legislation will give the state the clear authority and enforcement powers needed to protect life and property below impoundments.

Note: See attached publications list with copies of referenced publications.

DNR LEGISLATIVE STAFF BRIEFING, continued
Briefing Topic: Water Rights and Dam Safety

DIVISION OF LAND AND WATER MANAGEMENT

Water Management Section Publications*

° State of Alaska Water User's Handbook

An introduction to the Alaska Water Use Act, how to apply for water rights, and the statutes governing Alaska's water use. 45 pgs.

° Fact Sheet: Water Rights in Alaska

A two page summary of water rights: what they are; how to obtain them; why and where to apply.

° Fact Sheet: Dam Safety, Construction, and Modification in Alaska

A two page summary of dam safety responsibility; who it affects; what dams are affected; agencies to contact.

° Fact Sheet: Reserving Water For Instream Use

A two page summary of: what water reservations are; who may apply; how to apply; offices to contact.

° AWUDS - The Alaska Water Use Data System

A brochure: the who and why of water use data collection and contact agencies.

° Recommendations for Water Resources Planning and Administration (1976) by Frank J. Trelease

A report prepared under contract to Alaska Analyzing the need of and a recommendation for a state water plan. 75 pgs.

*In addition to the above, the Water Management Section has about 18 other publications consisting mainly of special reports published since the mid seventies. Much of the material is out-of-date, but still has some reference value.

WATER RESOURCES MANAGEMENT

BRIEFING PAPER

WHAT ARE WATER RIGHTS?

A water right is simply the right to use surface or subsurface water. In Alaska, there are no rights to groundwater based on ownership of the overlying land, nor are there any rights to surface waters based on ownership of the adjoining land (riparian water rights). Instead, our system is based on three propositions:

- 1) Only those who put the water to beneficial use should have rights to that water.
- 2) No one should have rights to more water than he can actually use.
- 3) The ability of an established water user to obtain adequate water supplies should not be jeopardized by subsequent appropriations from the water source. (Doctrine of prior appropriation)

A water right is a property right. When a water right is granted, it becomes attached to, or appurtenant to, the land where the water is being used for as long as it is used. If the land is sold, the water right goes with the land to the new owner, unless it is separated from the land with the approval of the Department of Natural Resources.

Alaska's Constitution (Art. VIII, Sec. 13) reserves all surface and subsurface waters to the people for common use, makes them subject to appropriation, and further provides that prior appropriation gives prior right.

HOW ARE WATER RIGHTS ACQUIRED?

Water rights are acquired by appropriation.

Prior to appropriating water, a person must first make application to DNR for a permit to appropriate.

Appropriating water generally involves:

- developing the means (impoundment-dam, diversion-pipe, or well) to capture and take the water
- the actual capturing or taking
- putting the water to a use that will benefit the appropriator or the public

If the water is not yet in use, a permit will be issued to develop the water source and to begin beneficial use. Only after the water is being beneficially used is a Certificate of Appropriation issued. This is the legal document which conveys water rights.

WHAT IS THE WATER RIGHTS PROGRAM?

- DNR is charged by statute (as 46.15) with the responsibility for administering a water rights program for Alaska.
- The program, as developed, provides a system for receiving water rights applications, adjudicating rights, and maintaining water rights records.
- As of January 1985, there were 11,806 water rights casefiles. In FY 84, 934 new applications were received.

W A computerized tracking system (LAS system) has been in operation since 1981 to facilitate the handling of water rights casefiles.

- On the average, each water rights casefile requires about 1.5 man-days for adjudication.
- Currently a total of 12 people distributed between the three regions are adjudicating water rights casefiles, while the Central Office has the equivalent of three full time positions assigned to the water rights program.

Refer to notes - see "Numbers" Pg 1

HOW DOES THE WATER RIGHTS PROGRAM BENEFIT THE CITIZEN?

- With an established water right, individuals have a legal standing to assert that right against conflicting uses of water with people who do not have water rights or who are junior in priority.
- The Water Rights Program has a built-in notification system mandated by statute by which the public and the appropriate state and federal agencies are kept informed of proposed projects which may affect water supplies. The Department of Natural Resources must answer the concerns of water rights holders in the vicinity of proposed projects before issuing new water rights.
- State Water Managers take an active role in negotiations involving competing uses of water to ensure that the rights of small appropriators are not overlooked.
- Regional water officers perform field inspections to assist people in determining how much water is needed for a particular use and to insure that the requested water is actually being utilized.

Problems of the interest

HOW DOES THE STATE BENEFIT FROM THE WATER RIGHTS PROGRAM?

- ° Water is a limited resource. In Alaska, the list of trouble areas experiencing water supply problems grow every year:

Juneau (Mendenhall Valley, Auke Bay)

Craig

Hoonah

Ketchikan

Sitka

Fairbanks (Farmers Loop Road, Ester Dome, Chena Ridge, Birch Hill)

North Slope (areas experiencing oil exploration and/or development)

Sitka

Fairbanks (Farmers Loop Road, Ester Dome, Chena Ridge, Birch Hill)

North Slope (areas experiencing oil exploration and/or development)

Anchorage (Hillside; South Anchorage - Jewel Lake, Rabbit Creek, Potter Marsh); Eagle River, Birchwood/Peters Creek)

Wasilla

North Kenai

Homer

Unalaska

Glennallen

The Water Rights Program is one of many tools that the State of Alaska uses to manage its water resources. The Water Rights Program provides an equitable system of water resource allocation and an orderly system of conflict resolution.

Instream Flow Reservations

IFR's

WHAT ARE RESERVATIONS OF WATER FOR INSTREAM USE?

- ^ A reservation of water is a type of water right where a certain amount of water in a lake or stream is reserved, or set aside, and is declared unavailable for diversionary water uses.
- ^ As authorized by AS 46.15.145, a reservation of water for instream use may be made to ensure there is sufficient water in a lake or stream for the protection of:
 - fisheries and wildlife
 - water quality
 - navigation and transportation
 - recreation

HOW ARE RESERVATIONS OF WATER OBTAINED?

- ^ Private citizens, organizations, or governmental agencies may apply to the Department of Natural Resources for reservations of water.
- ^ Reservations are obtained in the same way as out-of-stream appropriations.

IFR's are public water rights and cannot be relinquished, revoked, or otherwise ended without going through adjudication, public notice, etc. - to ensure the public interest is considered

FEDERAL RESERVED WATER RIGHTS

WHAT ARE FEDERAL RESERVED WATER RIGHTS?

by specific reservation or

- ~ Federal reserved water rights are created by implication when federal lands are withdrawn from entry (by Congress or other lawful means) for federal use.
- ~ Water rights, both out-of-stream and instream, are either generally or specifically reserved for the purposes of the reservation.
- ~ Characteristics of a federal reserved water right include:
 - 1) it may be created without diversion or beneficial use
 - 2) it is not lost by non-use
 - 3) its priority dates from the date the land is withdrawn
 - 4) it is the right to the amount of water reasonably necessary to satisfy both existing and reasonable foreseeable future uses of water for the purposes for which the land is withdrawn

HOW MUCH LAND IN ALASKA HAS FEDERAL RESERVED WATER RIGHTS?

- ~ Of the 367.7 million acres in Alaska, federal reserved water rights exist on almost 60 percent of the land mass, or over 217 million acres:

military land - 2.5 million acres

national parks - 51 million acres

fish and wildlife refuges - 76 million acres

national forests - 23.2 million acres

BLM lands - 65 million acres

- ~ Native allotments may also carry federal reserved water rights, although this has not been clearly established in Alaska.

HOW ARE FEDERAL RESERVED WATER RIGHTS ADJUDICATED?

- ~ The doctrine of federal reserved water rights is a judicial creation. The United States Supreme Court first recognized federal reserved water rights in Winters v. United States, 207 U.S. 564 (1908), an Indian reservation case. Since that time, court cases have extended the Winters Doctrine to many other types of federal withdrawals.
- ~ Federal law, through application of the McCarren Amendment (43 U.S.C. 666), provides for judicial adjudication of federal reserved water rights in state court. 1976
- ~ The McCarren Amendment also specifies that such state court adjudications must be basin wide, and include all federal reserved water rights and all other valid water rights within a defined hydrologic basin, including both surface and ground water systems.

(see notes Pg. 2 - Quantification)

WHY ARE WE CONCERNED ABOUT FEDERAL RESERVED WATER RIGHTS?

- Population growth and increasing development in Alaska is resulting in water supply and water rights conflicts in several areas where federal reserved water rights exist.
- In order for DNR to effectively manage and allocate the state's water and adjudicate water rights, it is necessary to have the federal reserved water rights in the state inventoried, then quantified by the appropriate federal management agencies. The state can then integrate federal water rights with state administratively adjudicated water rights.
- Indian River near Sitka experiences water shortages during low flow periods. Water rights claimants include the National Park Service, U. S. Forest Service, Sheldon Jackson College and the City and Borough of Sitka.
- The Ship Creek basin in Anchorage is an on-going concern. The Creek supplies water for two military bases and the Municipality of Anchorage. Because the surface water drainage is inter-related with the ground water aquifers in the Anchorage bowl, it is likely that this basin wide adjudication will include the entire Anchorage bowl, both surface and ground water, resulting in an extremely complex adjudication.
- Although the federal government has indicated it will await requests from the state before initiating quantification of federal reserved water rights, several federal agencies in Alaska have indicated verbally that they may quantify and claim federal reserved water rights within the next several years. BLM may claim water in the Gulkana Wild and Scenic River. The U.S. Fish and Wildlife Service may initiate studies to quantify federal reserved water rights on the Arctic National Wildlife Refuge.

WHAT IS THE STATE OF ALASKA DOING ABOUT FEDERAL RESERVED WATER RIGHTS?

- The Alaska Water Use Act, AS 46.15, provides for adjudication and administration of out of stream (diversionary) and instream water rights, but it contains no explicit procedures for state court adjudication, on a basin-wide basis, of federal reserved water rights.
- Legislation is proposed to amend the Water Use Act to include provisions for both state administrative and judicial adjudication of all water rights within a basin, including federal reserved water rights.
- The Department of Natural Resources has initiated the state's first basin wide adjudication involving federal reserved water rights on Indian River near Sitka. The National Park Service and the U.S. Forest Service both manage lands within the basin. Other major water users include Sheldon Jackson College and the City and Borough of Sitka. It is hoped that a negotiated settlement can lead to filing a declaratory judgement in state court to settle the existing water use conflicts on Indian River.

WHAT IS THE HISTORY OF THE PROPOSED BASIN WIDE ADJUDICATION LEGISLATION?

- ~ This bill is a rewrite of Senate Bill 810, introduced on February 17, 1982, in the Second Session of the Twelfth Legislature.
- ~ The Alaska Water Resources Board passed Resolution 84-5 on March 14, 1984, recommending adoption of statutory procedures for administrative and judicial adjudication of water rights. An earlier version of the presently proposed bill was presented to the Board at its October, 1984 meeting.
- ~ The proposed bill has been prepared after analysis of other states' legislative efforts to deal with federal reserved water rights and basin wide adjudication.
- ~ Earlier versions of the bill have been reviewed by other western states, and state and federal agencies in Alaska.

WHAT ARE THE MAJOR PROVISIONS OF THE PROPOSED BILL?

- ~ Section 1 of the bill amends AS 46.15.040 to add a disclaimer to the Water Use Act asserting that a right to appropriate water granted by the state is not a state guarantee of a particular water quality, volume, or pressure, or that water may be withdrawn at a particular cost.
- ~ Sections 2 and 3 of the proposed bill amend AS 46.15.140 to clarify the existing abandonment and forfeiture provisions and to create a rebuttable presumption so that if an appropriator does not beneficially use water covered under a certificate for a period of five successive years, it is the appropriator's obligation to prove to the commissioner that the appropriation has not been abandoned.
- ~ Section 4 of the proposed bill clarifies how the commissioner may terminate an instream flow reservation.
- ~ Section 5 contains the body of the adjudication provisions. It first creates a new AS 46.15.165, which would allow the Commissioner of DNR to initiate an administrative adjudication to quantify and determine the priority of all water rights and claims in a particular hydrologic basin. Section 5 also creates a new AS 46.15.166 providing that when a federal reserved water right may be involved, and the claimant refuses to consent to an administrative adjudication, the commissioner could initiate the adjudication in state superior court consistent with the McCarren Amendment, 43 U.S.C. § 666. While the design of the adjudication bill is to provide a procedure for the adjudication of both non-federal and federal reserved water rights, a new AS 46.15.169 makes clear that nothing in the Alaska Water Use Act is to be construed as an admission against the State of Alaska that a federal reserved water right exists in any particular context.
- ~ Section 6 of the bill adds a new AS 46.15.255 and AS 46.15.256, to clarify the Department of Natural Resources' authority to take action to remove unsafe or unpermitted works of appropriation where the appropriator refuses to do so, and to inspect records of an appropriator pertinent to the permitted or certificated use of water under the Water Use Act.
- ~ No fiscal note has been requested with this bill.

WATER RESOURCE PLANNING

WHY ADDRESS WATER RESOURCES IN LAND USE PLANNING?

- Population growth places increased demands on water resources -- potentially resulting in water shortages and pollution. Evaluating existing water supplies and projected water uses can help avoid water shortage and quality problems, and improve overall efficiency of future management of water resources.

WHAT IS THE STATE DOING TO PLAN FOR FUTURE WATER RESOURCE NEEDS?

- Water Management participates in the state's overall land and resource planning efforts in developing land use plans and policies guiding future management of water resources.
- DLWM coordinates with the Division of Geological and Geophysical Survey in prioritizing and scheduling hydrologic and water resource evaluation studies. The information obtained through these studies are used by resource managers for addressing water issues and planning for future water needs.
- DLWM works cooperatively with USGS for the collection of water use data necessary to determine existing water use for the purposes of determining water rights appropriations and future needs.
- Water Management coordinates with the Division of Technical Services in developing and enhancing the computerized Land Administration System which tracks the issuance of water rights and water use.

WHAT ARE THE NEEDS OF THE DIVISION OF LAND AND WATER MANAGEMENT TO ACCOMPLISH THE RESOURCE PLANNING PROGRAM?

Land Use Planning:

- A staff position dedicated to the evaluation of water resources and the development of management recommendations and public policy.
- Monies for personnel training and travel.

Water Resources Inventory (AWARE and AWUDS):

- Ongoing funding is needed to continue the resource inventory programs (AWARE and AWUDS). Due to existing water crises, such as Eagle River, adequate levels of funding are needed to address crisis-related water studies as well as studies related to future planning (re. ground water studies of proposed land disposals, and early stages of land use planning).

Administrative tracking of water rights and water use:

- Project funding is needed for: (1) updating and automating 11,000 water rights case files; (2) surveying public water suppliers for monthly water use levels.
- Annual operating funds are needed for ongoing LAS - Water Subsystem enhancements and data processing.