

Chapter 93
Water Management

Article 1
Existing Rights

11 AAC 93.010. "Existing rights" defined. Existing rights (also called "grandfather rights") are those water use rights established on or before July 1, 1966, by one of the following means:

(1) a lawful common law or customary appropriation or use of water, such as, but not limited by example, the use of water by the holder of a mining claim including within the claim boundaries both banks of the stream from which the water was taken, or the use of water following the posting of a notice of appropriation at the point of diversion, construction of a means of diversion, and recording of a notice of appropriation;

(2) beneficial use of water at any time during the period from July 1, 1961 - July 1, 1966; or

(3) construction of a means for appropriating water for a beneficial use if construction was in progress on July 1, 1966.

11 AAC 93.020. Filing period. A claim to an existing right is extinguished unless the claim was filed by

(1) March 27, 1967, for the Kodiak Recording District;

(2) May 31, 1967, for the Seldovia, Homer, Kenai, and Seward Recording Districts;

(3) July 31, 1967, for the Anchorage, Palmer, and Whittier Recording Districts;

(4) October 31, 1967, for all Southeast Alaska Recording Districts; and

(5) April 30, 1968, for the Cordova, Nome, and Fairbanks Recording Districts and for the remainder of the state.

11 AAC 93.030. Hearings on a determination of existing rights. (a) Any person who is adversely affected by a determination of existing rights made by the commissioner may, within

20 calendar days after the date of mailing of the summary of determination provided for by AS 46.15.135(c), make a written request for a hearing. The request must set forth

- (1) the name and address of the person making the request;
- (2) the person's right or interest in water from the watershed or source affected by the determination and the date on which the right or interest was acquired;
- (3) the manner and extent of damage to the person's right or interest that may result from the determination; and
- (4) the specific error believed to exist in the commissioner's determination.

(b) If a timely request is filed, the commissioner will set the determination for public hearing. Notice of the hearing will be given by publication and by mailing a copy of the notice to interested persons, including all persons who have filed a declaration with respect to the specified area or source. The commissioner will render a final determination after the conclusion of the hearing.

Article 2

Appropriation and Use of Water

11 AAC 93.035. Requirement to apply for the use of a significant amount of water.

(a) A significant amount of water is that amount of water for which an application for a water right or an application for a temporary water use authorization is required, as described in (b) of this section.

(b) A person shall file an application for a water right under 11 AAC 93.040 or for a temporary water use authorization under 11 AAC 93.220 before

- (1) the consumptive use of more than 5,000 gallons of water from a single source in a single day;
- (2) the regular daily or recurring consumptive use of more than 500 gpd from a single source for more than 10 days per calendar year;
- (3) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or
- (4) any water use that may adversely affect the water rights of other appropriators or the public interest.

(c) A person using less than the amount of water described in (b) of this section acquires no water right or priority unless an application is filed and a permit or certificate is issued under 11 AAC 93.035 - 11 AAC 93.140. The use of water 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 or to protect the public interest.

11 AAC 93.040. Application for a water right. (a) A person may not lawfully appropriate a significant amount of water of the state without first obtaining a permit to appropriate, a certificate of appropriation, or a temporary water use authorization under this chapter.

(b) An application for a water right must be made on a form provided by the department. The form must be completed in accordance with the instructions furnished to the applicant.

(c) An application must include the following items:

(1) the applicable application fee prescribed in 11 AAC 05.010;

(2) evidence that the applicant has a present possessory interest in the property where the water is to be beneficially used, as shown by a copy of the deed, patent, license, leasehold agreement, mining location certificate, or other instrument, or a copy of a completed application that has been filed with the appropriate agency to acquire permission for the use of federal, state, or municipal property;

(3) a map identifying

(A) the section, township, range, and meridian, and showing the property boundary, for the point of water withdrawal, impoundment, or diversion;

(B) the route of water transmission;

(C) the point of water use; and

(D) if water is to be returned to a stream or water body, the point of return flow;

(4) evidence that the applicant has obtained or is in the process of obtaining a right of access to the property where water is to be withdrawn, impounded, or diverted, and over which water is to be transported both to the point of use and to the point of return flow;

(5) repealed 8/20/2004;

(6) a legal description of the point of withdrawal, diversion, or impoundment; the point of water use; and, if water is to be returned to a stream or water body, the point of return flow; the legal description must include meridian, township, range, section, and aliquot parts, or the lot, block, and subdivision, or survey number, as appropriate;

(7) a description of the source as being either surface or ground water; the description must identify the name of the surface water source or the supply well log or well data for ground water, if available;

(8) a description of any impoundment, diversion, or withdrawal structures, including dimensions, construction materials, plans and specifications, and operation plans, and an application to construct or modify a dam, as defined in AS 46.17.900, if 11 AAC 93.171 requires an application;

(9) a description of the nature of the water use and times of the year during which water is to be used;

(10) a statement of the dates water use is expected to begin and when the maximum amount will be beneficially used;

(11) a statement of beneficial use, signed before a notary or postmaster, if water is already in use at the time of application;

(12) an application for a right-of-way, filed in accordance with AS 38.05.850, if access to or across state land is needed;

(13) a statement of the quantity of water requested, with documentation and calculations justifying the request if either the use or quantity is different from those listed in (d) of this section; and

(14) for a water use of more than 100,000 gpd (0.15 cfs) from a stream, a description of the mean annual flow, or mean monthly flow if available, using the best available data, or, if data are not available, an estimate of mean annual flow using hydrologic methods that the department determines to be reasonably accurate.

(15) Repealed 12/27/2012.

(d) Standard water use quantities are

- (1) single-family home, fully plumbed: 500 gpd;
- (2) single-family home, partially plumbed: 250 gpd;
- (3) single-family home, unplumbed: 75 gpd;

- (4) duplex or triplex: 1,000 gpd;
- (5) four-plex and larger housing: 250 gpd per unit;
- (6) mobile home park: 250 gpd per trailer;
- (7) motel or resort: 150 gpd per room;
- (8) cattle, other than dairy cows: 12 gpd per animal;
- (9) dairy cows: 35 gpd per animal;
- (10) horses: 15 gpd per animal;
- (11) sheep: 2 gpd per animal;
- (12) goats: 3 gpd per animal;
- (13) hogs: 4 gpd per animal;
- (14) poultry or rabbits: 0.5 gpd per animal;
- (15) dog (kennels): 1.0 gpd per animal; and
- (16) commercial irrigation: 0.5 acre feet per year per acre.

11 AAC 93.050. Incomplete applications. (a) An application that does not substantially comply with the requirements of 11 AAC 93.040 will not be accepted for filing.

(b) The commissioner will, in his or her discretion, require an applicant whose application complies with the requirements of 11 AAC 93.040, and has been accepted for filing, to provide additional information if, during the adjudication process, it is determined that the application fails to clearly present and document all aspects of the proposed project. The commissioner will identify deficiencies in the application and the applicant will be given 30 days in which to submit supplemental information, unless a longer period of time is allowed by the commissioner. The applicant's failure to submit that supplemental information within the required time is grounds for rejecting the application without further notice; a request from the commissioner for additional information will contain a warning to that effect.

11 AAC 93.060. Water rights on state-leased land. When a lessee of state land applies for a water right, water required for the use and enjoyment of the leasehold may be appropriated for the lessee's use. The lessee shall comply with the provisions of 11 AAC 93.040 - 11 AAC 93.140 in securing the appropriation. If the commissioner approves the appropriation, the appropriation will be granted to the lessee and will be for the benefit of the leased land. Upon an

assignment of the lease, the water right remains for the benefit of the leased land. Upon termination of the lease or upon the expiration of the permit issued under 11 AAC 93.120, the water right is considered intentionally abandoned, unless the lessee exercises a preference right to purchase the land, or unless the commissioner grants an extension of the water right beyond the lease term for good cause shown or assigns the water right to a state agency. The water right thus granted must be consistent with the provisions of the lease itself, this chapter, and AS 46.15.

11 AAC 93.065. Water rights on private-leased land. If a lessee of privately owned land applies for a water right, water required for the use and enjoyment of the leasehold may be appropriated for the lessee's use. The lessee shall comply with the provisions of 11 AAC 93.040 - 11 AAC 93.140 in securing the appropriation. The commissioner will give notice by certified mail to the lessor that a water right has been applied for on the lessor's land. The appropriation, if granted, will be issued to the lessee and will be for the benefit of the leased land. Upon termination of the lease and nonuse of water by the lessor or subsequent lessee for five years, or upon the expiration of the permit issued under 11 AAC 93.120, the water right is considered intentionally abandoned. The water right thus granted must be consistent with the provisions of the lease itself, this chapter, and AS 46.15.

11 AAC 93.070. Departmental investigations. (a) Upon receipt of or while adjudicating an application for water use, the department may investigate or inspect the proposed diversion, withdrawal, or impoundment structures, the source of the water, meter records, gage data, well logs, and other competing uses for water within the area, to determine whether there is a possibility that existing water rights of other persons or the public interest will be adversely affected or impaired by the proposed appropriation. Failure of the applicant to cooperate in the investigation will result in rejection of the application.

(b) The commissioner will, in his or her discretion, require the applicant to

- (1) submit water well information, including well depth, pump setting, and current static water level;
- (2) drill test wells and observation wells;
- (3) conduct pump and aquifer tests;

(4) provide test results or other hydrologic data and information necessary to better determine the effects of proposed appropriation on prior appropriators and the public interest;

(5) provide any other information necessary to make a finding under AS 46.15.080.

11 AAC 93.080. Public notice. When the department begins adjudicating a water right application, the department will provide notice of the application as follows:

(1) the department will publish notice under AS 46.15.133 in a newspaper of general circulation in the vicinity in which the water is to be appropriated;

(2) the department will post the notice on the Alaska Online Public Notice System as required under AS 44.62.175; in addition, if there is no newspaper of general circulation in the vicinity, the department will post the notice during the public comment period prescribed by AS 46.15.133 in a public place near the site of the proposed appropriation;

(3) the department will serve individual notice by certified mail on prior appropriators who may be taking water from the same source;

(4) repealed 8/20/2004;

(5) the department will provide written notice to any person known to the department to own land where the water is to be withdrawn or used, or over which the water is to be transported, or whose request to receive notice is on file with the department;

(6) the public comment period set by AS 46.15.133(c) begins the first day the newspaper publication appears, or the first day of posting, or upon receipt of the notice as evidenced by the certified mail receipt, date stamp, or other evidence of actual service;

(7) the department may extend the notice and public comment period.

11 AAC 93.090. Objections. (a) If no written objection is received from any person during the public comment period, the commissioner will proceed with adjudication of the application.

(b) All timely objections will be considered by the commissioner and each will receive a written response after the close of the public comment period.

(c) In adjudication of the application, the commissioner will, in his or her discretion, consider objections that are received by the commissioner after the close of the public comment period.

11 AAC 93.100. Exemptions to notice. An application to appropriate 5,000 gallons of water per day (gpd) or less is exempt from the notice provisions of 11 AAC 93.080 and AS 46.15.133, except that the Department of Fish and Game will be notified of an application for a water right from an anadromous fish stream listed in the Alaska Department of Fish and Game Catalog of Water Important for Spawning, Rearing, or Migration of Anadromous Fishes or a stream identified as supporting fish in the ADF&G Habitat Regional Guides. However, in an area where the total amount of water available appears to the department to be limited with respect to the number of potential users of the same source, or upon the request of another state or federal agency or a municipality as defined by AS 29, or to protect the public interest, the commissioner will, in his or her discretion, require public notice as provided by 11 AAC 93.080.

11 AAC 93.110. Hearings. (a) If objections are received during the public comment period, the commissioner will, in his or her discretion, hold a hearing on the objections.

(b) The commissioner will, in his or her discretion, hold a hearing to acquire additional information on an application if the commissioner determines that the water rights of prior appropriators or the public interest might be adversely affected or if the commissioner determines that additional information is required to rule on the application.

(c) The hearing will be public and a record will be kept.

11 AAC 93.115. Closure of an application for a water right. A pending water right application and the department's application file will, in the commissioner's discretion, be closed if

(1) the applicant informs the commissioner, in writing, or by filing a notice of relinquishment, that the applicant has abandoned plans to develop the water source or use, in which case the application will, in his or her discretion, be closed by the commissioner without further correspondence with the applicant;

(2) the applicant informs the commissioner orally that the applicant has abandoned plans to develop the water source and use, in which case the applicant will be notified in writing that the application is closed as a consequence of the oral notice;

(3) the commissioner is unable to locate the applicant by certified mail at the address on file in order to adjudicate the application, in which case the application will, in the commissioner's discretion, be closed without further correspondence by the commissioner with the applicant; or

(4) the applicant fails to provide information requested under 11 AAC 93.070 or fails to complete the newspaper notice of the proposed appropriation, in which case the applicant will be notified by certified mail that the application has been closed, noting the reason for the closure, the effective date of the closure, and any appeal process.

11 AAC 93.120. Issuance of a permit to appropriate water. (a) The commissioner will issue a permit to appropriate water if he or she finds that the appropriation meets the requirements of AS 46.15.080.

(b) The permit will be issued for a period of time that the commissioner considers to be consistent with the public interest and adequate to finish construction and establish the full use of water. The following time periods are the maximum time periods for which a permit will be issued unless the applicant proves to the satisfaction of the commissioner, or unless the commissioner independently determines, that a longer time period is required to establish the full use of water:

(1) domestic water use: two years;

(2) commercial irrigation: five years;

(3) public water supply

(i) use of 250,000 gpd or less: five years;

(ii) use of over 250,000 gpd: 10 years;

(4) industrial and commercial water use: five years;

(5) mining water use: 10 years;

(6) small-scale hydroelectric facilities that generate 100 kilowatts or less: five years;

(7) large-scale hydroelectric facilities that generate over 100 kilowatts: 10 years.

(c) The permit time period begins on the date the department issues the permit.

(d) The permit will, in the commissioner's discretion, authorize development and beneficial water use during all or part of the year and vary the quantities of water use, depending on need and water availability during any given month or season of the year.

(e) The department may issue a permit subject to conditions considered necessary to protect the rights of prior appropriators of record and the public interest, including

(1) the condition that no certificate will be issued until evidence is presented to the department of the acquisition of adequate easements or other means necessary for completion of the appropriation, including the condition that the permittee obtain right of access to and use of the property where water is to be withdrawn, impounded, or diverted and over which water is to be transported;

(2) conditions that require the permittee to measure the water use in a manner to be approved by the department and periodically report water use information to the department

(A) for any use of more than 30,000 gpd of water, except that water use for placer mining purposes may be exempt from this condition;

(B) for any use of water for irrigation of more than 40 acres of land;

(C) for hydroelectric power generation greater than 50 kilowatts; and

(D) for any other situation in which the department considers it necessary in order to protect the water rights of prior appropriators or the public interest;

(3) conditions to maintain, or restrictions from withdrawing, a specific quantity, rate of flow or volume of water at a given point on a stream or body of water, or in a specified reach of stream, throughout the year or for specified times of the year, to achieve any of the following purposes:

(A) protection of fish or wildlife habitat;

(B) recreational purposes;

(C) navigation;

(D) sanitation or water quality;

(E) protection of prior appropriators;

(F) any other purpose the department determines is in the public interest and should be taken into account under AS 46.15;

(4) conditions to ensure that the proposed means of impoundment, withdrawal, diversion, or construction are adequate, including the specification of engineering and design standards, requirements for maintaining, enlarging, modifying, abandoning, or removing impoundment structures, approved location of points of withdrawal or diversion, or approved location of points of return flow;

(5) a condition that if a land or mineral location, claim, or lease to which the water right is appurtenant ceases to be in good standing, is abandoned, is found invalid, or is otherwise terminated, then the water right will be considered intentionally abandoned.

(f) Upon the department's receipt of a permittee's completed request for a permit extension showing diligent effort toward completing the appropriation, the department may extend the permit once for a period of time equal to or less than the time allowed under the original permit if the department determines that the permittee has demonstrated a diligent effort toward completing the appropriation. The request for a permit extension must be accompanied by the applicable fee prescribed in 11 AAC 05.010.

(g) A permit extension granted under (f) of this section will, in the commissioner's discretion, be subject to additional conditions that the commissioner considers necessary to protect prior appropriators and the public interest.

(h) Nothing in this section constitutes a waiver of the responsibility of the applicant to secure the appropriate additional state, federal, or local regulatory permits or licenses.

(i) A permit holder who files for an extension of a permit to appropriate water or files a request for certification by submitting a statement of beneficial use, before the expiration of the permit to appropriate water, may continue to use water as authorized by the permit until the department grants or denies the extension of the permit or grants or denies the request for certification.

11 AAC 93.125. Cancellation of permits. A permit will, in the commissioner's discretion, be cancelled, and the case file closed, if the permittee

(1) does not develop and make use of the appropriation within the permit time period, or

(2) as provided in AS 46.15.175, violates a term or condition of the permit.

11 AAC 93.130. Issuance of a certificate of appropriation of water. (a) The commissioner will issue a certificate of appropriation to the permit holder for the quantity of water beneficially used, which might be equal to or less than that granted under the permit, if

(1) the permit holder submits a statement of beneficial use stating that the means necessary for the taking of water have been developed and the permit holder is beneficially using the quantity of water to be certificated; the fee required under 11 AAC 05.010 must accompany the statement of beneficial use; and

(2) the permit holder has substantially complied with all permit conditions.

(b) Before issuing a certificate of appropriation, the commissioner will, in his or her discretion, conduct field inspections or inspect books, records, meter records, gages, well logs, diversion, impoundment, withdrawal, or control structures, and other relevant information, to verify that the appropriation has been developed and water is being used in accordance with the terms and conditions of the permit.

(c) The commissioner will, in his or her discretion, issue a certificate subject to conditions considered necessary to protect the public interest. The conditions will, in the commissioner's discretion, include

(1) conditions to maintain a specific quantity of water at a given point on a stream or water body, or in a specified stretch of stream, throughout the year or for specified times of the year, to achieve any of the following purposes:

(A) protection of fish and wildlife habitat,

(B) protection of recreation,

(C) protection of navigation,

(D) protection of sanitation and water quality,

(E) protection of prior appropriators, or

(F) any other purpose the commissioner determines is in the public

interest;

(2) a condition that requires the certificate holder to meter water use and report water use information to the division;

(3) conditions to ensure that the means for impounding, withdrawing, or diverting water are adequate, which might include requirements for maintaining, enlarging, modifying, abandoning, or removing impoundment structures.

11 AAC 93.140. Water wells. (a) For a drilled, driven, jetted, or augered well constructed, the water well contractor or a person who constructs the well shall file a report within 45 days after completion with both the property owner and the department. The report must contain the following information as applicable:

- (1) the method of construction;
- (2) the type of fluids used for drilling;
- (3) the location of the well;
- (4) an accurate log of the soil and rock formations encountered and the depths at which the formations occur;
- (5) the depth of the casing;
- (6) the height of the casing above ground;
- (7) the depth and type of grouting;
- (8) the depth of any screens;
- (9) the casing diameter;
- (10) the casing material;
- (11) the depth of perforation or opening in the casing;
- (12) the well development method;
- (13) the total depth of the well;
- (14) the depth of the static water level;
- (15) the anticipated use of the well;
- (16) the maximum well yield;
- (17) the results of any well yield, aquifer, or drawdown test that was conducted;
- (18) if the water well contractor or person who constructs the well installs a pump at the time of construction, the depth of the pump intake and the rated pump capacity at that depth.

(b) When the drill rig is removed from the well site, the well must be sealed with a sanitary seal and a readily accessible means provided to allow for monitoring of the static water level in the well.

(c) A hand-dug well that is permanently decommissioned shall be filled by the land owner to a point 12 inches above the existing ground level with well-compacted impermeable material.

(d) A well, other than a hand-dug well, that is permanently decommissioned by the owner of the well must comply with the requirements of 18 AAC 80.015(e).

(e) If the department believes that an encounter of oil, gas, or other hazardous substance is likely to result from well drilling, the department will notify the Alaska Oil and Gas Conservation Commission, and the provisions of AS 31.05.030(g) may apply.

(f) The department will notify the Department of Environmental Conservation of any permanently abandoned well that may contaminate water of the state under the provisions of 18 AAC 80.

(g) Information required by (a) of this section is required for any water well that has been deepened, modified, or abandoned, and for any water supply well or water well that is used for monitoring, observation, or aquifer testing, including a dry or low-yield water well that is not used.

11 AAC 93.141. Application for a reservation of water. As provided in AS 46.15.145(a), the state, an agency or political subdivision of the state, an agency of the United States, or a person may apply for a reservation of water for

(1) "protection of fish and wildlife habitat, migration and propagation," which means the quantity or level of water necessary to maintain suitable habitat conditions for the various life stages of fish, other aquatic organisms, and wildlife, including waterfowl and mammals, and their habitat, including water quality, depth, velocity and temperature, substrate, or streamside vegetation;

(2) "recreation and park purposes," which means the quantity or level of water necessary to maintain suitable conditions for contact and secondary recreation, including wading, swimming, fishing, boating, or hunting, or for park purposes, including scenic, natural, historic, or cultural values;

(3) "navigation and transportation purposes," which means the quantity or level of water necessary to maintain sufficient width and depth to allow vehicles, including boats or float

planes, or tracked or wheeled vehicles during the winter, to travel on or through a stream or water body; and

(4) "sanitary and water quality purposes," which means the quantity or level of water necessary to attain and maintain water quality standards under 18 AAC 70 or, if applicable, drinking water standards under 18 AAC 80, or to maintain the naturally occurring water quality conditions.

11 AAC 93.142. Content of application. (a) An application for a reservation of water must be made to the department on a form provided by the department. The form must be completed in accordance with the instructions furnished by the department to the applicant.

(b) Each application must

(1) identify the purposes of the proposed reservation;

(2) identify the name of the stream or water body in which water is proposed to be reserved, and locate the proposed reservation on the most detailed United States Geological Survey map for the area, identified by section, township, range, meridian, and river mile index if available, showing either the point on a water body at which, or two points on a stream between which, the proposed reservation is being requested;

(3) explain what need exists for the proposed reservation, including reasons why the reservation is being requested;

(4) specify the time period required to fully quantify the proposed reservation, which may be no longer than three years after the date the application is accepted by the department for filing;

(5) specify the times of the year and purposes for which the reservation is proposed;

(6) identify and explain the methodology to be used to quantify the proposed reservation, including

(A) existing data to be used, if available;

(B) the method of any new data collection;

(C) the type of new data to be collected; and

(D) a description of how the data will be analyzed;

(7) state the estimated quantity of water, stage, or elevation proposed to be reserved, measured in cubic feet per second for an instream flow rate or measured in cubic feet, acre feet, or an elevation relative to a permanent bench mark for a surface elevation, with documentation and calculations justifying the request;

(8) identify physical, biological, water chemistry, and socio-economic data substantiating the need for and the quantity of water requested for the proposed reservation;

(9) be accompanied by the application fee prescribed by 11 AAC 05.010.

(c) At the applicant's request, the department will provide assistance in filling out the application.

(d) At the applicant's written request, submitted at least 30 days before the end of the time period specified under (b)(4) of this section, the commissioner will, in his or her discretion, grant an extension of the time period of up to two years for good cause shown.

(e) When the applicant completes the quantification of the proposed reservation of water, the applicant shall notify the commissioner in writing and shall submit any information that changes, adds, or deletes information presented in the original application.

11 AAC 93.143. Incomplete applications. (a) An application that does not substantially comply with the requirements of 11 AAC 93.142 will not be accepted by the department for filing.

(b) The commissioner will, in his or her discretion, require an applicant whose application complies with the requirements of 11 AAC 93.142 and has been accepted for filing to provide additional information if, during the adjudication process under 11 AAC 93.145, the commissioner determines that the application fails to clearly present and document all aspects of the proposed reservation. The commissioner will identify the areas of deficiency, and the applicant will be given 60 days in which to submit supplemental information, unless a longer period of time is agreed upon by the applicant and the commissioner. An applicant's failure to submit the additional information within the time required is grounds for rejecting the application without further notice; a request for additional information will contain a warning to that effect.

11 AAC 93.144. Departmental investigations. (a) Upon receipt of an application for a reservation of water, the commissioner will, in his or her discretion, investigate any aspect of the application, including the source of the water and other uses or demands for water within the area, to determine whether there is a possibility that the rights of prior appropriators or the public interest will be adversely affected by the proposed reservation.

(b) Failure of the applicant to cooperate in the investigation will result in the rejection of the application.

11 AAC 93.145. Adjudication of applications. (a) Notice of an application for a reservation of water will be provided in accordance with AS 46.15.133 and 11 AAC 93.080. In addition, the commissioner will provide notice to the Alaska Departments of Fish and Game and Environmental Conservation, to any federal or state agency responsible for managing land in the vicinity, and to any local government in whose jurisdiction the proposed reservation of water would occur, as well as to any other interested party who has filed a request with the department to receive notice.

(b) Timely objections received following notice of an application for a reservation of water will be considered in accordance with 11 AAC 93.090.

(c) Hearings regarding an application for a reservation of water will be held in accordance with AS 46.15.133 and 11 AAC 93.110.

(d) The commissioner's decision to grant, conditionally grant, or deny an application for a reservation of water will be summarized by written findings of fact and conclusions of law, including justification of any special conditions to which the reservation is subject. In determining whether the proposed appropriation is in the public interest, the commissioner will consider the criteria set out in AS 46.15.080(b).

11 AAC 93.146. Issuance of a certificate of reservation of water. (a) The commissioner will issue a certificate of reservation of water if the commissioner finds that the reservation meets the requirements of AS 46.15.145.

(b) The certificate of reservation will be issued to the applicant. The applicant is responsible for compliance with the conditions of the certificate of reservation.

(c) A certificate of reservation will contain the following conditions:

(1) the certificate of reservation may not be voluntarily abandoned, conveyed, transferred, assigned, or converted to another use, in whole or in part, unless required as a result of review under 11 AAC 93.147; and

(2) the certificate of reservation does not authorize the certificate holder or any other person to prevent access to, on, or through the water reserved by the certificate, or to prohibit the use of the reserved water for other compatible purposes set out in AS 46.15.145(a).

(d) The certificate of reservation will state any additional terms or conditions the commissioner considers necessary to protect the prior valid rights of other appropriators and the public interest. The conditions will, in the commissioner's discretion, include the following:

(1) measuring devices of a type and at a location approved by the commissioner must be installed and maintained to monitor and report on the reserved instream flow or level of water; and

(2) the reservation will be reviewed by the commissioner within a specified period of time, if sooner than the 10-year review under 11 AAC 93.147.

(e) The priority of a reservation of water is the date the application was accepted by the department for filing.

(f) Nothing in this section constitutes a waiver of the responsibility of the applicant to secure any appropriate state, federal, or local regulatory permits or licenses with regard to the stream or water body affected.

11 AAC 93.147. Review of reservation of water. (a) The commissioner will review a reservation of water at least once each 10 years after the date of issuance of the certificate of reservation. The commissioner will, in his or her discretion, review a reservation of water in fewer than 10 years if circumstances warrant a review. These circumstances might include

(1) a condition on the certificate of reservation requiring an earlier review, under 11 AAC 93.146(d)(2);

(2) a significant change affecting the water resource;

(3) a subsequent applicant's protest of the justification for the reservation of water if water might be unavailable to both maintain the reservation of water and to grant the applicant's request; or

(4) a written request by the certificate holder to the department, seeking authority to abandon, convey, transfer, assign, or convert the certificate of reservation to another use; the fee required under 11 AAC 05.010 must accompany the request.

(b) Upon review of a reservation of water, the commissioner will determine

(1) if the purpose for the reservation still applies;

(2) if the need for the reservation still exists;

(3) the effects of the reservation on prior appropriators;

(4) the effects of the reservation on the public interest;

(5) repealed 11/7/90;

(6) if additional physical, biological, water chemistry, and socio-economic data or reports concerning the reservation are available;

(7) if the quantity or level of water reserved is adequate for the purposes of the reservation;

(8) if the daily duration and months of the year of the reservation still apply; and

(9) if additional research, data collection, and analysis should be conducted, or different methodologies employed for reviewing the reservation.

(c) The commissioner will, in his or her discretion, require that additional research, data collection, and analysis be conducted or different methods used for reviewing the reservation of water. Costs of conducting additional research, data collection, and analysis, and of using a different methodology will be borne by the protestant if a protest regarding the reservation has been filed with the department. In other cases, these costs will be borne by the state. If the certificate holder desires expedited review, the commissioner will, in his or her discretion, require the certificate holder to bear the costs.

(d) The commissioner will provide written notice, as provided in 11 AAC 93.145(a), of a review of a reservation of water in order to solicit information that might be pertinent to the review. The commissioner will, in his or her discretion, hold a hearing on the review of a reservation of water.

(e) In accordance with the procedural requirements of 11 AAC 93.940, the commissioner will determine whether the purpose for the reservation of water, and his or her original findings of fact in granting the reservation, have been significantly altered by subsequent events. If the purpose of the reservation or all or part of the findings in granting the reservation no longer

apply to the reservation, the commissioner will, in his or her discretion, amend the certificate of reservation or revoke all or part of it in accordance with AS 46.15.145(f) and 11 AAC 93.940. The commissioner's final decision to amend or revoke all or part of a certificate of reservation will be summarized by written findings of fact and conclusions of law. The commissioner will record any amended certificate of reservation in the appropriate recorder's office.

Article 3
Dam Safety

11 AAC 93.150. Dam safety. Repealed 8/16/89.

11 AAC 93.151. Applicability. (a) The provisions of 11 AAC 93.151 - 11 AAC 93.201 apply to all artificial barriers located in the state that are dams within the meaning of AS 46.17.900, except dams owned or operated by the federal government or regulated by the Federal Energy Regulatory Commission.

(b) An artificial barrier that the department has given a Class I (high) or Class II (significant) hazard potential classification under 11 AAC 93.157 is a dam under AS 46.17.900(3)(C), even if the barrier does not meet the height and capacity criteria set out in AS 46.17.900(3)(A) or (B).

(c) An artificial barrier that the department has given a Class III (low) hazard potential classification under 11 AAC 93.157 is not a dam under AS 46.17.900, unless the barrier meets the height and capacity criteria set out in AS 46.17.900(3)(A) or (B).

11 AAC 93.153. Barrier measurement. For the purpose of determining whether a barrier is a dam under AS 46.17.900, the height of the barrier will be measured as either

(1) the maximum vertical distance from the natural bed of the watercourse at the upstream or downstream toe of the barrier, whichever yields the greater measurement, to the top of the barrier, or

(2) if the barrier is not across a watercourse, the maximum vertical distance from the lowest elevation of the outside limit of the barrier to the top of the barrier.

11 AAC 93.157. Hazard classification. (a) In order to determine design, operation, inspection, maintenance, emergency action, and reporting criteria under AS 46.17 and 11 AAC 93.151 - 11 AAC 93.201, the department will periodically review and classify each artificial barrier according to the barrier's potential danger to life or property, and will assign the barrier one of the following hazard potential classifications:

(1) a Class I (high) hazard potential classification, if the department determines that the failure or improper operation of the barrier will result in probable loss of human life;

(2) a Class II (significant) hazard potential classification, if the department determines that the failure or improper operation of the barrier will result in

(A) a significant danger to public health;

(B) the probable loss of or probable significant damage to homes, occupied structures, commercial property, high-value property, major highways, primary roads, railroads, or public utilities, other than losses described in (3)(B) of this subsection;

(C) other probable significant property losses or damage, other than losses described in (3)(B) of this subsection; or

(D) probable loss of or significant damage to waters identified under 5 AAC 95.011(a) as important for the spawning, rearing, or migration of anadromous fish; or

(3) a Class III (low) hazard potential classification if the department determines that the failure or improper operation of the barrier will result in

(A) limited impacts to rural or undeveloped land, rural or secondary roads, and structures;

(B) property losses or damage limited to the owner of the barrier; or

(C) insignificant danger to public health.

(b) As necessary to obtain accurate information for a review and classification under (a) of this section, the department will require the owner of an artificial barrier to submit the following information, on a form provided by the department and sealed by an engineer qualified under 11 AAC 93.193(a):

(1) the type and height of the barrier and the impounding capacity of the reservoir at the maximum storage elevation;

(2) the name of the water body, the location of the barrier and a description of the area downstream;

(3) a proposed hazard potential classification, and any supporting information for that proposed classification; supporting information may include maps, an inundation map prepared in substantial accordance with 11 AAC 93.195, a dam break analysis, photographs, and engineering calculations.

(c) The department may reject a hazard potential classification proposed under (b)(3) of this section and require the owner to submit additional information if the department determines that the

(1) engineer who sealed that information is not qualified under 11 AAC 93.193(a); or

(2) information previously provided is insufficient for the department to assign that hazard potential classification.

(d) The department may assign an artificial barrier a higher hazard potential classification than one proposed under (b)(3) of this section. The department will assign the barrier a hazard potential classification based on the level of information readily available regarding the barrier and its potential hazards.

11 AAC 93.159. Owner's periodic safety inspections. (a) The owner of a Class I or Class II dam shall provide for a periodic safety inspection of the dam at least once every three years. The owner of a Class III dam shall provide for a periodic safety inspection of the dam at least once every five years. The department may order a dam owner to provide for a periodic safety inspection more often than required by this subsection if the department determines that the dam might be unsafe or that more frequent inspections are necessary to protect public safety. Each periodic safety inspection and other work required by this section is at the owner's sole expense. Each periodic safety inspection must be detailed and comprehensive, and must meet the department's guidelines for periodic safety inspections. Those guidelines, set out in Chapter 10, Section 10.4 of the department's Guidelines for Cooperation with the Alaska Dam Safety Program, dated September 26, 2003 are adopted by reference.

(b) The periodic safety inspections required by this section must be performed by an engineer who has been approved under 11 AAC 93.193(b). Before an inspection, the owner shall

submit to the department, in writing, the qualifications of the engineer and the scope of the periodic safety inspection. The department will approve the scope of the inspection if the department determines that the scope is adequate to determine the safety of the dam and for the engineer to make reliable recommendations regarding operation and maintenance of the dam, inspections of the dam, and other aspects related to the safety of the dam.

(c) Within 30 days after the visual inspection of the dam is completed, the owner shall submit a periodic safety inspection report to the department for approval, with as many copies as the department requires. The periodic safety inspection report must be sealed by the engineer approved under 11 AAC 93.193(b) to conduct the inspection. The engineer shall, in the report, make

(1) specific conclusions regarding the safety of the dam, including conclusions with respect to the condition of the dam and the potential for and consequences of any dam failure; and

(2) recommendations for any additional inspections, monitoring, studies, or construction that may be required to improve the safety of the dam.

(d) In response to a periodic safety inspection report, the department may

(1) approve the report, if the department determines that the report adequately reflects the safety of the dam and provides for the maintenance or improvement of the safety of the dam;

(2) request additional detail or clarification in the report;

(3) issue an order requiring the owner to perform additional inspections, studies, or analyses, or to submit additional information that the department determines is necessary to adequately assess the safety of the dam;

(4) revoke, under 11 AAC 93.173(k), a certificate of approval to operate a dam; or

(5) issue a construction, operation, repair, maintenance, shutdown, or dam removal order that the department considers necessary to protect against dam failure or to protect life and property.

(e) Repealed 10/2/2004.

11 AAC 93.160. General requirements. Repealed 8/16/89.

11 AAC 93.161. State inspections. (a) The department may inspect a dam or artificial barrier, regardless of its size or hazard potential classification, after providing notice to the owner under AS 46.17.060.

(b) If the department determines that providing two weeks' notice under AS 46.17.060 is not practical because the dam or barrier presents a potential immediate danger to life or property, the department will give the owner of the dam or barrier as much notice before the inspection as is reasonable under the circumstances.

(c) The owner of a dam shall reimburse the department for costs that the department incurs in making an inspection under this section, including the costs of conducting related dam safety studies and analyses and employing consulting engineers or contractors, if the department determines that a condition may exist that could adversely affect the safety of the dam and the

(1) owner has failed or refused to perform a periodic safety inspection in accordance with 11 AAC 93.159; or

(2) periodic safety inspection report submitted under 11 AAC 93.159(c) is inadequate, and the owner has failed to respond to a department order or request for additional information.

11 AAC 93.163. Emergency remedial action. (a) The department may take emergency remedial action to protect life or property from the risks created by the dam's operation or potential failure, if the department determines that one or more of the following conditions exist:

(1) the condition of a dam is sufficiently dangerous to preclude adequate time for the issuance of an order to the owner under 11 AAC 93.159(d) regarding the maintenance or operation of the dam;

(2) actual or potential flooding threatens the condition of the dam;

(3) the owner will not voluntarily comply with an order or does not have the present means to comply with an order from the department.

(b) In taking emergency remedial action under this section, the department may take supervisory control of the dam from the owner, over the owner's objection if necessary, until the emergency no longer exists. During the department's supervisory control of the dam, the owner, agents, and employees of the owner shall comply with all of the department's orders.

(c) The owner shall reimburse the state for the costs of any reasonably necessary emergency remedial action taken under this section, including the costs of any consultant, contractor, emergency response agency, or other entity retained or requested by the department to respond to the emergency.

11 AAC 93.164. Owner's emergency action plan. (a) The owner of a Class I or Class II dam shall develop and maintain an emergency action plan in accordance with this section.

(b) The department will approve an emergency action plan if

(1) the plan adequately protects life and property, given the particular risks presented to life or property if the dam fails or in anticipation of imminent dam failure;

(2) the plan provides adequately for the coordination of emergency responders in the community;

(3) the plan contains information that the department considers necessary to minimize danger to life and property; that information must include, if required by the department, a

(A) detailed inundation map, prepared in substantial accordance with 11 AAC 93.195;

(B) dam break analysis; and

(C) schedule for exercise and revision of the plan; and

(4) for a Class I dam, the plan is developed and maintained in accordance with

(A) the Federal Emergency Management Agency's Federal Guidelines for Dam Safety: Emergency Action Planning for Dam Owners (FEMA 64), as revised as of October 1998 and adopted by reference; or

(B) other requirements that the department determines are necessary to protect life or property.

(c) The owner of a Class I or II dam shall review the emergency action plan at least annually, and shall submit any revision of the plan to the department for approval.

(d) The owner of a Class I or II dam shall exercise the emergency action plan to a level specified by the department as sufficient to maintain adequate preparation for an actual emergency, and shall revise the emergency action plan at least every three years, or at a frequency that the department determines sufficient to maintain adequate preparation for an

actual emergency. The plan shall be revised after the exercise in order to address any problems or areas for improvement identified during the exercise, and shall be submitted to the department for approval. Revised plans must be distributed to all persons with responsibilities identified in the plan.

(e) The owner of a Class II dam may include the emergency action plan in the operations and maintenance manual required under 11 AAC 93.167, 11 AAC 93.171, or 11 AAC 93.173.

11 AAC 93.165. Dam measurement. Repealed 8/16/89.

11 AAC 93.167. Certification of dams constructed before May 31, 1987. (a) The owner of a dam that was constructed before May 31, 1987 shall submit to the department a complete application, on a form provided by the department, for a certificate of approval to operate the dam under 11 AAC 93.173(a)(3), along with the applicable fee under 11 AAC 05.010(a)(8)(l).

(b) An application for a certificate of approval under this section must include

(1) record drawings for the dam, prepared by a professional engineer registered under AS 08.48 and 12 AAC 36 or professional land surveyor registered under AS 08.48 and 12 AAC 36;

(2) an operation and maintenance manual prepared in accordance with 11 AAC 93.197;

(3) for Class I and Class II dams, an emergency action plan in accordance with 11 AAC 93.164; and

(4) a current periodic safety inspection report in accordance with 11 AAC 93.159.

(c) The department will approve the application and issue a certificate of approval to operate the dam under 11 AAC 93.173(a)(3) if the department

(1) determines that record drawings of the dam contain sufficient detail to document the configuration of the dam as constructed;

(2) determines that the operation and maintenance manual is appropriate for the size and type of the dam, and for the hazard potential classification assigned to the dam under 11 AAC 93.157;

(3) for Class I and Class II dams, approves the emergency action plan under 11 AAC 93.164; and

(4) approves the current periodic safety inspection report under 11 AAC 93.159.

11 AAC 93.170. Construction of large dams. Repealed 8/16/89.

11 AAC 93.171. Dam construction, repair, or modification. (a) Before construction, repair, or modification of a dam, a person must apply to the department under this section for a certificate of approval. Unless the department determines that an item or document is not required for the protection of life or property, the applicant must file the following information and documents with the department:

(1) an initial application package containing the information and documents required under (f)(1) of this section;

(2) a preliminary design package containing the information and documents required under (f)(2) of this section;

(3) a detailed design package containing the information and documents required under (f)(3) of this section;

(4) a final construction package containing the information and documents required under (f)(4) of this section;

(5) pre-construction plans containing the information and documents required under (f)(5) of this section;

(6) post-construction documentation containing the information and documents required under (f)(6) of this section.

(b) After receiving an initial application package under (a)(1) of this section, the department will approve the applicant's proposed schedule for filing the remaining information and documents required under this section, and for issuing the required certificates of approval, if the department determines that the proposed schedule will provide an adequate opportunity for the department to review the safety of the dam. The department may amend the approved schedule if the department determines that the amendment is necessary to allow the department to evaluate the safety of the dam.

(c) After submitting an initial application package under (a)(1) of this section, and before submitting a preliminary design package under (a)(2) of this section, the applicant must obtain department approval for the proposal prepared under (f)(1)(F) of this section. The department will reject the applicant's proposal if the department determines that the proposal does not adequately protect life or property.

(d) After submitting the preliminary design package under (a)(2) of this section, and before submitting the final construction package under (a)(4) of this section, an applicant must obtain department approval for the applicant's proposed method of demonstrating financial ability or providing financial assurance, if the applicant is required under (f)(2)(C) of this section to propose a method. The department will approve the proposed method if the department determines that the method is sufficient to pay the costs required under (f)(2)(C) of this section.

(e) Information supplied and documents submitted to the department under (f) of this section must contain all of the analyses and data appropriate for the size, type, and proposed hazard potential classification of the dam. The information and documents must contain sufficient information to justify the engineering design assumptions, criteria, and conclusions, and must contain the information necessary for the department to make a safety determination when reviewed in conjunction with the plans, drawings, and specifications. In addition to the information and documents required under (f) of this section, the department will require an applicant to conduct additional investigation, provide additional design work or analyses, or provide additional information that the department determines is necessary to protect life and property.

(f) Application information and documents must include the following:

(1) for an initial application package,

(A) a letter to notify the department of the applicant's intent; the letter must include the identity of the applicant, the identity of the owner if other than the applicant, the identity of the engineer with qualifications as described under 11 AAC 93.193(a), and a general description of the proposed project;

(B) a completed application form provided by the department, signed by the owner, and accompanied by a non-refundable deposit on the application fee described under 11 AAC 05.010(a)(8)(J), calculated based on preliminary estimates of the applicable costs;

(C) a proposed schedule for the submission of application information and documents required under this section and an estimate of when construction is expected to begin;

(D) a hazard potential classification proposed in accordance with 11 AAC 93.157(b) for the dam;

(E) for new construction of Class I and II dams, an analysis of project alternatives including a feasibility study and a site study that justifies the location, type, and configuration of the proposed dam over other alternative locations, types, and configurations of dams or other projects; and

(F) a proposal prepared by the engineer identified in (A) of this paragraph that outlines the proposed scope of work, methodologies, levels of analysis, and approach to design and construct, repair, or modify the dam to adequately provide for the protection of life and property; the proposal must be based on the proposed size and type of the dam, and based on the hazard potential classification proposed under 11 AAC 93.157(b); the proposal must address at least each of the following:

(i) the inflow design flood determined in substantial accordance with 11 AAC 93.195(b) for the dam;

(ii) seismic parameters for the location of the dam, including the peak ground acceleration, the maximum credible earthquake, the maximum design earthquake, and the operating basis earthquake; those parameters must be determined in substantial accordance with the guidelines from the United States Army Corps of Engineers' Earthquake Design and Evaluation for Civil Works Projects, publication ER 1110-2-1806, dated July 31, 1995 and adopted by reference, or must be determined in substantial accordance with another approach approved by the department under (c) of this section;

(iii) other critical criteria related to the dam including structural stability, hydraulics, seepage, and any other criteria that may significantly affect the design of the dam;

(iv) a description of the design quality assurance and quality control to be conducted during the design;

(2) for a preliminary design package,

(A) proof that the applicant has applied for or holds a valid water use permit, certificate, or authorization required under AS 46.15;

(B) for construction of new dams or modifications that increase the size of the reservoir or raise the hazard potential classification determined in accordance with 11 AAC 93.157, proof of land ownership, a lease agreement, or other legal authority for right of entry, for the land under the dam, all appurtenant works, and the reservoir at the maximum water level;

(C) for construction of new dams or modifications that increase the size of the reservoir or raise the hazard potential classification determined in accordance with 11 AAC 93.157, a proposed method as follows to demonstrate the ability to pay for the following costs:

(i) for a government agency, financial ability may be demonstrated through taxing authority or other revenue generating ability, and by the pertinent bond, ordinance, resolution, or law as may be required to provide sufficient money to pay the costs of operating and maintaining the dam in a safe condition and complying with the requirements of 11 AAC 93.151 - 11 AAC 93.201;

(ii) for an applicant other than a government agency, the owner must provide a performance bond or other financial assurance adequate to provide sufficient money to pay for the costs of safely breaching the dam at the end of the dam's service life and restoring the stream channel and reservoir land to natural conditions, or for the costs of performing reclamation and post-closure monitoring and maintenance, as required under 11 AAC 93.172;

(D) a topographic map of the dam site at a legible engineering scale and legible contour interval, and with sufficient detail to show the location of the dam, the reservoir area at normal and maximum water storage levels, the survey datum, the coordinate system, property lines and other boundaries, and the location of the spillways, outlet works, borings, test pits, and material sites;

(E) a profile drawing along the dam axis showing the elevation of the crest of the dam, the location and elevation of spillways and outlet works, and geological investigation information;

(F) dam cross section drawings, including the maximum cross-section of the dam, indicating elevation and width of the crest, the location and elevation of spillways and outlet works, the slopes of upstream and downstream faces, the thickness of erosion control structures, and the location of underdrains, cutoff walls, and bonding trenches;

(G) a geological and geotechnical investigation report for the dam site, the reservoir area, spillways, outlet works, appurtenant works, and material sites that includes geological maps, locations and logs of borings and test pits, geological cross-sections, material analyses, laboratory test results, and recommendations for foundation treatment, stability analyses, and seepage control;

(H) a seismic report that describes the methods and references used to determine and evaluate the seismic characteristics of the project location; seismic parameters for the location of the dam presented in the report must include the peak ground acceleration, the maximum credible earthquake, the maximum design earthquake, and the operating basis earthquake, as proposed under (1)(F)(ii) of this subsection and approved by the department under (c) of this section;

(I) a hydrology report that describes the methods and references used to determine the inflow design flood, including drainage basin characteristics, streamflow and precipitation data, inflow and outflow hydrographs, and an estimate of impacts of flood events on areas downstream including an incremental damage assessment, if conducted; and

(J) if the information and documents scheduled for filing under (b) of this section cannot be filed by the due date, a proposal to revise the schedule that indicates when the owner expects to submit the remaining information and documents required to be filed under this section; the proposal must also include an estimate of when construction is expected to begin;

(3) for a detailed design package,

(A) an engineering design report sealed by the engineer identified in (1)(A) of this subsection that includes the following information and documents:

(i) a description of all methodologies, references, formulas and assumptions used in developing the design criteria and engineering evaluations;

(ii) an evaluation of the structural stability of the dam, foundation, and appurtenant works;

(iii) an evaluation of the performance of the dam, foundation, and appurtenant works during a seismic event;

(iv) descriptions, physical analyses, and permeability analyses, as appropriate for the materials used in the construction of the dam;

(v) a seepage analysis for the dam and foundation, including filter criteria to prevent piping of fine-grained materials;

(vi) design criteria, calculations, and rating curves for the spillways and outlet works;

(vii) a storage-versus-depth curve and a storage-versus-area curve for the reservoir;

(viii) recommendations for diverting water during construction;

(ix) recommendations for special construction considerations, first filling, operations, maintenance, instrumentation, and monitoring;

(x) design evaluations and recommendations for other features of the dam and appurtenant works;

(B) a detailed design drawing package at a legible size and legible engineering scale that includes the following information:

(i) a cover sheet that identifies the project, dam owner or operator, engineer, and location;

(ii) an index of drawings, legends, drafting standards, conventions, abbreviations, codes or other information necessary to interpret the drawings;

(iii) drawings that include a revision number, that are dated, that are uniquely numbered, and that are marked or stamped with the phrase "ISSUED FOR AGENCY REVIEW" or with similar language;

(C) draft construction specifications;

(D) a plan to control the quality of the construction work and to assure its compliance with the drawings and specifications; and

(E) if the information and documents scheduled for filing under

(b) of this section cannot be filed by the due date, a proposal to revise the schedule that indicates when the owner expects to submit the remaining information and documents required to be filed under this section; the proposal must also include an estimate of when a certificate of approval to construct, modify, or repair the dam is desired and the approximate period of construction;

(4) for a final construction package,

(A) a final drawing package sealed by the engineer identified in (1)(A) of this subsection that includes the same information listed in (3)(B) of this subsection, except that each drawing must be marked or stamped with the phrase "ISSUED FOR CONSTRUCTION" or with similar language;

(B) final construction specifications that include a cover sheet with the date and project identification, and that are sealed by the engineer identified in (1)(A) of this subsection;

(C) a schedule for dam construction that includes key elements of construction, milestones, mandatory inspection points, and the estimated date for substantial completion; the schedule must be revised and resubmitted upon request of the department, if the construction is not accomplished according to the schedule;

(D) a certified cost estimate for the proposed work; the certified cost estimate

(i) must be prepared by a professional construction cost estimator, by the chief financial officer of the owner, or by the engineer identified in (1)(A) of this subsection;

(ii) must include the cost of all labor and materials for the construction, modification, or repair of the dam, including the cost of engineering, the cost of site investigations, the cost of surveying, the cost of construction quality control and quality assurance inspection, and other direct costs associated with the design and construction activities; and

(iii) for work using equipment, services, or other assets of the dam owner, must include a reasonable estimate of the market value of the equipment, services, or other assets utilized for the design of and for the construction, repair, or modification of the dam;

(E) a non-refundable application fee supplement that is equal to the difference between the fee deposit submitted under (1)(B) of this subsection and the fee required under 11 AAC 05.010(a)(8)(J), calculated by using the certified cost estimate submitted under (D) of this paragraph; and

(F) the demonstration of financial ability, posting of bond, or provision of other financial assurance described in (2)(C) of this subsection that the department has approved under (d) of this section;

(5) for pre-construction plans,

(A) a water diversion plan for the construction that includes

(i) cofferdam drawings and specifications;

(ii) a cofferdam stability analysis under normal flow and probable flood conditions with supporting hydrologic data;

(iii) hydraulic and stability analyses for conduits or spillways used for diversion during construction;

(iv) plans for controlling and pumping of seepage during construction; and

(v) plans for removal of cofferdams, conduits, spillways, and other temporary structures used for water diversion during construction;

(B) an erosion control plan that describes measures to be used during and after construction to limit erosion, both within the construction site and in the downstream channel;

(6) for post-construction documentation, to be submitted to the department after completion of the construction, modification, or repair,

(A) a completion report, sealed by the engineer required under 11 AAC 93.173(c)(2), and including

(i) a description of how the plans and specifications were followed, and a description of any deviation from the plans and specifications;

(ii) a description of unexpected conditions encountered during construction;

(iii) inspection reports, and field and laboratory test results including sample locations and test standards or methodologies;

(iv) photographs documenting construction progress and final conditions;

(v) record drawings sealed by the engineer required under 11 AAC 93.173(c)(2); each record drawing must be marked or stamped with the phrase "CONSTRUCTION RECORD DRAWING" or with similar language;

(B) a post-construction operation and maintenance manual prepared in accordance with 11 AAC 93.197; and (C) for Class I or Class II dams, an emergency action plan as required in 11 AAC 93.164.

11 AAC 93.172. Dam removal or abandonment. (a) Before removing or abandoning a dam, a person must apply to the department under this section for a certificate of approval. Unless the department determines that an item or document is not required for the protection of life or property, the following information and documents must be submitted to the department for review and approval:

(1) a completed application form provided by the department, signed by the owner, and accompanied by a non-refundable application fee described under 11 AAC 05.010(a)(8)(J), based on estimates of the applicable costs prepared as required in 11 AAC 93.171(f)(4)(D);

(2) design drawings and specifications for the proposed final configuration of the dam and reservoir site; for Class I and Class II dams, design drawings and specifications must be sealed by an engineer qualified under 11 AAC 93.193(a);

(3) a description of the method and means to dewater or stabilize the reservoir and to breach, remove, or abandon the dam;

(4) a description of the method and means to control erosion at the site during and after the breach, removal, or abandonment, including

(A) controlling sediment transport from the area of the reservoir; and

(B) restoring the reservoir bed and stream channel, or otherwise reclaiming the system;

(5) if the entire dam is not removed,

(A) a hydrologic and hydraulic evaluation of the proposed final configuration of the dam or barrier during the probable maximum flood or other inflow design flood determined in substantial accordance with 11 AAC 93.195;

(B) a stability evaluation of the proposed final configuration of the dam or barrier under static conditions and under dynamic conditions using seismic parameters for the maximum design earthquake; those parameters must be determined in substantial accordance with the guidelines from the United States Army Corps of Engineers' Earthquake Design and Evaluation for Civil Works Projects, publication ER 1110-2-1806, dated July 31, 1995 and adopted by reference, or must be determined in substantial accordance with another approach approved by the department to be adequate to protect life and property;

(C) operation and maintenance requirements for the proposed final configuration of the dam or barrier; and

(D) a statement regarding whether the final configuration of the dam or barrier constitutes a dam under AS 46.17.900 and remains subject to regulation under 11 AAC 93.151 - 11 AAC 93.201;

(6) for mine tailings dams, a

(A) description of the probable potential failure modes of the dam and tailings storage system in the proposed final configuration;

(B) description of long-term expectations for consolidation of the dam and tailings, for the phreatic surface of groundwater within the dam and tailings, for the performance of the dam underdrain system, and for the quantity and characteristics of seepage; and

(C) performance bond or other financial assurance adequate to provide sufficient money to pay for the costs of post-closure monitoring, operation, maintenance, and inspection, as required under this section;

(7) a schedule for completing the work;

(8) a description of the steps that have been taken with regard to abandoning any water rights issued under AS 46.15;

(9) a post-closure monitoring and maintenance plan;

(10) an agreement to release, apply, or transfer any bond or other financial assurance approved by the department under 11 AAC 93.171(d).

(b) Within 30 days after completing the removal or abandonment of a dam, the owner of the dam shall provide the department with the following information and documents:

(1) a description of how activities described in the information and documents provided under this section were conducted;

(2) a description of unexpected conditions encountered;

(3) photographs documenting construction or demolition progress and final conditions.

11 AAC 93.173. Certificates of approval. (a) The department will issue a certificate of approval if it determines that the action for which approval is sought may be conducted without unreasonable risk to life or property, and for a certificate of approval

(1) for construction, modification, or repair of a dam, after reviewing information and documents submitted under 11 AAC 93.171 (a)(1) - (5);

(2) for removal or abandonment of a dam, after reviewing information and documents submitted under 11 AAC 93.172(a); or

(3) to operate a dam, after reviewing information and documents submitted under 11 AAC 93.167 or 11 AAC 93.171(a)(6).

(b) The department will deny a certificate of approval if the owner fails to submit a complete application under 11 AAC 93.167, 11 AAC 93.171, or 11 AAC 93.172, or the department determines that the proposed construction, modification, repair, operation, removal, or abandonment of the dam would present an unreasonable risk to life or property.

(c) After the issuance of a certificate of approval for construction, repair, modification, removal, or abandonment of a dam, the owner may begin the construction, repair, modification, removal, or abandonment. During the construction, repair, modification, removal, or abandonment, and until it is completed,

(1) the owner may not deviate from the terms and conditions of the certificate or from approved plans, drawings, and specifications without the department's approval;

(2) except for the removal or abandonment of a Class III dam, an engineer qualified under 11 AAC 93.193(c) shall observe' and inspect the work for compliance with the approved plans, drawings, and specifications; and

(3) the department may, upon 24 hours' notice to the owner, inspect the dam or any work associated with the construction, operation, modification, repair, removal, or abandonment of the dam.

(d) Water may not be impounded behind a newly constructed dam, and additional water may not be impounded behind a repaired or modified dam, until the department issues, under (a) of this section, a certificate of approval to operate a dam.

(e) A certificate of approval is valid only for the period of time specified in the certificate. An action allowed under the certificate may not continue beyond the certificate's expiration date.

(f) The department will extend the expiration date of a certificate of approval to operate a dam by up to 90 days if the

(1) owner submits to the department a current periodic safety inspection report as provided under 11 AAC 93.159; and

(2) department determines that the dam may be operated safely during the period of extension.

(g) In order to renew a certificate of approval to operate a dam, the owner must submit the following information to the department before the expiration date of the certificate of approval:

(1) a current, periodic safety inspection report as provided under 11 AAC 93.159;

(2) a current operation and maintenance manual as provided in 11 AAC 93.167 or 11 AAC 93.171;

(3) for owners of Class I or Class II dams, a current emergency action plan as provided in 11 AAC 93.164.

(h) The department will renew a certificate of approval to operate a dam if the department determines that the action for which approval is sought may be conducted without unreasonable risk to life or property, and after reviewing the information and documents submitted under (g) of this section.

(i) As the department considers necessary to protect life and property, the department will specify terms and conditions for a certificate of approval, including

(1) maximum or minimum filling rates and other conditions to ensure proper loading of the dam during the initial filling of the reservoir;

(2) normal and maximum reservoir water elevations;

(3) due dates and frequencies for routine inspections, for periodic safety inspections required under 11 AAC 93.159, and for emergency action plan exercises and revisions required under 11 AAC 93.164; and

(4) operation and maintenance procedures.

(j) An owner may not assign or otherwise transfer a certificate of approval issued under 11 AAC 93.167, 11 AAC 93.171, or this section. To request that the department transfer a certificate of approval issued under 11 AAC 93.167, 11 AAC 93.171, or this section, the transferor and the transferee must submit a joint application on a form provided by the department and pay the applicable fees provided in 11 AAC 05.010(a)(8)(K). The department may approve the transfer and issue a new certificate of approval including any terms and conditions that the department determines are necessary to ensure that the dam will be operated and maintained in a safe manner.

(k) department may revoke a certificate of approval for construction, modification, repair, removal, or abandonment of a dam or a certificate of approval to operate a dam if

(1) the department determines that the operation, construction, repair, modification, removal, or abandonment of a dam presents an unreasonable risk to life or property;

(2) the owner fails to submit a periodic safety inspection report required under 11 AAC 93.159;

(3) the department rejects a periodic safety inspection report because the report is inadequate for the department to determine the safety of the dam; or (4) after reviewing a periodic safety inspection report or other information, the department determines that the dam is unsafe.

11 AAC 93.174. Transfer of certificate of approval. Repealed.

11 AAC 93.175. Records. (a) The owner of a dam shall maintain on file, either at the location of the dam or at the owner's regular place of business in the state, all records pertaining to the safety of the dam, including

- (1) construction plans and specifications;
- (2) engineering reports;
- (3) record drawings;
- (4) all completion reports;
- (5) construction inspection reports;
- (6) material test analyses;
- (7) reports of routine safety inspections and monitoring performed as specified in the operation and maintenance manual required under 11 AAC 93.167(b)(2), 11 AAC 93.171(f)(6)(B), or 11 AAC 93.173(g)(2);
- (8) periodic safety inspection reports required under 11 AAC 93.159; and
- (9) all other information and documents that might contain data relevant to the safety of the dam.
- (10) the current operation and maintenance manual required under 11 AAC 93.167(b)(2), 11 AAC 93.171(f)(6)(B), or 11 AAC 93.173(g)(2); and
- (11) the current emergency action plan required under 11 AAC 93.164.

(b) All records that the owner is required to retain under this section must be open to the department's inspection and copying during the owner's regular business hours, or, in the event of an emergency, at any time the department considers necessary.

(c) The department may seek an administrative subpoena requiring the owner or the owner's agents, contractors, or employees, to produce, within seven days, any record that the owner is required to retain under this section. If the party refuses to comply with the subpoena, the department may seek to enforce the subpoena by filing an appropriate action in superior court.

(d) A record required under this section shall be maintained as long as the dam is in service and for an additional period of time that the department specifies, as necessary to protect life and property, in a certificate of approval issued under 11 AAC 93.172 for removal or abandonment of a dam.

11 AAC 93.177. Reporting of dam incidents. The owner or operator of a dam shall report to the department, on a form provided by the department, each incident involving the dam. For purposes of this section, incidents include one or more of the following events:

- (1) the satisfactory or unsatisfactory performance of a dam during extreme loading periods caused by extraordinary seismic or hydrologic events;
- (2) the uncontrolled release of water from a dam due to improper operation, overtopping, excessive seepage, or piping, regardless of whether downstream flooding occurs;
- (3) indications of stress in structural features or appurtenant works that could potentially affect the structural or operational integrity of the dam;
- (4) severe deterioration or erosion of structural elements or materials of construction, including concrete, steel, timber, soil, rock, geosynthetics, pipes, and valves;
- (5) modifications or repairs to the dam required to satisfy regulatory requirements or other deficiencies that may be identified in the dam or the original design basis.

11 AAC 93.180. Construction of medium-sized dams. Repealed 8/16/89.

11 AAC 93.190. Construction of small dams. Repealed 8/16/89.

11 AAC 93.193. Qualified engineers. (a) The department will not approve proposals for hazard potential classifications as required under 11 AAC 93.157, design engineering reports, design and construction drawings, construction specifications, or other information or documents submitted under 11 AAC 93.171 or 11 AAC 93.172, or construction completion reports or record drawings as required under 11 AAC 93.171 (f)(6)(A), unless sealed by an engineer with

- (1) a valid certificate of registration issued under AS 08.48 and 12 AAC 36 as a professional engineer in the branch of civil engineering;
- (2) at least five years of experience, in this state or another state, as a licensed or registered professional engineer in the branch of civil engineering; and
- (3) significant work experience in the design, construction, inspection, and safety of dams.

(b) The department will not approve an engineer under AS 46.17.050 and 11 AAC 93.159(b) for purposes of conducting a periodic safety inspection as required by 11 AAC 93.159, unless the engineer has

(1) a valid certificate of registration issued under AS 08.48 and 12 AAC 36 as a professional engineer in the branch of civil engineering; and

(2) at least five years of experience, in this state or another state, as a licensed or registered professional engineer in the branch of civil engineering; and

(3) sufficient work experience to determine the safety of the particular dam being inspected and to make reliable recommendations regarding the operation and maintenance of that dam, inspections of that dam, and other matters related to the safety of that dam.

(c) For purposes of the observation and inspection requirements in 11 AAC 93.173(c)(2), an owner shall use an engineer with the qualifications set out in (a)(1) - (3) of this section.

11 AAC 93.195. Inundation maps and inflow design flood information. (a) An inundation map prepared under 11 AAC 93.157(b) or 11 AAC 93.164 must

(1) indicate the extent of flooding below a dam after failure under the normal operating level of the reservoir, under the inflow design flood, and under other scenarios as the department considers necessary to evaluate danger to life and property;

(2) identify downstream structures or other development, flood wave depth and arrival times, roads, evacuation routes, staging areas, and other information required by the department to minimize danger to life and property; and

(3) be based on a dam break analysis, if required.

(b) For purposes of 11 AAC 93.164 and 11 AAC 93.171, the information for determining the inflow design flood shall be developed in substantial accordance with

(1) the Federal Emergency Management Agency's Federal Guidelines for Dam Safety: Selecting and Accommodating Inflow Design Floods for Dams (FEMA 94), as revised as of October 1998 and adopted by reference; or

(2) methods approved by the department that adequately assess and characterize the design hydrology, and that are based on the hazard potential classification assigned under 11 AAC 93.157.

(c) In this section, "inflow design flood" means the flood flow above which the incremental increase in the downstream flood caused by a failure of the dam does not result in any additional danger downstream.

11 AAC 93.197. Operation and maintenance manuals. (a) An owner that is required under 11 AAC 93.167, 11 AAC 93.171, or 11 AAC 93.173 to prepare or provide an operation and maintenance manual must describe in that manual, in detail, how a dam will be operated, inspected and maintained, including

- (1) a physical description of the dam;
- (2) any operating limitations on the dam;
- (3) critical design criteria;
- (4) a schedule and procedures for routine safety inspections, monitoring, and maintenance of the dam;
- (5) detailed instructions and maintenance procedures for operating valves, gates, or other equipment;
- (6) maintenance procedures, calibration information, and instructions for instrumentation and for monitoring and alarm systems;
- (7) site-specific visual inspection checklists; and
- (8) other information requested by the department to provide sufficient detail regarding dam operation, inspection, and maintenance for the protection of life and property.

11 AAC 93.200. Fee for dam construction permit. Repealed 1/1/86.

11 AAC 93.201. Definitions. Unless the context requires otherwise, in AS 46.17 and 11 AAC 93.151 - 11 AAC 93.201,

- (1) "alteration" has the meaning given in AS 46.17.900;
- (2) "appurtenant works" has the meaning given in AS 46.17.900;
- (3) "Class I dam" means a dam assigned a Class I (high) hazard potential classification under 11 AAC 93.157;
- (4) "Class II dam" means a dam assigned a Class II (significant) hazard potential classification under 11 AAC 93.157;

- (5) "dam" has the meaning given in AS 46.17.900;
- (6) "department" means the Department of Natural Resources;
- (7) "enlargement" has the meaning given in AS 46.17.900;
- (8) "modification" means an enlargement or alteration;
- (9) "owner" has the meaning given in AS 46.17.900;
- (10) "record drawings" means plan, profile, and cross-section drawings that show the final configuration of a dam as constructed, including
 - (A) lines, grades, elevations, and size;
 - (B) types of material used for construction;
 - (C) reservoir area; and
 - (D) details of all appurtenant works, including spillways, outlet pipes, monitoring devices, and other equipment;
- (11) "repair" has the meaning given in AS 46.17.900; "repair" does not include routine maintenance;
- (12) "routine maintenance" means any work performed on a dam that
 - (A) is generally of a housekeeping nature; and
 - (B) does not affect or have the potential to affect the safety of the dam;
- (13) "sealed" means prepared by an engineer or a person under that engineer's direct supervision, and bearing the signature and seal of that engineer as required by AS 08.48.221 and 12 AAC 36.185.

Article 4

Temporary Water Use

11 AAC 93.210. Temporary water use. (a) Procedures to authorize the temporary use of water, as provided in 11 AAC 93.220, will apply if the use continues for less than five consecutive years and the water applied for is not otherwise appropriated.

(b) A water right or priority is not established by a temporary water use authorization issued under 11 AAC 93.220. Authorized temporary water use is subject to amendment, modification, or revocation by the department if the department determines that amendment,

modification, or revocation is necessary to supply water to lawful appropriators of record or to protect the public interest.

(c) Upon the commissioner's receipt of a written request from the permittee, an authorization for temporary use of water will, in the commissioner's discretion, be extended one time for good cause for a period of time not to exceed five years. The request for an extension of the authorization for temporary use of water must be accompanied by the fee prescribed by 11 AAC 05.010.

11 AAC 93.220. Procedure for temporary water use. (a) A person must receive authorization under this section before temporary use of a significant amount of water under 11 AAC 93.035. The application for an authorization for temporary water use must be made on a form approved by the department and completed in accordance with the instructions furnished to the applicant.

(b) An application must include

(1) the application fee prescribed by 11 AAC 05.010;

(2) a map identifying the section, township, range, and meridian, and indicating the location, of the property, the point of withdrawal, diversion, or impoundment, and the point of use;

(3) the quantity of water to be used, with documentation and calculations justifying the request;

(4) the nature of the water use;

(5) the time period during which water is to be used; and

(6) the type and size of equipment used to withdraw the water.

(c) repealed 8/20/2004.

(d) The department may consider any pertinent information, in addition to that provided in the application, in deciding whether to authorize or deny temporary use of water. The reason for the decision will be furnished to a person who is denied a temporary water use authorization and to a person who has filed an objection.

(e) An authorization for temporary use of water will include

(1) the quantity of water to be used;

(2) the legal description of the point of water withdrawal or diversion;

- (3) a project description;
- (4) an expiration date;
- (5) the daily duration and months of use; and
- (6) the point or area of water use, if applicable.

(f) The department may issue an authorization for temporary use of water subject to conditions including suspension or termination, considered necessary to protect the water rights of other persons or the public interest. (g) Denial of an application under this section does not preclude the applicant from applying for a permit under 11 AAC 93.040.

Article 5 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.

11 AAC 93.240. Application for preferred use status. An applicant for preferred use status shall submit the applicable fee prescribed in 11 AAC 05.010 and provide the department written evidence that establishes, to the satisfaction of the department, that

- (1) the use of water is for a public water utility that serves the general public as defined by AS 42.05.990(4) and (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.

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, the commissioner will, in his or her discretion, require the submission of additional evidence, hold hearings, or require investigative studies.

(b) Denial of an application for preferred use status does not preclude the applicant from applying for other water rights under 11 AAC 93.040 - 11 AAC 93.140.

11 AAC 93.260. Issuance of a permit to appropriate for preferred use. (a) If the commissioner grants an applicant preferred use status under 11 AAC 93.250, the commissioner will issue a permit to appropriate for preferred use when

(1) notice has been given under 11 AAC 93.080; 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 limited water availability has resulted in the need for immediate action, the commissioner will:

(1) order the applicant to post a bond or certificate of deposit, in the name of the department and the applicant, in an amount the commissioner considers 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 by established priority.

(c) An order issued under (b) of this section continues in effect until an agreement on compensation is arrived at as provided in (a) of this section or until the limited water condition is over.

Article 6

Enforcement

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 11 AAC 93.280 - 11 AAC 93.290.

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 the right of a prior appropriator, or, with the exception of changes in water quality, to the resource itself, the commissioner will, in his or her 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.

11 AAC 93.290. Commissioner's orders. (a) In order to protect the public interest the commissioner may issue any of the following orders:

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

(2) a stop order to a 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 stop order to a person substantially interfering with the appropriation of water to which a right was granted under the provisions of this chapter;

(4) a stop order to a person appropriating, diverting, or impounding water without a permit or authorization, including uses that are not a significant amount of water under 11 AAC 93.035;

(5) an order requiring the submittal of books, records, meters, gauges, well logs, and other hydrologic information relevant to an adjudication or action; or

(6) an order to remove or abate unpermitted diversion or impoundment works.

(b) If the commissioner considers it necessary to prevent or rectify a violation of this chapter, the commissioner will, in his or her discretion,

(1) give notice and hold a hearing in order to gather additional information, evidence, or testimony; or

(2) obtain a search warrant or court order authorizing the commissioner to enter onto the property, seize, or remove structures or works of appropriation, or directing the violator to take other action required to protect against damage to persons and property.

Article 7

Appeals

11 AAC 93.300. Appeals. An eligible person affected by a decision issued under this chapter may appeal that decision in accordance with 11 AAC 02.

Article 8

Administrative Basin-wide Adjudication

11 AAC 93.400. Boundaries of the adjudication area. (a) Before initiating an adjudication under AS 46.15.165, the commissioner will identify in writing the geographic and hydrologic boundaries and the hydrologic resources of the adjudication area. The written identification will

- (1) describe the interaction and hydrologic communication between the surface water drainage systems and the ground water flow systems;
- (2) identify the surface water topographic drainage divide and the boundaries of ground water aquifer systems on the most detailed United States Geological Survey map available for the basin;
- (3) describe the geographic and hydrologic boundary and the area in square miles;
- (4) describe how the boundary and area size were determined;
- (5) collect and summarize available stream discharge and ground water data and determine, where possible, mean monthly and annual stream discharge, high and low flows, duration curves, current water use, and the aquifer's yield; and
- (6) summarize ongoing and planned hydrologic or hydrogeologic investigations in the area.

(b) The commissioner will, in his or her discretion, alter the boundaries identified in (a) of this section as needed after an adjudication is initiated under 11 AAC 93.410.

11 AAC 93.410. Initiating an administrative basin-wide adjudication. The commissioner will, in his or her discretion, initiate an administrative basin-wide adjudication by issuing an order that will, in the commissioner's discretion, contain some or all of the following information:

(1) a written consent by the federal government to participate in the administrative adjudication and to have its claim to federal reserved water rights adjudicated in the process;

(2) a reference to the authorizing statute, AS 46.15.165, and statement of intent to adjudicate all water rights claims, including federal reserved water rights, pending, permitted, or certified in the area;

(3) a description of the purpose of the basin-wide adjudication;

(4) a description of the geographic and hydrologic area under adjudication;

(5) a description of the surface water bodies and ground water aquifer systems, including names if possible;

(6) a legal description of the adjudication area, including meridian, township, range, section, and aliquot parts;

(7) a notice that public and private water utilities will represent water users purchasing water from the utilities;

(8) a description of the time period during which the federal government or any other person may file a claim to have federal reserved water rights adjudicated;

(9) a notice that new water rights applications in the adjudication area will be accepted and included in the adjudication if filed within a stated period of time after the close of the newspaper publication period;

(10) a notice that the adjudication will not preclude the filing of future applications for water rights under AS 46.15, but that such rights will be junior in priority to those adjudicated under these proceedings; and

(11) the address and office location to obtain further information.

11 AAC 93.420. Notice procedures. (a) Notice of the adjudication will be served on those persons listed in AS 46.15.165(c) and in the manner described in AS 46.15.165(e).

(b) Notice to the agencies of the federal government having management or trust responsibility over lands within the adjudication area will be served on

- (1) the chief officer of the federal agency's Alaska regional office;
- (2) the manager of the specific federal land reservation, if any;
- (3) the U.S. Attorney General; and
- (4) the U.S. Attorney for the District of Alaska.

(c) Notice will be given to the Department of Fish and Game and the Department of Environmental Conservation.

(d) Newspaper notice will be published once a week for four consecutive weeks in a newspaper of general circulation in the area to be adjudicated.

11 AAC 93.430. Federal reserved water rights claims. (a) A claim by the federal government or other person claiming federal reserved water rights within the adjudication area must be filed in writing with the commissioner.

(b) A claim to federal reserved water rights must contain the following information:

- (1) the name of the agency, person, or agent representing the person making the claim, and the representative's phone number and address;
- (2) the claimed priority date;
- (3) the claimed primary purpose of the federal reserved water right;
- (4) a list of statutes, proclamations, orders, or other documents establishing the federal withdrawal or reservation of land;
- (5) the amount of water claimed and data supporting the quantification of the claim;
- (6) the daily duration and months of the year during which water is claimed;
- (7) the water source, including name if possible;
- (8) the most detailed USGS topographic map available for the area showing the location and the legal descriptions for the points of water withdrawal, diversion, or impoundment and water use, or river reach for instream use, including meridian, township, range, section, and aliquot parts;
- (9) all documents that establish each land withdrawal or reservation and support the claimed priority date, claimed primary purpose, and quantities;

(10) well logs, aquifer test data, and well construction data for diversions from ground water sources; and

(11) any available water use data.

11 AAC 93.440. Commissioner's orders. In performing the adjudication under this chapter, the commissioner will, in his or her discretion, issue further orders as necessary, including

(1) designating an impartial qualified person as a master to preside over the adjudication;

(2) establishing hearing times and places;

(3) establishing appropriate rules of evidence and procedures for use in connection with a hearing.

Article 9

Critical Water Management Areas

11 AAC 93.500. Initiating designation proceedings. The commissioner will, in his or her discretion, initiate proceedings to designate a particular geographic or hydrologic area, including surface and ground water, as a critical water management area if

(1) the commissioner determines that there is or might be an imminent water shortage in the area, for all or part of the year, affecting a substantial number of permittees or certificate holders of record so that their ability to reasonably acquire water has been or will be affected by existing or potential overappropriation, drought, saltwater intrusion, or a chemical or toxic contamination rendering the water source unusable;

(2) an agency or political subdivision of the state, or an agency of the United States, petitions for the designation of the area as a critical water management area and demonstrates that a condition in (1) of this section exists; or

(3) 25 percent or more of the permittees and certificate holders of record in a geographic or hydrologic area petition for the designation of a critical water management area and demonstrate that at least one condition in (1) of this section exists.

11 AAC 93.510. Public notice and hearing. Before the commissioner designates a geographic or hydrologic area as a critical water management area, or revokes or amends a designation, the department will

(1) publish a notice of the proposed designation, revocation, or amendment in a newspaper of general circulation in the area affected once a week for four consecutive weeks, soliciting public comment and announcing the date, time, and place of a public hearing;

(2) solicit comments on the proposed designation, revocation, or amendment by certified mail, return receipt requested, from appropriators and property owners of record within the area; affected federal, state, and local agencies, including the Departments of Fish and Game and Environmental Conservation; and any affected regional or village corporation; and

(3) hold a public hearing in the affected area to take written and oral comments on the proposed designation, revocation, or amendment; the department will accept additional written comments submitted up to 30 days after the hearing date.

11 AAC 93.520. Department order. The decision to designate a geographic or hydrologic area as a critical water management area, or revoke or amend a designation, will be in writing, and will, as appropriate,

(1) state the reasons for the designation, revocation, or amendment;

(2) define the boundaries of the area or amendment;

(3) predict the likelihood of an imminent or continued water shortage or contamination problem;

(4) state how additional appropriations would affect the rights of permittees or certificate holders of record, or the public interest under AS 46.15.080; and

(5) state whether, after a specific date, applications for water rights will be accepted or adjudicated.

11 AAC 93.530. Effect of the order. (a) Within 30 days after signing a department order to designate a geographic or hydrologic area as a critical water management area, or revoke or amend a designation, the commissioner will announce the decision by publishing the order in a newspaper of general circulation in the affected area once a week for four consecutive weeks. The order will also be mailed to permittees or certificate holders of record and property owners

of record in the area; affected federal, state, and local agencies, and affected regional and village corporations.

(b) After the commissioner takes action under (a) of this section, the department may take the following actions:

(1) restrict or deny the acceptance of applications for new water appropriations or applications for additional quantities for existing appropriators of record, until the order is amended or revoked;

(2) seek voluntary agreement among permittees and certificate holders to limit the quantity of their water use on an equitably apportioned basis during all or part of the year;

(3) fix a time limit for accepting new applications for water rights for existing water uses;

(4) designate all water uses as significant;

(5) require notice of all applications;

(6) require conservation measures;

(7) take any other actions necessary to fully inform the public of the order; or

(8) enforce actions under 11 AAC 93.280, 11 AAC 93.290, AS 46.15.255, and AS 46.15.256.

11 AAC 93.540. Appeals. An eligible person affected by a decision under 11 AAC 93.520 - 11 AAC 93.530 may appeal that decision as provided in 11 AAC 02.

Article 10

General Provisions

11 AAC 93.910. Change of address. (a) All water right applicants, permit holders, and certificate holders shall promptly notify the commissioner of any change of ownership or 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 11 AAC 93.040 - 11 AAC 93.260 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.

11 AAC 93.920. Exemptions. (a) repealed 8/20/2004.

(b) The use of seawater or the emergency use of water for protection of life or property, is exempt from the provisions of this chapter unless the department determines that the use should be regulated in the public interest.

11 AAC 93.930. Procedure for the transfer and change of appropriations. (a) A person with a permit to appropriate or certificate of appropriation who intends to change the location of the point of water withdrawal, diversion, or impoundment, depth of taking, nature of use, point of return flow, or place of use, or add points of withdrawal, diversion, or impoundment, shall apply in writing for permission to make the change and include the applicable fee prescribed in 11 AAC 05.010.

(b) In determining whether a proposed change will be approved, the department will consider the effect of the proposed change on the water rights of other persons and the public interest. The department will provide for notice to water right holders of record who may be adversely affected, and to the Department of Fish and Game and the Department of Environmental Conservation, and post a notice on the Alaska Online Public Notice System as required under AS 44.62.175. However, the department will not provide notice for a request to change use of less than 5,000 gpd unless the department determines that providing notice is in the public interest or required by law. The department will accept written comments, and may hold a hearing, as provided in 11 AAC 93.080 - 11 AAC 93.110.

(c) If the department determines that the proposed change will not adversely affect the water rights of other persons or the public interest, and that the proposed change does not constitute a significant change in beneficial use and is unlikely to adversely affect existing water uses, fish and wildlife habitat, or water quality, the department will amend and issue the permit to appropriate or certificate of appropriation to include the change.

(d) If the department determines that the proposed change will not adversely affect the water rights of other persons or the public interest, but determines that the proposed change will constitute a significant change in beneficial use, a new use, or that the proposed change may adversely affect existing water uses, fish and wildlife habitat or water quality, the department

may issue a change permit for a period of time that corresponds with the category of use and maximum period of time for issuance of a permit to appropriate under 11 AAC 93.120(b).

(e) A change permit will not be issued, and a permit to appropriate or certificate of appropriation will not be amended, if it is proven to the satisfaction of the department that the change will adversely affect the water rights of permit holders and certificate holders of record, or if the department finds that the proposed change may adversely affect or impair the public interest or that the appropriation proposed to be changed has been abandoned or forfeited.

(f) The department may grant a proposed change, or issue a change permit allowing the proposed use change, in whole or part, subject to conditions that the department considers necessary in order to avoid injury to the water rights of other persons or to the public interest.

(g) If a change permittee demonstrates that the change has been put into effect during the period of time prescribed in 11 AAC 93.120(h), the department will issue an amended certificate to reflect that the water right has changed subject to the terms and conditions imposed by the department. (h) The department will record any amended certificate in the appropriate recorder's office.

11 AAC 93.940. Procedure on abandonment and forfeiture. (a) Except as provided in (f) of this section, if the commissioner has reason to believe that all or part of an appropriation has been abandoned or forfeited, the certificate holder will be notified that the commissioner intends to revoke the certificate for nonuse, to the extent of the nonuse. The revocation notice will be sent by certified mail, return receipt requested, to the last known address on record with the department.

(b) If the certificate holder desires to retain the appropriation, the certificate holder must file an objection within 30 days after receipt of the revocation notice. The certificate holder has 60 days after the date the objection is filed to submit proof that the appropriation has been neither abandoned nor forfeited. The proof must be in writing, and may include statements or affidavits, sworn testimony of witnesses, documents, and other relevant evidence. The commissioner will, in his or her discretion, hold a hearing in order to gather additional information, evidence, or testimony on the proposed revocation.

(c) If the proof substantiates that the appropriation has not been abandoned or forfeited, the commissioner will rescind the revocation notice. The holder will be notified of the decision by certified mail.

(d) If the proof does not substantiate that the appropriation has been neither abandoned nor forfeited, the commissioner will declare the appropriation abandoned or forfeited and revoke the certificate in whole or in part depending on the extent of nonuse. The commissioner will record the decision, and any amended certificate, in the appropriate recording office. In addition, the commissioner will, in his discretion, secure a court order for the removal of the works of appropriation.

(e) If necessary, the commissioner will, in his or her discretion, require a record of use to be submitted on a specified regular basis.

(f) If a certificate holder voluntarily relinquishes his or her water right by submitting a notice of relinquishment or a signed, notarized letter stating that all or part of the water right is being relinquished and stating the amount being relinquished, the notice requirement under (a) does not apply and the water right will be considered abandoned. The certificate will be revoked in whole or in part, and a copy of the revocation decision will be sent to the certificate holder. Any amended certificate will be recorded by the commissioner in the appropriate recorder's office.

11 AAC 93.950. Recording of instruments. The department will, at the certificate holder's expense, record certificates issued under this chapter in the appropriate recorder's office.

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 permit or certificate issued under this chapter, brought by the holder or owner of it or any third party. Neither this chapter nor any permit or certificate issued under it is intended as a waiver of sovereign immunity or of the state's immunity under the 11th amendment to the United States Constitution.

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 appropriators 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) deleted 11/7/90;

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

(5) deleted 11/7/90;

(6) deleted 11/7/90;

(7) "declaration of appropriation" or "grandfather right" means a formal claim to a water right acquired under law or custom 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 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) repealed 8/20/2004;

(15) deleted 11/7/90;

(16) deleted 11/7/90;

(17) "well" means an artificial opening or artificially altered natural opening by which ground water is sought or through which ground water flows under natural pressure or is artificially withdrawn, but does not include a hole or shaft 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 the amount of water flowing past a given point during one second;

(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, that is supplied from drainage, upwellings, springs, or groundwater;

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

(24) "afy" means acre-feet per year;

(25) "appropriators of record" means applicants for, and permittees and certificate holders of, water rights;

(26) "appurtenant" means that a permit or certificate to appropriate is legally attached to the land or place where the water is beneficially used, unless the water right is severed under AS 46.15.160;

(27) "aquifer" means any geologic formation that will yield water to a well in sufficient quantity for beneficial use;

(28) "aquifer system" means a heterogeneous body of interlayered permeable and poorly permeable material that functions regionally as a water-yielding hydraulic unit and comprises two or more permeable beds (aquifers) separated at least locally by aquatards

(confining units) that impede ground water movement but do not greatly affect the regional hydraulic continuity of the system;

(29) "cfs" means cubic feet per second;

(30) "drainage basin" means a natural, distinct, and independent hydrologic area; surface or subsurface or both; confined or unconfined;

(31) "gpd" means gallons of water per day;

(32) "gpm" means gallons of water per minute;

(33) "non-consumptive water use" means the instream use of water, or the diversion of water where the quantity of water diverted is not diminished except by evaporation or transpiration and the water is returned to its original source at the original point of diversion immediately after its use;

(34) "reasonably acquire" means that a permittee or certificate holder can acquire adequate water to fulfill the purposes of the appropriation from the source of water for which the water right is permitted or certificated, even though changes in the condition of water occurrence have taken place as a result of the withdrawal of water by later appropriators;

(35) "seawater" means water, taken from the sea or ocean, with a salinity of 35 parts per thousand or greater;

(36) "statement of beneficial use" means a notarized statement of the actual quantity of water being used from a permitted source of water for a specific purpose;

(37) "water source" means a water body, lake, stream, aquifer, or ice;

(38) "unduly affected" means that a prior appropriator loses the ability to reasonably acquire an adequate quantity of water to fulfill the purposes of the appropriation from the water source from which the water right is permitted or certificated, except that a prior appropriator has not been unduly affected if water can reasonably be obtained by installing more efficient diversion works for the withdrawal of water or by performing effective routine repair and maintenance of diversion works or water well equipment in order to allow for the full development of the water resource.