



Alaska Dam Safety Program

HAZARD POTENTIAL CLASSIFICATION AND JURISDICTIONAL REVIEW

This form is used to review and indicate the hazard potential classification of an artificial barrier in accordance with 11 AAC 93.157 and to determine if the barrier is a dam under the jurisdiction of the Alaska dam safety regulations, based on the definition articulated under Alaska Statute 46.17.900 (3), and summarized as follows:

- “Dam” includes an artificial barrier, and its appurtenant works, which may impound or divert water and which...
- has or will have an impounding capacity at maximum water storage elevation of 50 acre-feet and is at least 10 feet in height measured from the lowest point at either the upstream or downstream toe of the dam to the crest of the dam; or
 - is at least 20 feet in height measured from the lowest point at either the upstream or downstream toe of the dam to the crest of the dam; or
 - poses a threat to lives and property as determined by the department after an inspection.

In accordance with 11 AAC 93.151, an artificial barrier with a Class I or Class II designation is determined to meet the third definition of a dam, regardless of its geometry.

Please complete items 1 through 21. Attach additional information as necessary. This form must be certified and stamped on page 3 by an Alaska-registered professional engineer, qualified in accordance with 11 AAC 93.193.

1. Name of barrier: _____

National Inventory of Dams (NID) number: _____ (Assigned by Department)

Name of stream: _____

General location and region: _____

Legal location: Township _____ Range _____ Section _____ Meridian _____

Purpose and type of barrier: _____

This barrier is: Existing Proposed Under construction

Current hazard potential classification: I II III Not assigned

2. Owner: _____

Address: _____

Contact name: _____

Phone: _____

3. Is barrier federally owned, or regulated by the Federal Energy Regulatory Commission?

Yes (stop here)

No (complete form)

4. Maximum crest height of barrier: _____ feet
 Measured from: Upstream toe Downstream toe Offstream toe
 Basis of height: Conceptual design drawing Detailed design drawing
 As-built drawing Field measurement NID data
5. Maximum impoundment volume: _____ acre-feet
 Surface area of reservoir at maximum storage: _____ acres
 Average depth of reservoir above bottom of barrier: _____ feet (live storage)
 Basis of volume estimate: Surface area multiplied by average depth
 Bathymetry
 NID data
 Other: _____
6. Downstream development: Yes No Unknown
 Type of development (check all that apply):
 Homes Power or communication utilities
 School Water or wastewater treatment facilities or lines
 Community halls, churches, etc. Overnight campgrounds
 Industrial or commercial property Public parks or trails
 Major highway Fish hatchery or processor
 Primary roads Barrier owner's property or facilities
 Secondary or rural roads Other utilities: _____
 Railroads Other development: _____
- Basis of observations: Ground reconnaissance Aerial reconnaissance
 Aerial photo Other: _____
- Date of observations: _____
7. Proximity of development to downstream channel (add maps or other information as necessary):
 Distance downstream from barrier: _____
 Distance from stream bed: _____
 Relative elevation above streambed: _____
8. Is development in the inundation zone of a flood from an uncontrolled release of water from the barrier?
 Yes No Unknown
9. Was a dam break analysis conducted? Yes No
 Basis of determining inundation zone: Simplified DAMBRK model
 DAMBRK model
 (Please attach calculations) NWS FLDWAV model
 HEC-1 model
 Other: _____
 Maximum depth and velocity of flow through development: _____
10. Is development at risk from improper operation or a "sunny day" failure?
 Yes No Unknown
11. Is development at risk from an incremental increase in the flood if the barrier fails under flood conditions?
 Yes No Unknown
 Flood condition evaluated: 100 year 1/2 PMF PMF Other _____

12. Could an uncontrolled release cause other significant property damage or loss? Yes No Unknown

Description: _____

13. Could an uncontrolled release effect public health? Yes No Unknown

Description: _____

14. Is the reservoir created by the barrier the primary water supply for a community of more than 500 residents? Yes No Unknown

15. Is a backup water supply available? Yes No Unknown

16. Is barrier located on waters important to anadromous fish? Yes No Unknown

17. Are anadromous fish waters at risk of damage or loss if an uncontrolled release occurs? Yes No Unknown

18. Proposed hazard potential classification: Class I (High) Class II (Significant) Class III (Low)

19. Basis of classification: Quantitative - Numerical dam break analysis conducted
 Qualitative - Limited engineering calculations
 Preliminary - No engineering calculations

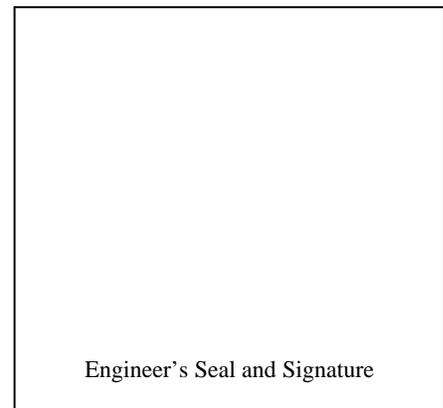
20. Comments: _____

21. Certified by: _____ (Print name)

Date: _____

Company: _____

Phone: _____



Notes:

- 1. This form must be certified and stamped by an Alaska-registered professional engineer qualified in accordance with 11 AAC 93.193.
- 2. The information presented in this form may be overruled based on current data that reveals a higher level of confidence in the quality of information necessary to make the appropriate determinations.
- 3. Anadromous fish waters are determined in accordance with 11 AAC 195.010 (a).
- 4. Alaska dam safety regulations are articulated under 11 AAC 93.151 through 11 AC 93.291 (Article 3).

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Jurisdictional Status of Barrier:

Dam under state jurisdiction

Barrier is not a dam under state jurisdiction

Reasons:

- Height
- Height and storage volume
- Hazard potential classification
- Anadromous fish stream
- Other: _____

Reasons:

- Height
- Height and storage volume
- Hazard potential classification
- Federal ownership or regulation
- Other: _____

Concur with proposed hazard potential classification:

Yes No

Hazard potential classification based on current information:

Yes No

Official hazard potential classification:

Class I (High) Class II (Significant) Class III (Low)

Comments: _____

Reviewed by: _____

Title: _____

Signature: _____

Date: _____