



# **Alaska Dam Safety Program**

**Alaska Department of Natural Resources**

**Division of Mining, Land and Water**

**Water Resources Section**

**Dam Safety and Construction Unit**

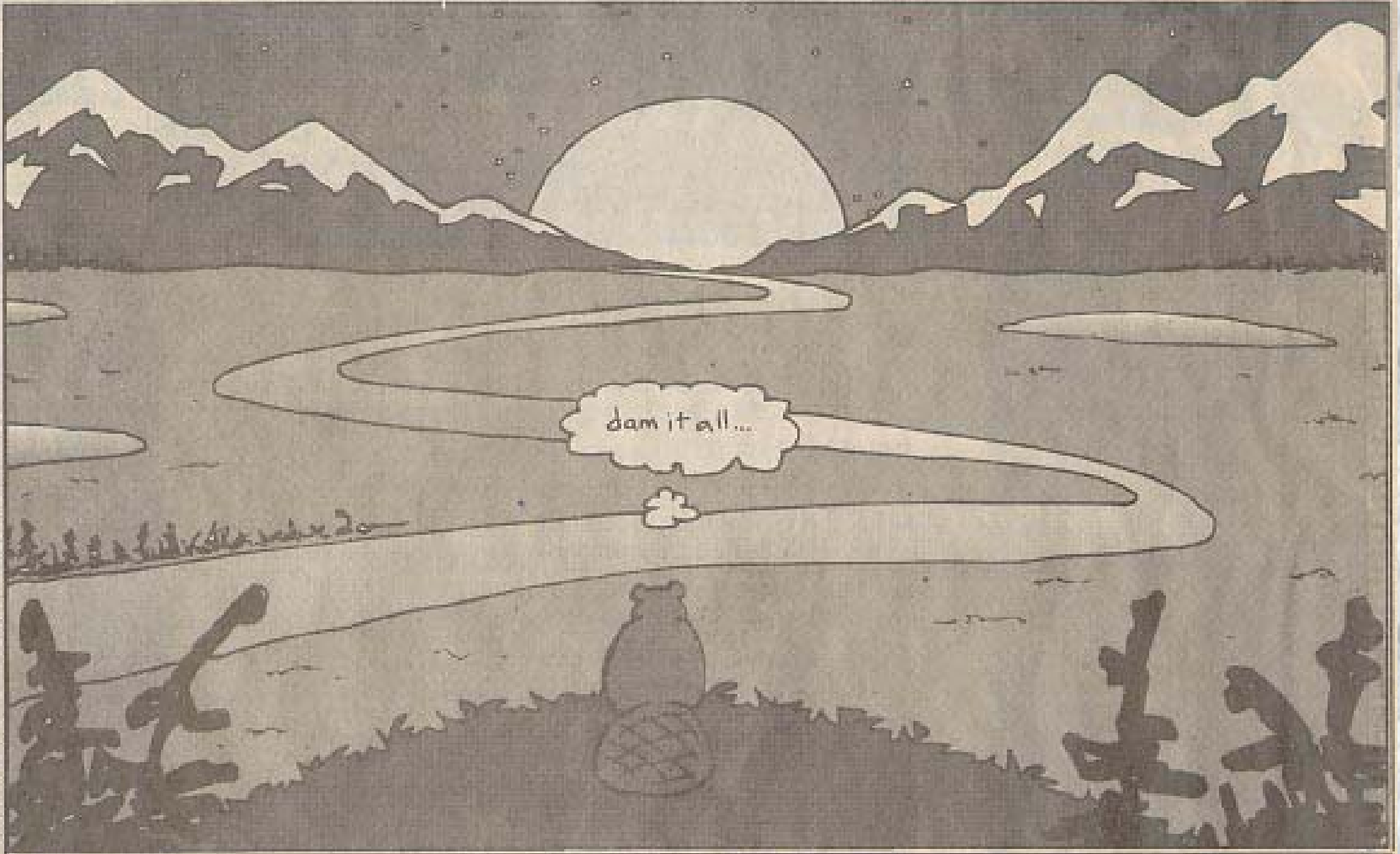
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# POLICY STATEMENT

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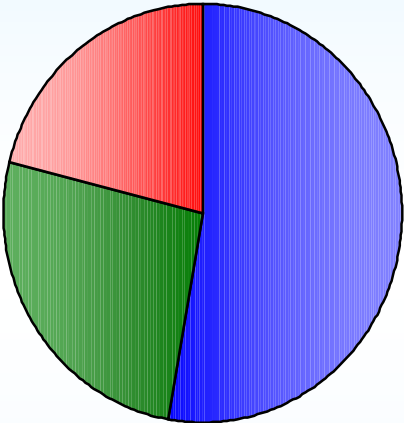


the Humble Beaver pauses to reflect upon the Infinite Mysteries of Life... *Jack*

# Dams in Alaska

**35 Federal  
Jurisdictional  
Dams**

**52 Non-  
Jurisdictional  
Dams  
(on inventory)**



**83 State  
Jurisdictional  
Dams**

**170 Dams on Inventory**

# Eklutna Lake Dam



10/22/1999 10:28am

# Long Lake Dam at Snettisham Hydro Project near Juneau



# Akutan Hydro Dam



1/15/1999 2:49pm

# **Alaska Dam Safety Statutes and Regulations**

- **AS 46.17 establishes basis for program and defines a state jurisdictional dam**
- **11 AAC 93.151 through 93.201 articulates the Dam Safety regulations**
  - **Hazard classification assignment**
  - **Requirements for owner's Periodic Safety Inspections**
  - **Authority for inspections and emergency actions by the state**
  - **Requirements for Certificates of Approval**
- **Federally owned or operated dams and FERC regulated dams are specifically exempt in statute**

## **AS 46.17.900 (3) defines a dam**

- **“dam” includes an artificial barrier, and its appurtenant works, which may impound or divert water and which.....**
  - **A....20 feet high**
  - **B....10 feet high and stores 50 acre-feet**
  - **or**
  - **C....high or significant hazard potential**

**(Run-of-river dams usually fail to measure up)**



# RESOURCES

- **Alaska Dam Safety Program web site**
  - <http://dnr.alaska.gov/mlw/water/dams/>



**Guidelines for Cooperation  
with the  
Alaska Dam Safety Program  
(June, 2005)**

# Alaska Dam Safety Program

- *Certificate of Approval to Construct, Modify, Repair, Remove or Abandon a Dam*
  - for extraordinary activity
- *Certificate of Approval to Operate a Dam*
  - for ordinary activity



Alaska Dam Safety Program

# Five stages in the regulatory life of a dam

- Application for new dam construction
- Construction
- Operation
- Remediation
- Closure

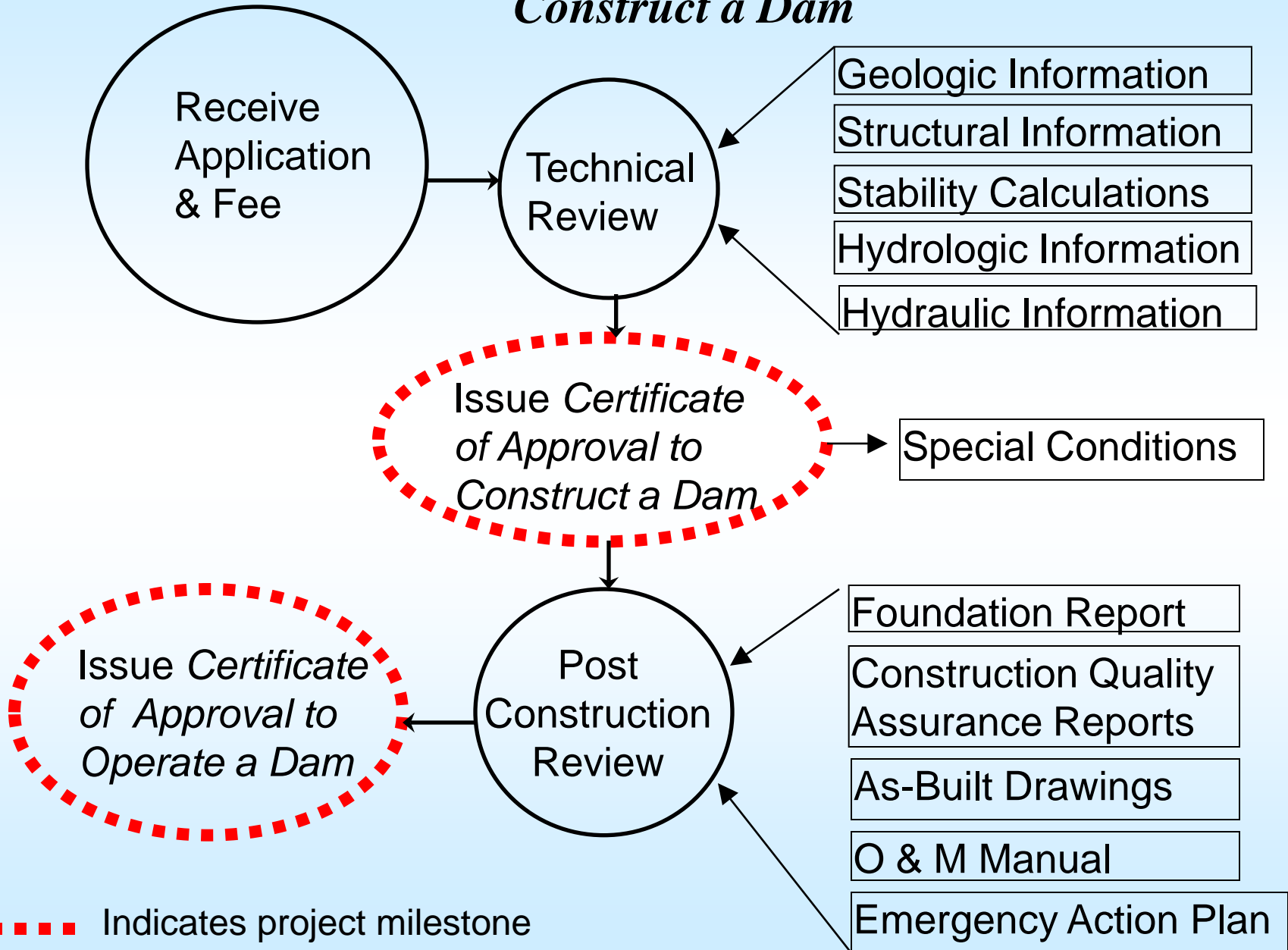
# Four parts to design application

- **Initial Application Package**
- **Preliminary Design Package**
- **Detailed Design Package**
- **Final Construction Package**

# Post construction submittals

- **Construction completion report**
  - Record drawings (as-built)
  - Design changes
  - Inspection reports
- **Operations and maintenance manual**
- **Emergency Action Plan**

# Review process for *Certificate of Approval to Construct a Dam*



# Alaska Dam Safety Program

- *Certificate of Approval to Operate a Dam*
  - Dated to expire after next Periodic Safety Inspection due date
- *New Certificate of Approval to Operate a Dam*
  - Issued based on current Operations and Maintenance Manual after current Periodic Safety Inspection is approved



Alaska Dam Safety Program

# Alaska Dam Safety Program

- **Special Conditions to Certificate of Approval**
  - **Emergency Action Plan requirements for Class I and II dams**
  - **Next PSI due date**
  - **Mandatory maintenance or repair requirements**
  - **Operating limitations**
  - **Other important stipulations**



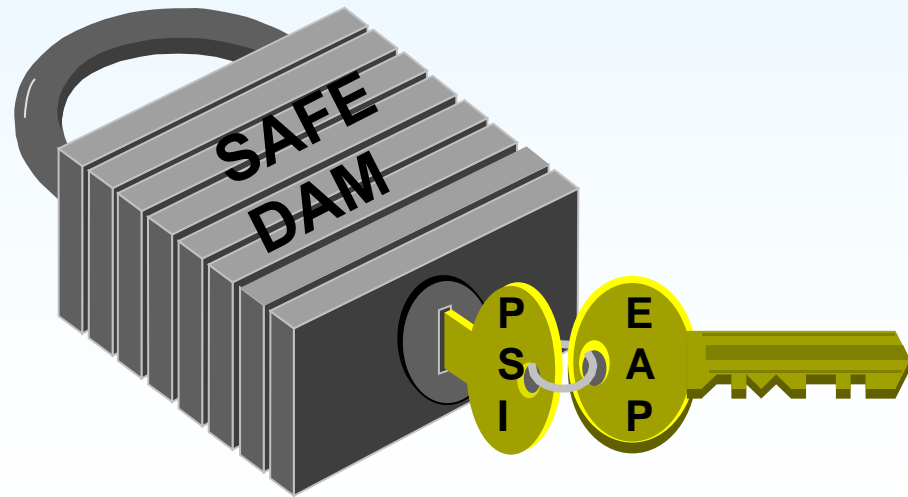
**Alaska Dam Safety Program**



# Communication: the Key to Safety

## Operator Submittals

- Application for Certificates of Approval
- OPERATIONS AND MAINTENANCE MANUAL
- Emergency Action Plan
- Periodic Safety Inspections
- Other submittals



# Communication: the Key to Safety

## Dam Safety Response

- Requests for additional information
- Review comments on manuals, plans and reports
- Certificates of Approval to Construct, Repair, Modify, Remove, or Abandon a Dam
- Certificate of Approval to Operate a Dam
  - Special Conditions to certificates



# Dam Safety: A matter of responsibility.



7/13/1999 19:42