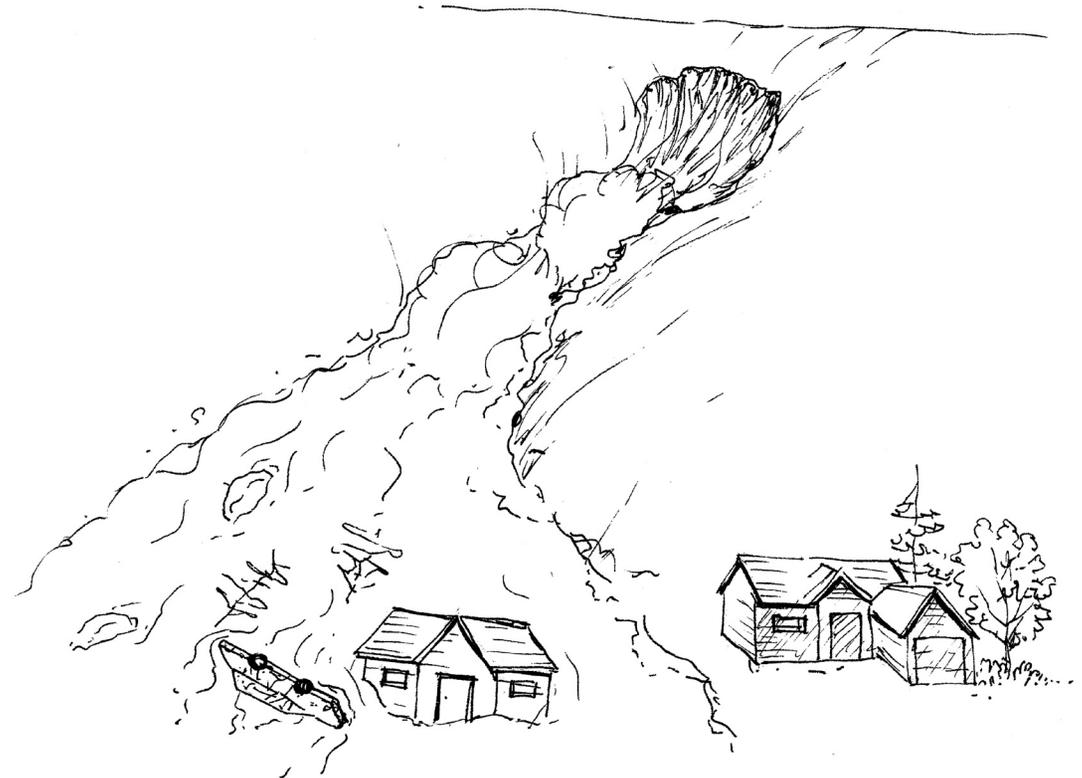


dam safety

Dams are generally used for water storage, irrigation, flood control, electricity, wildlife habitat, navigation, and recreation (Federal Emergency Management Agency 3 Dec. 2004). A dam failure is an unintended release or surge of stored water. This release or surge of water can cause a significant amount of property damage, injury and even the loss of life to people living downstream. Dam failure may be caused by structural problems with the dam itself such as poor design, improper construction, inadequate maintenance, or age. Failure can also be caused by flooding, landslides, earthquakes, or vandalism.

The damage that occurs from a dam failure is generally determined by the population living below the dam and the amount of water stored in the dam. As the population increases in valleys below dams, so does the potential for catastrophic effects. The effects of a dam failure will vary depending on the size of the dam, the amount of water stored at the time of failure, stream flow, and the proximity and size of the population downstream. The destruction of homes and property, damage to roads and utilities, loss of agriculture, destruction of wildlife habitat, and loss of flood control capabilities are all possible effects of dam failure (Pierce County, Washington 3 Dec. 2004).

Prevention should be the goal of any community at risk from the effects of a dam failure. Regular inspections and maintenance of dams can do much to reduce risk of failure. Ensuring proper design and construction is essential in any new dam construction, as is educating the public about the risk associated with living downstream from a dam and having appropriate emergency procedure in place in case of failure.



Dam failures can have catastrophic effects on people living below the dam.

references and further reading:

Pierce County, Washington. Sept. 2002. Technological Hazards: Dam Failure. 3 Dec. 2004. <<http://www.co.pierce.wa.us/xml/abtus/ourorg/dem/EMDiv/HIVA/dams.pdf>>.

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