

HAZARD IDENTIFICATION AND VULNERABILITY ANALYSIS (HIVA)

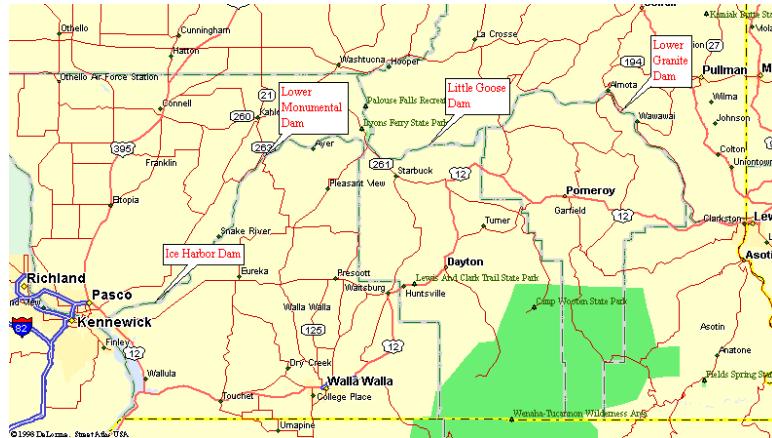
Walla Walla County, Washington

SNAKE RIVER DAM FAILURE

Hazard Overview

Upstream from Walla Walla County on the Snake River there are several dams, four of which pose a threat of flooding should they fail. Failure of any of these dams would send water down river flooding low-lying areas. Burbank, Wallula and the Western portion of Walla Walla County along the Columbia River could be threatened by such an event.

Inundation maps have been prepared by the U.S. Army Corps of Engineers for these dams indicating the worst possible case scenario. Should a dam fail, the amount of floodwater reaching Walla Walla County would not exceed the estimates on the inundation maps. These maps indicate a rise in river level from the normal 343 feet above sea level to as much as 355 feet above sea level.



Should an upriver dam fail, the downriver dams are expected to immediately begin to release water to lower the pool above the dam in an effort to mitigate the effect as the floodwater travels downstream. This release of water can also cause flooding before the actual dam failure floodwater arrives.

History and Probability of Occurrence

There have been no failures of Snake River Dams. The worst-case scenario for Walla Walla County would be the failure of Ice Harbor Dam since it is the closest and would afford little warning.

There is little likelihood that a Snake River Dam will fail in the next 25 years. The probability of occurrence is LOW.

Vulnerability

The low-lying areas of Burbank, Wallula and the Western portion of Walla Walla County along the Columbia River could be threatened by such an event. The Columbia River water level in the McNary pool is about 343 feet above sea level. Should a dam failure occur the pool could rise to as much as 355 feet above sea level. This depth of water would flood the low-lying portions of the community of Burbank, portions of Highway 12, the railway along the corridor, schools,

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businesses and port facilities. Water would also backup the Walla Walla River about two miles until it reached elevation 350 feet.

Damage to homes, business, port and transportation facilities in the flooded areas of Burbank, Wallula, Port Kelley and along the Columbia River would be great. Infrastructure damage to roads, rail, communication and bridges would have an impact on most of Walla Walla County. Economic damage to the entire county would be significant.

An important segment of Walla Walla County would be exposed to the effects of this hazard. In a worse case scenario, there could be a disaster of moderate to major proportions. The vulnerability of Walla Walla County is MEDIUM.

Risk Rating

The probability is LOW and our vulnerability is MEDIUM, so a risk rating of LOW is assigned. There is little potential for a Snake River dam failure disaster during the next 25 years. The threat is such as to warrant little special effort to prepare for, respond to, recover from, or mitigate against this hazard. This hazard need not be specifically addressed in the county's emergency management training and exercise program except as generally dealt with during hazard awareness training.