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Engineer Research and
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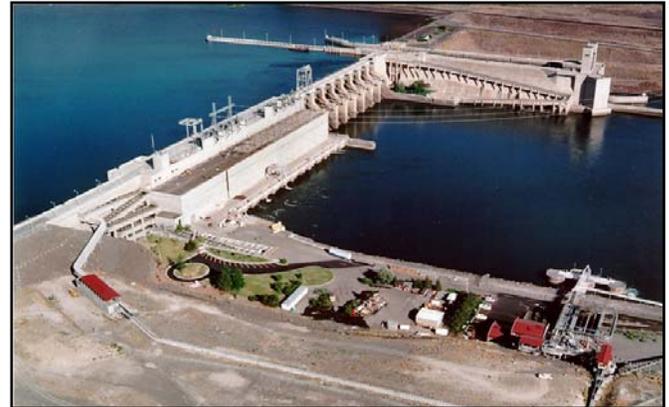
Lower Monumental Lock and Dam Physical Model Study

Description

The Lower Monumental Lock and Dam is located on the Snake River, 41.6 miles upstream from confluence of the Snake and Columbia Rivers in South Central Washington. It is about 45 miles northeast of Pasco, Washington.

The project includes a powerhouse, navigation lock, and an 8-bay gated spillway. The reservoir (Lake Herbert G. West) has a normal operating range between Elevations 540 and 537 Mean Sea Level (MSL).

The Dam is about 3,800 feet long and rises about 135 feet above the channel invert. The six power generators have a combined capacity of 810,000 kilowatts.



Lower Monumental Lock and Dam, Washington

Issue

At the Engineer Research and Development Center (ERDC), Coastal and Hydraulic Laboratory (CHL), the project structures and topography was reproduced at a 1:55 scale to investigate spill operations necessary to reduce the rate of degradation of the stilling basin apron until repairs could be made. The model has been used for studies involving both juvenile and adult fish passage. Some of the structural modifications investigated were a Behavioral Guidance Structure and a Removable Spillway Weir.

Sponsors

US Army Corps of Engineers, Walla Walla District (CENWW)

Point of Contact

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