



Hungry Horse Dam

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The Hungry Horse Dam project includes the dam, reservoir, powerplant, and switchyard. The project plays an important role for meeting the power needs in the Pacific Northwest and flood risk management. It also contributes to other uses including irrigation and navigation.

Flood Risk Management Operations

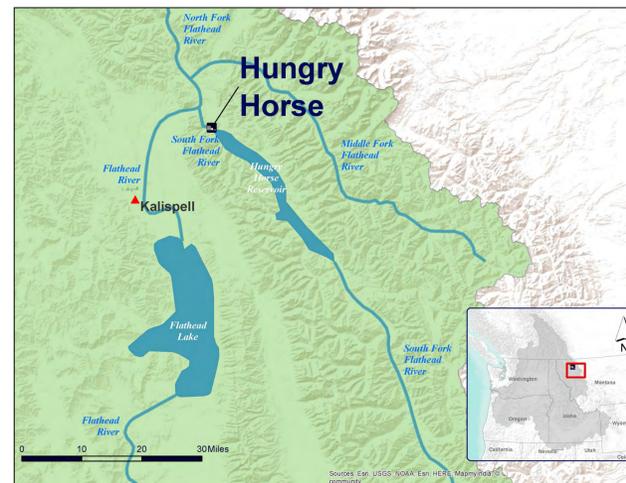
From January through June, the reservoir level is adjusted for flood risk management space requirements. The amount of reservoir draft or space is dependent on inflow forecasts. The objective of the flood risk management season is to provide enough space in the reservoir for system flood risk management operations in the lower Columbia River, and also to provide local flood protection in the mainstem Flathead River near Columbia Falls, Montana.

Operations for Fish

Hungry Horse Dam is operated to augment flows in the spring, from April to June, to aid spring anadromous fish migrating in the lower Columbia River. From July through September, the project is operated to balance reservoir storage to meet local and downstream fish needs. The reservoir is drafted to supplement flows for juvenile anadromous fish migration in the lower Columbia River, but timing and limit of the draft are also intended to benefit resident fish. Flows from the reservoir are maintained year round to preserve fish habitat in the river below the dam.

Maintenance Activities

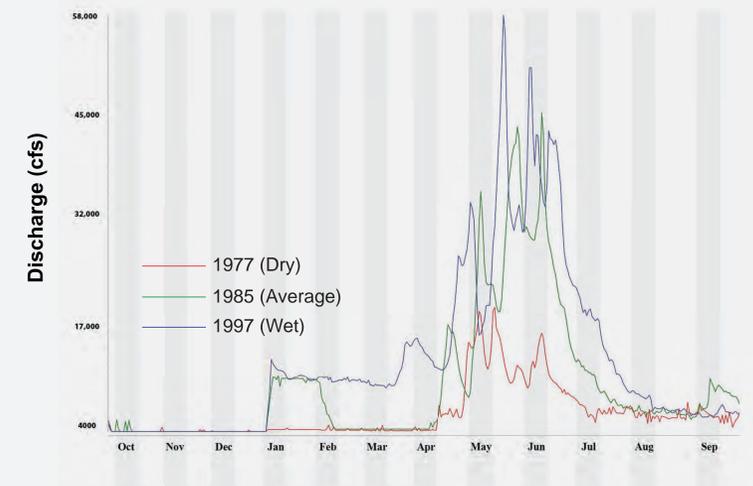
Annual maintenance on dam outlet works, spill structures, power plants, etc. is necessary for continued operations. Periodically, extraordinary maintenance activities are necessary to safely operate the project. An example of extraordinary maintenance at Hungry Horse Dam is the upcoming modernization of the power plant.



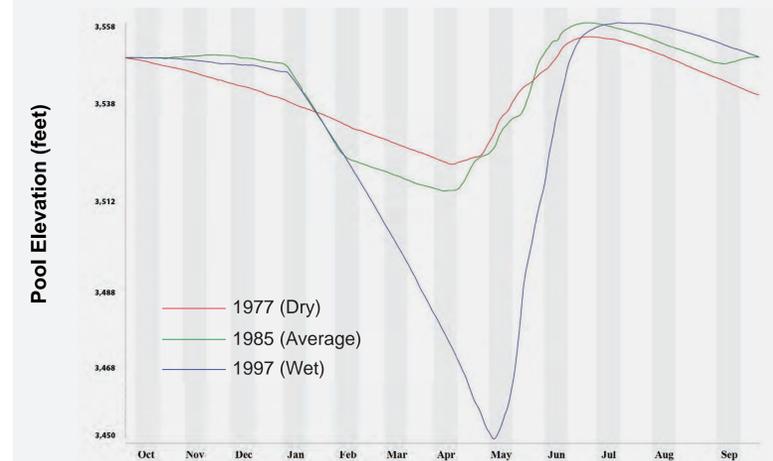
Quick Facts

- ▶ Original Construction: 1948 to 1953
- ▶ Dam Type: Concrete Arch
- ▶ Dam Height: 564 feet
- ▶ Crest Length: 2,115 feet
- ▶ River: South Fork Flathead River
- ▶ Active Capacity: 3,467,179 acre-feet at full pool elevation of 3560 feet
- ▶ Spillway (type/capacity at reservoir elevation 3565 feet): Gated Morning Glory Spillway /50,000 cubic feet per second (cfs); hollow-jet valves / 14,000 cfs
- ▶ Power Plant: Four 107MW generators, with combined hydraulic capacity of 12,000 cfs (transmission limited to 9,000 cfs) at reservoir elevation of 3560 feet.

Modeled SF Flathead River flows near Columbia Falls, MT for wet, average, and dry water supply conditions.



Modeled reservoir pool elevations for Hungry Horse Dam, for wet, average, and dry water supply conditions.



General operational purposes by season.

Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
						McNary Spring Flow Objective - April 10 Elevation Target		McNary Summer Flow Objective - Draft Reservoir			
Minimum Flows at SF Flathead River below Dam or at Columbia Falls											
Flood Risk Management						Refill					
Power generation											

