



John Day Dam and Lake Umatilla

Quick Facts

- ▶ Stream: Columbia River (RM 215.6)
- ▶ Location: Rufus, OR
- ▶ Owner: U.S. Army Corps of Engineers, Portland District
- ▶ Authorized Purposes: Hydropower, Navigation, Flood Control (1950 Flood Control Act)
- ▶ Other Purposes: Fish & Wildlife, Recreation, Water Quality, Irrigation
- ▶ Type of Project: Storage
- ▶ Authorized Flood Storage: 535,000 acre-ft

Dam

- ▶ Completed: 1972
- ▶ Height: 281 ft
- ▶ Length: 5,543 ft
- ▶ Features: powerhouse, spillway, navigation lock, fish passage facilities
- ▶ Forebay Elevation Normal Operating Range: Jul-Sep = 265–268 ft msl
Nov-Jun = 260–265 ft msl
- ▶ Spillway Capacity (max): 1,560,000 cfs

Powerhouse

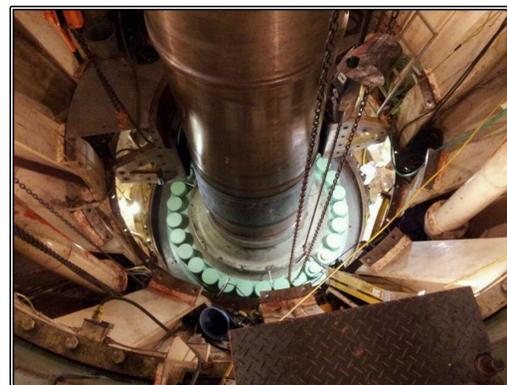
- ▶ Generation Capacity: 2,160 MW, 16 Units
- ▶ Hydraulic Capacity: 322,000 cfs



John Day Lock and Dam was authorized by Congress for power, navigation, and flood control in the 1950 Flood Control Act and amended in 1957. The project was completed in 1971 near the city of Rufus, OR, 215 miles upstream of the Pacific Ocean. Lake Umatilla extends upstream of the dam for 110 miles to McNary Dam.

Hydropower

John Day Dam has 16 turbine units and a total generating capacity of 2,480 megawatts.



John Day Dam, Lake Umatilla, and associated facilities are operated for Hydropower, Navigation, Flood Risk Management, Fish & Wildlife, Recreation, Water Quality, and Irrigation.

Navigation

John Day Dam navigation lock is the third of eight locks encountered in the Columbia-Snake Inland Waterway, a 465-mile river highway that allows barge transport of commodities between the Pacific Ocean and Lewiston, ID.

Annually, about 10 million tons of commercial cargo pass through the John Day lock.

Flood Risk Management

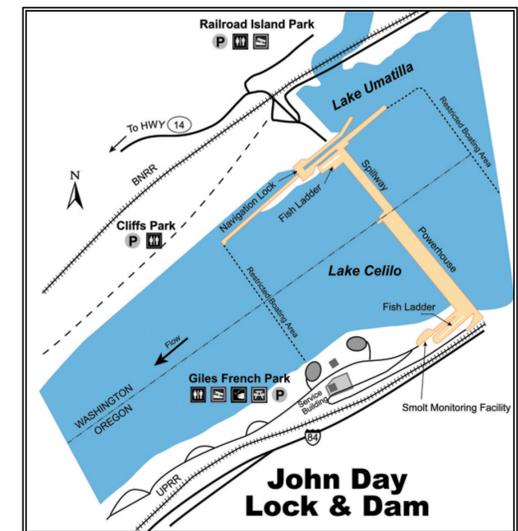
John Day Dam was originally authorized for 2 million acre-feet of flood control storage; however, due to concerns from local and downstream interests, the authorization was amended to 500,000 acre-feet in 1957.

Water Quality

Water quality is monitored and managed consistent with Clean Water Act and state standards for the health of aquatic species. During spill for juvenile fish passage at the four Lower Columbia and four Lower Snake River projects, the Corps implements a Water Quality Program to manage total dissolved gas.

Recreation

Popular recreational activities at John Day Dam and Lake Umatilla include boating, fishing, windsurfing, kiteboarding, hiking, wildlife viewing, camping, and more. There are several state parks and Corps recreation areas along the shoreline of Lake Umatilla.



Fish & Wildlife

John Day Dam has two fish ladders—one on each shore—to provide a passage route for upstream-migrating fish, including adult salmon and steelhead, lamprey, sturgeon, shad, and others. Passage routes operated for downstream-migrating fish are the spillway, two spillway weirs, and a juvenile bypass system.

