



# McNary Dam and Lake Wallula

## Quick Facts

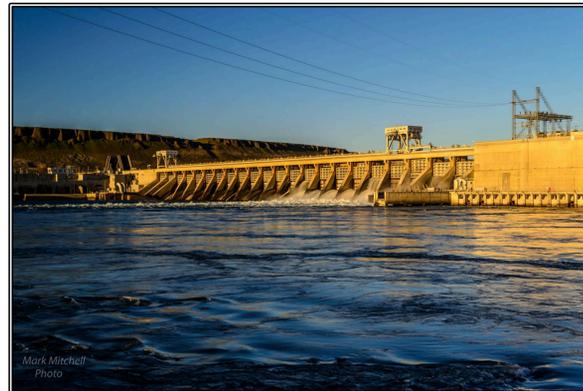
- ▶ Stream: Columbia River (RM 292)
- ▶ Location: Umatilla, OR
- ▶ Owner: U.S. Army Corps of Engineers, Walla Walla District
- ▶ Authorized Purposes: Hydropower, Navigation (1945 Rivers and Harbors Act)
- ▶ Other Purposes: Fish & Wildlife, Recreation, Water Quality, Irrigation
- ▶ Type of Project: Run-of-River

## Dam

- ▶ Completed: 1957
- ▶ Height: 183 ft
- ▶ Length: 7,365 ft
- ▶ Features: powerhouse, spillway, navigation lock, fish passage facilities
- ▶ Forebay Elevation Normal Operating Range: 337–340 ft msl
- ▶ Spillway Capacity (max): 2,200,000 cfs

## Powerhouse

- ▶ Generation Capacity: 980 MW, 14 Units
- ▶ Hydraulic Capacity: 232,000 cfs



McNary Lock and Dam was authorized by Congress for power and navigation in the 1945 Rivers and Harbors Act. Construction began in 1947, and all turbine units were operational in 1957. Lake Wallula extends upstream of the dam for 64 miles to Hanford and has over 242 miles of shoreline.

## Hydropower

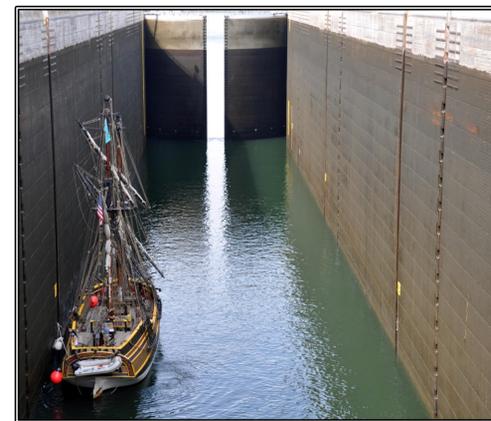
McNary Dam has 14 turbine units and a total project capacity of 980 megawatts, enough to power about 686,000 homes. The Corps and BPA are collaborating to modernize the turbines to improve power and hydraulic capacity and incorporate the latest fish-friendly design.



McNary Dam, Lake Wallula, and associated facilities are operated for Hydropower, Navigation, Fish & Wildlife, Recreation, Water Quality, and Irrigation.

## Navigation

McNary Dam navigation lock is the fourth 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. In 2015, more than five million tons of cargo passed through the McNary lock.



## Recreation

Nearly 17,000 acres of public lands surrounding Lake Wallula are utilized for recreation, wildlife habitat, and water-connected industry. Currently, there are about 2,400 acres leased to state or local park agencies, 17 public boat launch facilities, and 8 commercial boat club facilities.



## Fish & Wildlife

McNary 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.



The McNary National Wildlife Refuge is owned and managed by the U.S. Fish & Wildlife Service as part of the larger Mid-Columbia River Refuge Complex.



## 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.