



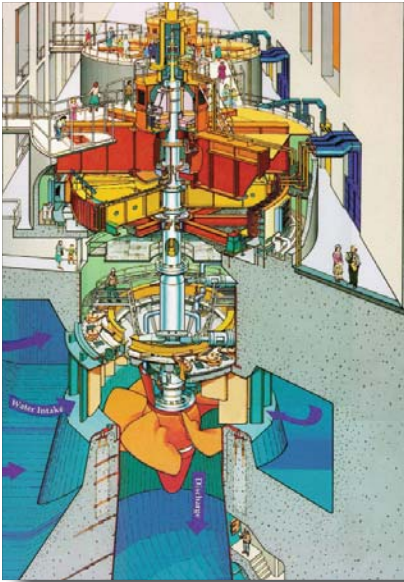
US Army Corps
of Engineers ®
Walla Walla District

FACT SHEET

Hydropower



The Walla Walla District operates and maintains seven hydropower dams -- Ice Harbor, Lower Monumental, Little Goose and Lower Granite are located on the Snake River; McNary is located on the Columbia River; and Dworshak is located on the North Fork of the Clearwater River. Hydropower is a clean, efficient, renewable, reliable, flexible power supply that helps reduce the region's carbon emissions footprint.



How electricity is generated

Water flowing downstream at dams produces electricity. As the water passes through the dam's powerhouse, it falls from the upstream level behind the dam to a lower down stream level. This water is moving with tremendous force and is guided down to the turbine. As it strikes the blades of the turbine, the water turns the turbine like a propeller. The turning turbine spins coils of wires inside a large generator mounted above it, converting the mechanical energy of falling water into electrical energy. Transmission lines then carry the electricity to homes and businesses.



U.S. Army Corps of Engineers Walla Walla District Hydropower Projects

Project	River	State	Service	Rating
Dworshak	N/Fork Clearwater	ID	1973	400 MW
Ice Harbor	Snake	WA	1962	603 MW
Little Goose	Snake	WA	1970	810 MW
Lower Granite	Snake	WA	1975	810 MW
Lower Monumental	Snake	WA	1969	810 MW
McNary	Columbia	OR/WA	1952	980 MW

Hydro Facts

The U.S. Army Corps of Engineers is the largest hydro-power producer in the U.S.

The Walla Walla District is the Corps' second largest power producer.

The Northwest gets about 50% of its energy from hydropower, a clean, reliable, renewable, efficient, flexible power source.

The Walla Walla District operates and maintains six hydropower facilities at Ice Harbor, Little Goose, McNary, Lower Monumental, Lower Granite and Dworshak dams.

These facilities are capable of producing 4,400 megawatts of energy, enough to power a city the size of Seattle.

Annual production equals about 15 billion kilowatts, which equates to about \$895 million.

Kaplan Turbines are the main workhorse of the District. They are approximately 90% to 95% efficient and have adjustable blades allowing operators to tilt them in response to changing water conditions. While they are a little more complex than other turbines, they turn at only 87.5 rpm and are designed to have a long service life.