Web Content

Client Portland General Electric (PGE)
Website deschutespassage.com

Overview

For the first time since 1968, salmon and steelhead will be swimming their way up the Metolius, Crooked and upper Deschutes Rivers. Through a unique partnership, PGE and the Confederated Tribes of Warm Springs will be restoring fish passage around the Pelton and Round Butte dams on the Deschutes River. As co-owners of the dams, PGE and the Tribes have spent several years developing a plan to restore this section of the Deschutes and its tributaries. The project will improve habitat for the fish, expand recreation opportunities for the public and encourage economic possibilities for the region.

An underwater tower

This unique solution involves building a 273-foot underwater tower and fish collection station above Round Butte Dam in Lake Billy Chinook. The fish will be collected, sorted and transported downstream so they can continue their journey to the Pacific. When Round Butte Dam was built in 1964, it included a fish passage system-a gondola/tramway for the upstream journey and an intake/collection system for the downstream migration. But unforeseen changes in the river currents and temperatures made it impossible for the fish to find their way downstream. Eventually the system was abandoned and a fish hatchery was built below Round Butte Dam instead. The new underwater tower modifies the currents and temperature to mimic the natural conditions of the river. With the new collection station, the fish will be efficiently transported downstream so they can continue on to the Columbia River and out to the ocean. On their return to the river, the fish will be transported by truck above Round Butte Dam to reach the upstream areas to spawn and complete their migration cycle.

Important source of clean energy

With the new structure and restoration of fish passage on the Deschutes, the Pelton Round Butte hydro project has been certified by the Low Impact Hydropower Institute as a source of green energy. There are only 33 hydroelectric projects in the U.S. that have earned this distinction. See the PGE news release to learn more.

Reliable and steady, hydropower is a great source of clean energy and is important to Oregon's economy. It's also important to PGE, constituting 9 percent of the utility's power generation mix. Because of PGE's plans to restore fish passage, the Pelton Round Butte hydro project will be counted as part of PGE's renewable energy portfolio. This is an important step in reaching PGE's state-mandated goal of 25 percent renewable energy sources by 2025. For more on this effort, visit PGE and the Environment.

Costs

The total cost of the project will run about $130 million. This covers the construction of the underwater tower and fish facility ($108 million), as well as a series of supporting projects to improve environmental conditions for the fish, such as:

- Releasing salmon and steelhead fry into upstream creeks and streams so they will return there to spawn once the project is complete.
- Improving habitat along the tributaries and streams so the returning adult fish can spawn and the young fish can thrive.

When the project is complete, PGE plans to submit a request to the Oregon Public Utility Commission to recover project costs though a price adjustment of 1 percent at most.

Timeline

Construction of the project is already underway and will be completed in spring 2009:

- September 2007: construction began
- December 2008: top of tower in place
- April 2009: construction complete
- May 2009: testing complete, system operational

As soon as the project is fully operational, young fish will be transported downstream to continue their migration cycle.

Benefits

Restoring fish passage in the Deschutes River Basin benefits the whole region. With improved habitat and downstream passage, the fish can return to their native spawning grounds and complete their natural cycle. A flourishing fish population means better sport fishing and improved harvest for the Tribes, which is good for the Central Oregon economy. A vibrant and healthy river supports the numerous recreational and agricultural uses of the river and its reservoirs. By restoring fish passage on the Deschutes, PGE and the Tribes will be providing an important source of clean electricity for the region, while being good stewards of the environment.