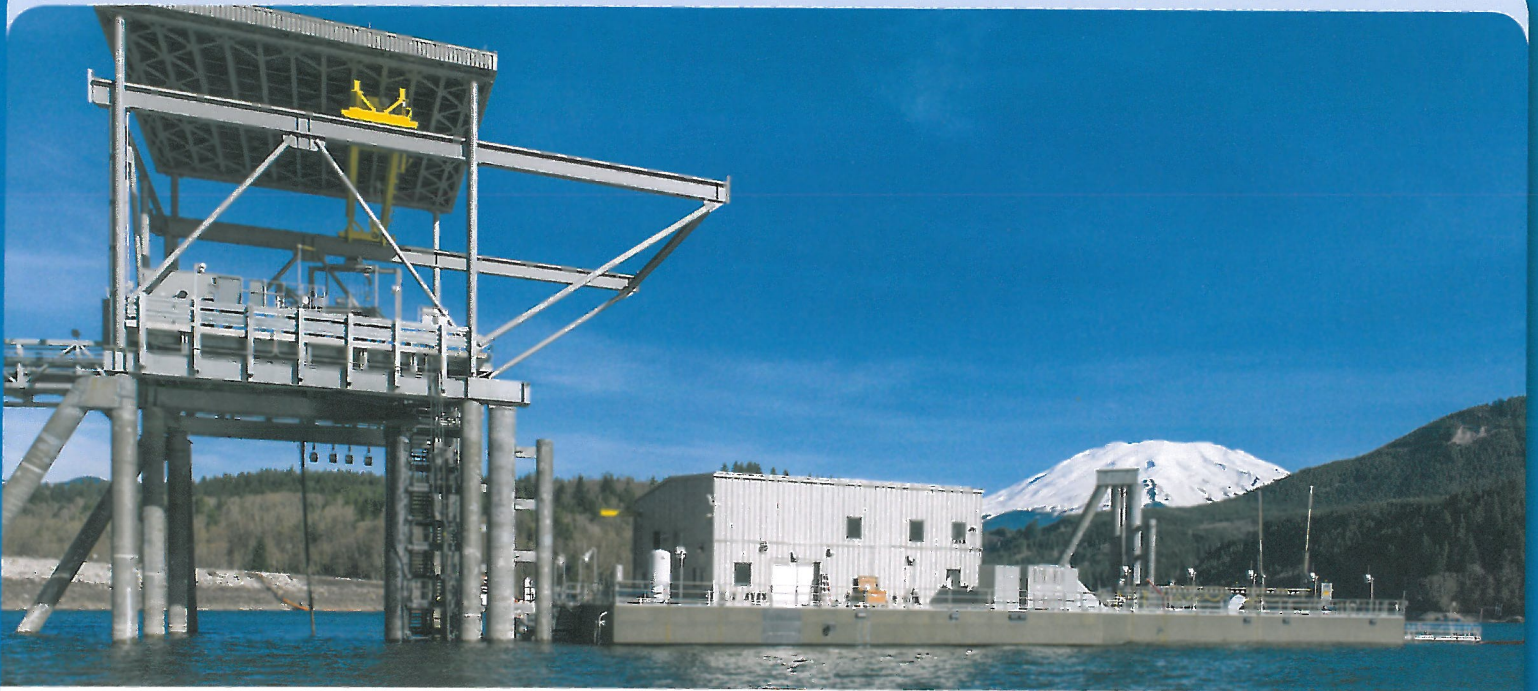


# Swift Reservoir

## Fish Collector



The Swift Reservoir fish collector, located on the uppermost reservoir of PacifiCorp's Lewis River Hydroelectric Project, allows fish moving downstream to make their way to the ocean safely. The goal is to re-ignite migratory fish runs above the three Lewis River dams.

The facility does this by creating flow conditions to attract out-migrating fish, typically juvenile salmon and steelhead, and some adult steelhead. Once the fish are collected, they are sorted at the facility for transport to the lower Lewis River downstream of Merwin Dam near the city of Woodland.

The fish collector is part of the operating licenses granted to PacifiCorp and the Public Utility District No. 1 of Cowlitz County by the Federal Energy Regulatory Commission in 2008 after a lengthy settlement process involving more than two dozen agencies, tribes and local groups.

The Swift fish collector is only the third facility of its kind in the world. The fish passage project cost the utilities about \$60 million and began operating in March 2013. The project is only part of an ongoing commitment to the Lewis River area that encompasses wildlife enhancement, recreation and flood management.

The Swift Reservoir Fish Facility project has four main parts:

- Fish collector
- Net system
- Mooring tower
- Access trestle





## How does the project work?

The fish collector is just off the south end of the Swift Dam, anchored by the mooring tower and connected to the dam by an access trestle. The mooring tower and access trestle are supported on piles, and the surface collector rises and falls with the reservoir level.

Juvenile fish, the offspring of the salmon and steelhead that spawned upstream, come downstream through the reservoir as they are drawn toward the ocean.

Given the attraction to downstream current, the juvenile fish will move towards the fish collector, which re-circulates water to simulate a lake outlet. The net system and the surface collector will attract these fish, which are typically 3-6 inches long at this stage in life, into a collection area. The fish are collected and gently transported from the facility on specially designed trucks via the access trestle. The juvenile fish are then trucked around the dams and released downstream of Merwin to continue their journey to the sea.

## Swift fish collector details:

Dimensions:

**Length:** 170 feet

**Width:** 60 feet

**Height:** 53 feet

**Weight:** Approximately 3 million pounds (1,500 tons)

**Fish holding capacity:** Approximately 75,000 smolt-sized fish (3-6 inches long)

**Maximum pumping capacity:** 750 cubic feet per second  
*The collector has the pumping capacity to fill an Olympic-size swimming pool in two minutes.*

**Operating range:** Will work year-round within a 100-foot reservoir level fluctuation

**Mooring tower height:** 280 feet from foundation to roof  
*The total height of the mooring tower is about the same as a 20-story building.*

**Access trestle length:** 660 feet  
*The access trestle, connected to the dam, is as long as two football fields.*

**Water depth at collector location:** 150 feet

For more information about our habitat restoration projects on the Lewis River, please visit [pacificorp.com/lewisriver](http://pacificorp.com/lewisriver).

