



FISH MOVERS

Giant fish collector key to recolonizing upper Lewis River



JULY 13, 2012 11:00 PM • BY TOM PAULU / THE DAILY NEWS

An odd-looking, 1,500-ton structure was towed 12 miles down Swift Reservoir in a few hours Friday. Starting next year, the floating fish collector will be a key part of the effort to recolonize the upper Lewis River watershed with salmon and steelhead after an eight-decade absence.

The fish transportation system was required when the federal government in 2008 renewed PacifiCorp's license to operate the three dams on the Lewis River.

The construction of Merwin Dam in 1931 blocked upstream migration of salmon and steelhead. In the 1950s, Swift and Yale dams were built farther upstream. The \$110 million project under construction now provides a way for fish to get trucked around all three dams in both directions.

During the relicensing process, scientists considered installing fish ladders on the dams, said Frank Shrier, a fish biologist for PacifiCorp., but they rejected that alternative.

Standing atop Swift Dam, which is 512 feet tall, he said, "The height of this dam is the blockade. It's so tall they couldn't do a ladder here."

Since last year, workers have been building the fish collector at the upper end of Swift, the only place on the reservoir with a boat launch. To move it to its final location at Swift Dam, a small tugboat started shoving the 170-by-60 foot collector before 8 a.m. Friday. With favorable winds, it reached the dam by late morning.

When the project is completed late this year, the collector will be attached to a 660-foot-long trestle that already juts out from the dam. The trestle is anchored in the lake bed on 200-foot-long pilings. Nets will funnel fish towards the collector, which will rise and fall with the reservoir's water level. As fish get closer, "they'll sense this flow and they'll want to go down there," Shrier said. "It's kind of like a big river."

Workers on the floating structure will separate fish by size and species. Outgoing fish will be trucked below the dams and allowed to swim downstream to the ocean. When they return as adults, the salmon and steelhead will be collected at a \$50 million facility under construction just below Merwin Dam. The Merwin facility, scheduled to be completed by December of 2013, includes a water system to attract adult fish, a fish ladder, a sorting

mechanism and a truck loading bay.

Biologists have already started putting adult coho in the upper Lewis. As they did before the dams were put in, fish will be able to swim up the Lewis as far as the Lower Falls. "The Muddy (River) will probably be the habitat of choice," Shrier said.

That tributary of the Lewis, which has its origins in the Mount St. Helens blast area, is running clear these days, he said. Fish are also expected to spawn in Pine Creek and smaller tributaries of Swift Reservoir. Altogether, the project will reopen 117 miles of spawning habitat that was stopped by the dams.

The goal is to get 9,000 adult coho, 2,000 spring chinook and 1,500 winter steelhead to return to the upper Lewis every year. As far as biologists can estimate, that's about the number of wild fish that spawned in the waters before the dams went in. If the project meets its goal, the capital cost of the project alone over 20 years would be \$440 per fish, showing how expensive it is to restore wild fish runs.

The fish collector can hold 76,000 smolts — the peak expected to be born of wild fish annually.

"Eventually there will be far more wild fish than hatchery fish in the system," Shrier said. The goal is to eventually allow anglers to keep those wild fish, which currently must be released.

In the short term, fishing shouldn't change much in Swift Reservoir, where the state Department of Fish and Wildlife stocks catchable-sized rainbow trout.

The fish collection facility can easily be seen from a turnout on Lewis River Road several miles east of Cougar. Though the device drew puzzled looks from onlookers Friday, it's not unheard of. Similar systems transport fish around Baker Dam on the Skagit River and Pelton Round Butte hydro project on the Deschutes River.

Those facilities are "quite effective," Shrier said.

Other floating fish collectors are planned on the North Fork Clackamas River and Lake Cushman. "It's growing technology," Shrier said.



Fish collector floats to Swift Reservoir site

New facility to help restore miles of fish habitat arrives at its Swift Reservoir site

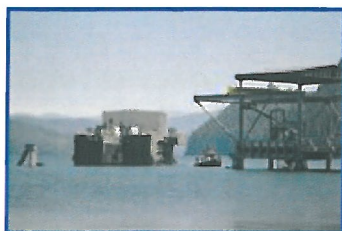


AlThomas

AlLEN Thomas/The Columbian The Swift Reservoir floating fish collector, left, will be secured to the trestle on the right. Trucks to haul young salmon and steelhead downstream past the Swift, Yale and Merwin dams will reach the structure via the trestle.

By [Allen Thomas](#)

As of Friday, July 13, 2012



AlThomas

AILEN Thomas/The Columbian The collector will be turned 180 degrees and connected to the trestle once construction is done.



AlThomas

AILEN Thomas/The Columbian The \$60 million Swift fish collector being towed from Swift Forest Camp to the permanent location at Swift Dam. Facility is 170 feet long, 60 feet wide, 53 feet tall and weighs 3 million pounds.

COUGAR -- The four cables connected to anchors were cut, the tug's engine roared, and PacifiCorp's \$63 million, 3-million-pound floating fish collector began its once-in-a-lifetime journey down Swift Reservoir to the dam Friday.

"It's not every day you move something this big," said Tom Gauntt, a PacifiCorp spokesman.

Indeed it's not.

The facility is half the size of a football field. It's 170 feet long, 60 feet wide and 53 feet tall.

Pushed by what seemed like a tiny tug for such a hulking structure, the fish collector made the approximately 10-mile trip from its construction site at Swift Forest Camp to the dam in less than four hours.

The move had all the excitement of watching paint dry, but Swift's floating fish collector -- the second of its kind in the world -- is at the center of reopening 117 miles of historic salmon and steelhead habitat in the upper North Fork of the Lewis River.

As part of their 50-year federal license to operate the three dams on the North Fork of the Lewis, PacifiCorp and Cowlitz PUD are required to re-establish salmon and steelhead in the upper watershed.

Adult winter steelhead, coho and spring chinook will be captured at Merwin Dam and trucked upstream of Swift Dam for release.

Frank Shrier, a PacifiCorp scientist, said the goal is to release 1,500 winter steelhead, 9,000 coho and 2,000 adult spring chinook annually.

The young produced by those adults will be collected at the new floating structure at Swift Dam and transported to the lower Lewis.

The collector can pump 600 cubic feet per second of attraction flow for the young fish. That's enough to fill an Olympic-size swimming pool in 2 minutes.

By comparison, the East Fork of the Lewis River was flowing at 244 cubic feet per second on Friday.

"Both the current and the noise will seem like a waterfall and fool them" into entering the collector, said Shrier.

The collector will be operational by December. Most of its work will be in March through June, when young salmon and steelhead head downstream to the ocean.

Shrier said he is confident about the reintroduction of steelhead and coho.

"Coho and steelhead will find their way," he said. "Spring chinook are the ones that are going to need the most help establishing."

Allen Thomas: 360-735-4555 [☎](tel:3607354555); http://twitter.com/col_outdoors; al.thomas@columbian.com.

us on Facebook for the latest news and information from Clark County

[Close for now](#) | [Close for good](#)

[Follow @thecolumbian](#) on Twitter for the latest news and information from Clark County

[Close for now](#) | [Close for good](#)