

# Company says technology can aid salmon passage

By COURTNEY FLATT  
Northwest News Network

One Northwest company thinks it may have a better way to help adult salmon make it up and over the Snake River dams.

Yes, you read that right — over the roughly 100-foot-tall dams.

Whooshh Innovations has deployed its fish passage technology at dams and other obstructions on rivers around the world from the United States to Canada to Norway.

Company officials have met with federal agencies and have presented a draft proposal to lawmakers. Moreover, company officials said, this innovation could generate \$60 million over 10 years by diverting water from fish ladders to hydropower turbines.

This could be the largest project for the company, said Vince Bryan, CEO of Whooshh Innovations. It could potentially replace the six fish ladders on the lower Snake River to help adult salmon reach spawning grounds, Bryan said.

“The issue that we’ve been working on for the past 10 years was exactly this issue: How to get the fish through the river system more quickly,” Bryan said.

However, Noe Gonzalez, a spokesperson for the U.S. Army Corps of Engineers, said overall, the adult fish ladders on the lower Snake work well. The fish ladders were built with the dams and have had few modifications since they were constructed. Most recently, a cooling system was installed at the Little Goose and Lower Granite dams, the last two dams on the lower Snake.

The first device by Whooshh Innovations grabbed headlines during early days of testing with an explosive nickname: the salmon cannon. The flexible plastic tube doesn’t exactly



Whooshh Innovations  
A fish passage technology developed by Whooshh Innovations transported 8,200 salmon around a massive landslide on the Fraser River in a remote part of British Columbia.



Courtney Flatt/Northwest News Network  
Washington Department of Fish and Wildlife crews load a 30-pound fall Chinook salmon into a demonstration of the original salmon cannon.

shoot salmon in the air. It’s more like the ultimate slip and slide, former Whooshh

Innovations president Tom Shearer said in an earlier interview with Northwest

Public Broadcasting.

### ‘No stress’

The white flexible tube is misted with water. The pressure inside makes the salmon feel like they’re still in the river, Bryan said. At earlier demonstration projects, shadows of the fish can be seen moving their tails because they feel like they’re swimming through the tubes.

“The fish are literally gliding in the tube,” Bryan said. “We mist inside the tube, so they are exchanging oxygen. There’s no stress levels — they’re not in a panic.”

He said the pressure differential inside the tubes makes the fish feel like they’re in 30 inches of water.

“When they exit, then they just continue on. They just swim,” Bryan said.

A study with the Columbia River Inter-Tribal Fish Commission has shown some fish made it to the next dam faster than fish that went up the traditional ladders. That’s because they have used less energy in the tubes than in the fish ladders, Bryan said.

This Snake River proposal, Bryan said, improves upon the salmon cannon, which was initially designed

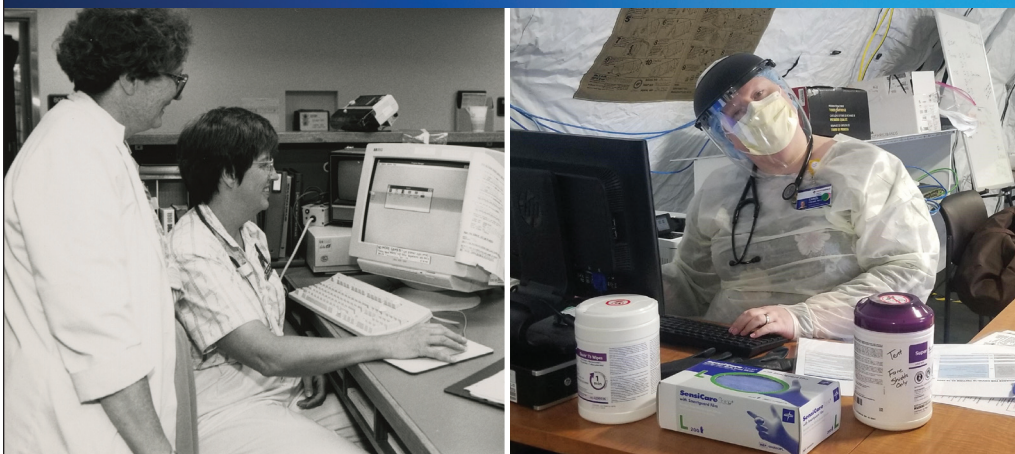
to sort Northwest apples without bruising them.

A big difference in the newer technology is how the fish enter the system. People have to place fish into the salmon cannon. This newer device, which the company has dubbed the Passage Portal, is fully automated. The portal system will use water flow to attract fish, taking in cooler water from deeper in the water column.

The system is mounted onto a floating structure. That structure allows it to move where the fish are swimming, Bryan said.

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