Cost to replace salmon-blocking culverts running into billions, WSDOT says

By James Drew

July 26, 2019 06:20 AM

Olympia

The taxpayers' cost to comply with a federal court order to improve salmon habitat by repairing state culverts has ballooned from \$1.9 billion to \$3.8 billion over the past dozen years, officials told legislators Thursday.

At a work session, members of the House-Senate Transportation Committee said they are committed to meeting the court's mandate, which is considered a critical element to protect endangered orcas who feed on chinook salmon. But some lawmakers questioned whether the state can reduce the estimated \$500 million cost of designing replacements or repairs to culverts over the next 10 years.

Rep. Andrew Barkis, R-Olympia, said it appeared that many of the culvert projects would be similar, especially as the state completes more of them

"Is there something that you can provide to justify why it would be half a billion dollars to do this design each and every time?" he asked officials with the state Department of Transportation.

Kim Mueller, the agency's fish passage delivery program manager, said the areas where the work will be done vary widely. Many sites require extensive excavation and grading, and foundations for new culverts have to be dug deeper so they are stable, Mueller said.

Several Washington tribes with treaty-protected fishing rights sued the state in 2001.

WSDOT estimated the cost in 2007 at \$1.9 billion by examining culverts completed from 2000 to 2006. The department updated the estimate in 2013 to \$2.4 billion after a federal judge issued an injunction requiring the state to do the work. A federal appeals court upheld that decision and the U.S. Supreme Court last year left the ruling in place.

In preparation for this year's legislative session, WSDOT increased the estimate to \$3.8 billion based, in part, on the costs of culvert projects that were completed in recent years and to anticipate additional culverts that may fail and have to be replaced.

The injunction requires the state to restore 90 percent of potential salmon habitat blocked by culverts by 2030.

WSDOT has about 2,000 fish barriers statewide, but the injunction covers 992 in Western Washington. Of that total, 415 culverts with fish habitat of a quarter mile or more must be fixed by 2030 and the state is required to repair an additional 577 when they fail or as part of larger roadway project.

So far, WSDOT has fixed 72 culverts since 2013, improving access to about 330 miles of habitat. That's equal to about 30 percent of actual or potential habitat.

There are three elements that lead to a culvert becoming a barrier for fish: a drop from the culvert to the stream below, or the water is too shallow, or if the speed of the water is too rapid, said Megan White, director of WSDOT's Environmental Services Office.

The complexity of the projects, which includes trying to minimize the impact on motorists, drives the cost, Mueller said.

"We need to keep traffic moving during construction. Our contractors need to dig big holes in the road ,and often we can't just close the road during construction due to high traffic volume like in King County or when a detour does not exist, for example in the Olympic Peninsula," she said. "Costs increase when roads are kept open during construction for things like flagging, building a detour, or building half the project at a time."

Thursday's meeting came two months after Gov. Jay Inslee used a budget maneuver to boost amount in the transportation budget for culvert work from \$100 million to \$275 million. That budget runs from July 1 through June 30, 2021.

WSDOT plans to have 39 barrier projects in construction during that period that will improve fish access to about 180 miles of habitat and design 93 other projects that will be tackled later.

The department's presentation to the committee included a map with dots showing where those projects are located, including several in Pierce and Whatcom counties. WSDOT, however, has not released details of those locations to the public yet. Mueller briefly discussed two projects — Chico Creek under state Route 3 in Kitsap County and Siebert Creek under U.S. 101 in Clallam County.

Citing an example of how the state is coordinating passage work with local governments, Mueller said the city of Bellingham informed WSDOT about restoration work it was doing on Squalicum Creek. As a result, the state included a culvert project to benefit the creek in the current two-year transportation budget.

"We both are now able to leverage the benefit of each other's work," she said.

In an interview after the meeting, Rep. Jake Fey, chairman of the House Transportation Committee, said he expects lawmakers next year will work on finding more money to help city and county governments replace culverts they own.

"These projects are not located based on jurisdictions that have the money to pay. They're going to be wherever they are, so the state is going to have to find a way to make that work so we get the best benefit from the fish passage investments. There has to be a statewide solution for the local efforts as well," Fey said.