

Fish passage: Stream miles of access restored or improved to blocked fish habitat

Our strategy

We are committed to backing *The Oregon Plan for Salmon and Watersheds*, which includes supporting the recovery of threatened and endangered fish as well as native migratory fish by removing fish passage barriers on the state highway system. The program uses limited transportation funds to retrofit and replace culverts in the most cost effective way. ODOT partners with government agencies, watershed councils and other stakeholders to improve fish passage.

About the target

We have used different program targets to evaluate performance for this KPM. From 2005 to 2014 we reported the remaining

balance of high priority culverts (e.g. actuals) The actuals represented the total number of statewide high priority culverts owned and managed by ODOT that still need to be replaced or retrofitted.

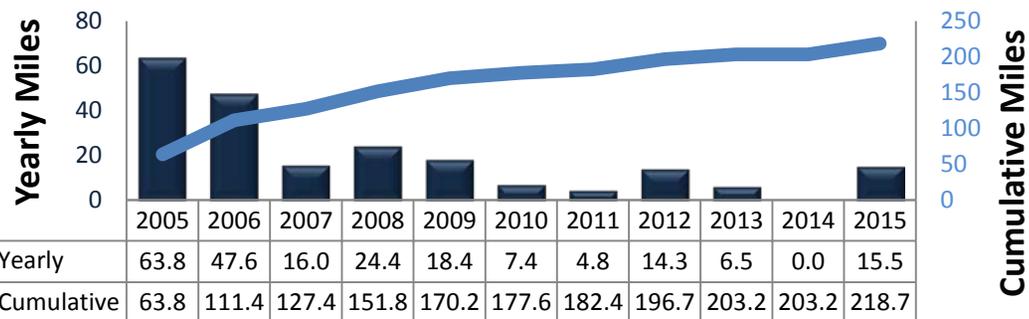
Starting in 2015 we will be reporting improved or restored access to stream miles of fish habitat. Stream miles of habitat will provide a more useful measurement of the benefit and contribution of the program to the recovery of listed salmon and native migratory fish.

We have good data on the amount of habitat access ODOT is restoring on an annual basis with culvert replacements and retrofits (see below table). We are still

developing information on the total amount of habitat blocked by barriers on the state highway system. Our current information on miles of habitat blocked above the state highway system is based on dated and incomplete barrier information. According to this data, in 2005 there were 1,403 identified barriers on the state highway system blocking access to 1,712 miles of native migratory fish habitat. We believe the actual number is significantly higher.

In the last 10 years (2005 to 2015) we have improved or restored access to 218.7 miles of habitat for native migratory fish. In the future we will be able to report the amount of access restored relative to the amount of habitat blocked.

Fish Passage - Stream miles of access restored or improved to blocked fish habitat



Fact

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Fish Passage at State Culverts, cont.

How we are doing and how we compare

During fiscal year 2015 we are constructing three fish passage projects that will restore access to 15.5 miles of habitat. From 1997-2015 this program repaired or replaced a total of 145 culverts and opened or improved access to 476.5 miles of stream habitat.

For fiscal years 2011-2015, Salmon Program funds were divided between fish passage and storm water projects, under an agreement with the Northwest Environmental Defense Council. Because of this, the rate of retrofitting or replacing culverts slowed. However, these funds did address water quality improvements that will benefit salmon.

Unlike other states, our program is discretionary and independent of other Statewide Transportation Improvement Program (STIP) and maintenance projects. Our projected fish passage target is to complete the number of projects program funds will allow, currently two to three

projects each year. Current fish passage design criteria generally require larger, more expensive structures to replace existing infrastructure. Our Fish Passage Program has the ability to target high value streams that bring the greatest benefit to native migratory fish. This is unique among western states.

Factors affecting results and what needs to be done

The rate of project delivery diminished since the start of the program. Factors contributing to this include increased costs for construction, right of way and project development. In addition, much of the high benefit, low cost fish passage improvements are already finished.

The remaining fish passage barriers are typically more costly projects. Many of the early program projects were culvert retrofits that provided a higher benefit per cost than full culvert replacement projects.



To continue improving fish passage we need more funding. We are exploring processes to streamline project permits and plan review timelines. We are also evaluating fish passage 'banking' that would provide mitigation options while targeting high value streams.

About the data

Oregon Department of Fish and Wildlife manages the statewide fish passage culvert inventory list at highway-stream crossings. This list is updated based on projects completed, changes in habitat condition, and new culvert survey data.

Contact information

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Data source

ODOT Statewide Culvert Inventory for
Priority Culverts Data, Oregon Department
of Fish & Wildlife, Highway Division, ODOT
Fish Passage Program