

Agenda Item Summary

BACKGROUND

The Oregon Department of Transportation (ODOT) and the Oregon Department of Fish and Wildlife (ODFW) are implementing a Culvert Repair Programmatic Agreement (CRPA) pilot project that allows ODOT to make specific short-term repairs to culverts without having to meet full fish passage criteria at the repair location during the 2015 through 2017 period. The Oregon Fish and Wildlife Commission approved this CRPA in October of 2014. ODOT now has the ability to make critical repairs to aging culverts in a cost effective manner, while providing a net benefit to native migratory fish (NMF) over the status quo by improving fish passage at each site repaired. In addition, ODOT agreed to pay \$1.8 million into an ODFW-managed account that will fund five high priority fish passage projects off the state highway system to offset delayed passage at culvert repair locations. When all five compensation projects are complete, they will provide NMF access to 139.5 miles of good and excellent quality habitat.

ODOT's culvert inventory has revealed that approximately 10,500 culverts are in poor or critical condition and need to be repaired or replaced in the near term to maintain the safety and integrity of the state highway system. The cost to replace all of these culverts in kind would be well over one billion dollars. This cost would be substantially higher for installation of larger culverts or bridges to meet fish passage criteria. Culvert repair work on fish-bearing streams has largely been deferred over the past 10 years, because of the inability to meet fish passage design criteria with a repair and the lack of available funding for full fish passage criteria replacements. Culvert repairs can typically be completed for 50 to 150 thousand dollars as opposed to a culvert replacement project that meets fish passage criteria that typically can range in cost from 1.5 to 5 million dollars.

In 2016, ODOT repaired six culverts in critical condition under the CRPA at a cost of \$737,862.13. The cost to replace these culverts would have been 36.45 million dollars, this saved ODOT over 35 million dollars. This cost savings should be evaluated relative to the design life provided by the approach. The repairs have added approximately 25 years of life to these culverts, whereas full replacements would have provided a new design life of 75 years. However, even given the difference in life span for the two approaches, life cycle costs are much lower for the repair option.

Fish passage improvements at the culvert repair projects all had the effect of increasing water depth and decreasing water velocities across the range of stream discharges when native migratory fish migrate. These passage improvements will increase the window of hydraulic conditions necessary for successful upstream migration for both adult and juvenile NMF. The 2016 repair projects demonstrated that fish passage improvements could be successfully installed in culverts larger than 60" in diameter due to

their larger hydraulic capacities and the ability to move equipment and materials into the culverts.

In 2016, ODFW completed administration of ODOT compensation funding allowing the removal of two high priority fish passage barriers. The removal of Odell Creek Dam in the Hood River Basin and the reconnection of a historic oxbow channel of the East Fork of the Millicoma River in the Coos River Basin provided native migratory fish access to an additional 19.5 miles of good quality habitat. The combination of initial benefits to NMF both at the six culvert repair sites and the two compensation sites in 2016 combined with substantial cost savings of over \$35 million to ODOT, is demonstrating tangible and substantive progress toward meeting CRPA goals.

PUBLIC INVOLVEMENT

ODFW and ODOT staff has been providing periodic pilot agreement status updates at Fish Passage Task Force meetings since the inception of the pilot agreement. Fish Passage Task Force Meetings are open to the public and offer opportunity for public comment. To date, no substantive public comment has been received during these public comment opportunities.

ISSUE 1

2016 CRPA ACOMPLISHMENTS AND ANTICIPATED NEXT STEPS:

ANALYSIS

ODOT and ODFW staff have collaboratively implemented six culvert repairs and funded two of the five compensation projects under the CRPA during 2016.

ODOT anticipates completing approximately 20 additional culvert repairs under the CRPA in 2017.

ODFW anticipates completion of two additional compensation projects in 2017 and the final compensation project during the 2018-2019 construction periods.

ODOT and ODFW staff has begun initial discussions on a new or renewed CRPA pilot agreement, which we anticipate to bring to the Commission for consideration in the spring of 2018.

OPTIONS

- 1. N/A
- 2. N/A

STAFF

- 1. N/A

RECOMMENDATION

DRAFT MOTION

N/A

EFFECTIVE DATE