U.S. 97 Milepost 190 Wildlife Crossing

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Project Components

- Construct a wildlife crossing in the vicinity of milepost (MP) 190 on U.S. 97.
- Install fencing on either side of the crossing structure to direct wildlife to the crossing.

Why is this project needed?

U.S. Highway 97 is a critical part of the State's transportation system and is a major north-south corridor between California and Washington, and is designated a statewide freight route. Keeping the roads in good condition and providing a safe, efficient transportation system that supports economic opportunity is a critical part of the mission for the Oregon Department of Transportation's (ODOT).

The problem of deer-vehicle collisions on U.S. 97 has long been recognized as a public safety issue. Mule deer herds typically move across the highway to winter east of U.S. 97 and move west toward their summer range in the spring. Although not as commonly struck during road crossings, the highway also bisects important elk habitat. The proposed project involves installing a wildlife crossing to improve highway safety and habitat connectivity. This project is within a section U.S. 97 with high incidents of deer-vehicle collisions, an ODOT statewide high priority wildlife collision hot spot, a statewide high priority wildlife linkage zone, and a known mule deer migration corridor.

The project proposal is to construct a wildlife crossing on U.S. 97 at MP 190, located approximately four miles south of Crescent, Oregon. The proposed location is situated where the highway fill is so deep that it functions as a barrier to wildlife movement across U.S. 97. The most recent deer carcass count identified 35 road-kill deer and elk (mostly deer) in a two mile section (MP 189-191) over the last four years (2010-2014). The current average daily traffic for this section of U.S. 97 is 4000 and this is projected to increase to 5000 by 2033. Wildlife-vehicle collisions are expected to increase as traffic increases.

How does ODOT propose to solve these problems?

In collaboration with the Oregon Department of Fish and Wildlife, ODOT studied two different wildlife crossings: an undercrossing and an overcrossing. The team made an assumption that either crossing would need to accommodate four lanes of traffic on U.S. 97 (there is currently on one lane in each direction at the potential location) and meet freight mobility standards (lane widths and height restrictions).

The undercrossing would be located 150 feet north of the 190 mile marker on U.S. 97 in a deep highway fill. Both a bridge and a culvert (box and arch) were considered. This location is in a natural drainage that wildlife would typical use for movement. From a wildlife perspective, a bridge would be the preferable structure for the undercrossing as it is less confining and easier for wildlife to see from one side to the other, which would lead to a higher probability of use. Two bridges built for wildlife undercrossings near Lava Butte on U.S. 97 are functioning very well.

Rendering of the proposed wildlife crossing at Milepost 190 on U.S. 97.

The overcrossing would be located at the 189.8 mile marker in between two cut slopes. The current design is a buried arch bridge that is 130' wide and 85'-6" between foundation centerlines. The length of the bridge was determined by how wide the crossing on top needed to be to make wildlife comfortable using it. The top of the structure would be native surfacing to mimic the surrounding terrain.

Both options would require fencing on each side of the highway to direct wildlife to the structures. The location of the fence ends is a critical component of any wildlife passage project because they are likely to result in

increased animal crossings ("hot spots") at those points. Therefore, it is important for driver safety to locate the ends of the fence where road, topography, and vegetation conditions provide drivers the greatest opportunity to see animals as they approach and cross the highway. For either structure, the current plan is to end of the fencing approximately one half mile south and 2.2 miles north of the structure locations in order to meet the above criteria.

After analyzing the two options, the team recommended constructing the overcrossing at the 189.8 mile maker. Biologists felt either option would work for wildlife, assuming a bridge was selected as the preferred structure for the undercrossing. Even though the cost of building each structure (between $1.5-2 million) was about the same, the additional roadwork (detour) needed to construct the bridge would make the overall cost higher. The impact on traffic would be less constructing the overcrossing.

Current Status
Once the conceptual design is completed the project will be put on hold until construction funding is obtained.

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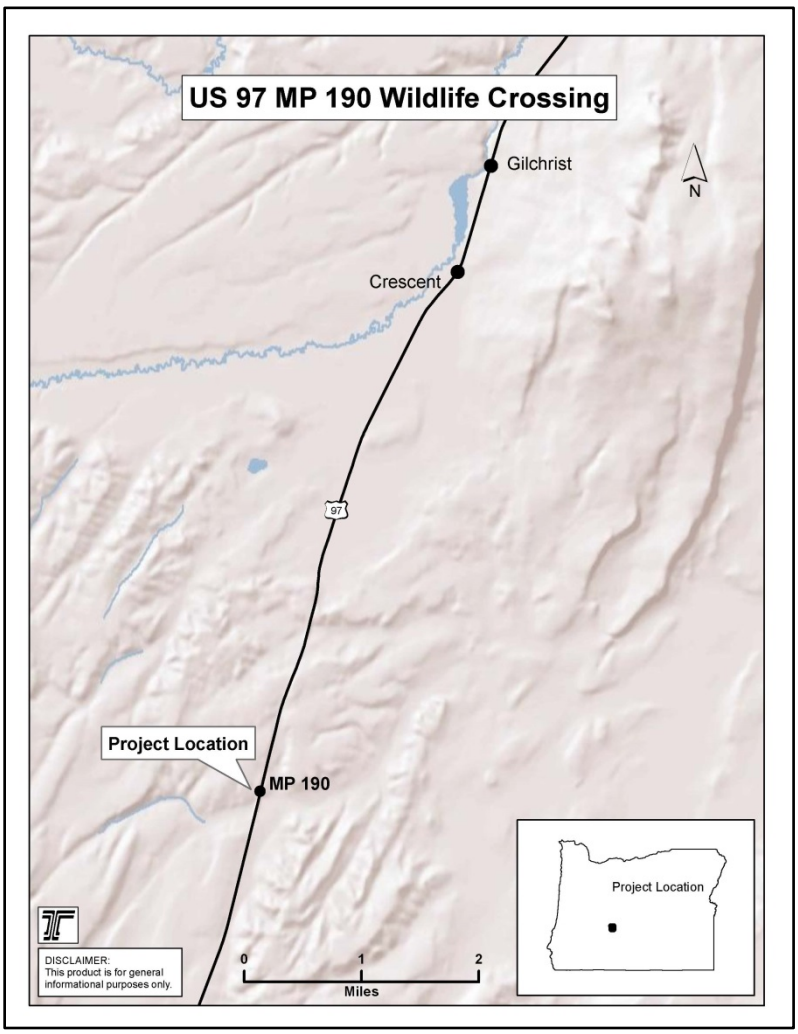
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