



Leading the Way

Trappers Point project wins engineering award

The Wyoming Engineering Society has named WYDOT's Trappers Point wildlife crossing project its 2012 President's Project of the Year.

District 3 Construction Engineer Ted Wells accepted the award on behalf of WYDOT and all the contributing agencies during the WES annual convention Feb. 8 in Casper.

The project included design and construction of two overpasses and six underpasses on a 12-mile section of WYO 191 west of Pinedale to provide safe crossings for pronghorn, deer and other wildlife.

It was initiated and funded by WYDOT, designed by WYDOT and Valley West Engineering of Jackson and built by Reiman Corp. of Cheyenne.

The Wyoming Game and Fish Department, U.S. Bureau of Land Management, Bridger-Teton National Forest and Upper Green River Cattle Association also collaborated on the project to improve safety on the highway.

The Trappers Point project has previously been honored with awards from the National Parks Conservation Association and the Federal Highway Administration.

WYO 191 crosses an ancient migration route for pronghorn traveling between winter range in the high desert south of Pinedale and summer range in Grand Teton National Park, the second-longest wildlife migration route in the Western Hemisphere.

The route is also heavily used by deer, and hundreds of animals have died there annually in collisions with vehicles. The combined loss of wildlife and property damage to vehicles was estimated at nearly \$4.1 million from 2005 through 2009.

The savings from reducing wildlife deaths and damage to vehicles is expected to exceed the project cost of \$9.7 million in 12 years.

Evidence of the success of the project began to appear while

construction was still in progress. As work on the walls and final grading were being completed last fall, pronghorn began taking advantage of workers' lunch breaks to race across the overpasses.

"The Trappers Point overpass is so well designed and so well suited to accommodate pronghorn migration, that we observed pronghorn using the overpass even before completion," said Jeff Burrell, Northern Rockies program coordinator for the Wildlife Conservation Society. "During this fall's migration, our scientists observed thousands of pronghorn using the Trappers Point overpass, as well as mule deer and other species using the underpasses. This is the best testimony for the outstanding design of these structures."

The two wildlife overpasses are the first built in Wyoming, and were designed primarily for pronghorn, which are reluctant to use underpasses. About 30 miles of special fencing was installed to direct animals to the safe crossings.

The overpasses mark the first time WYDOT has placed long-span precast-concrete arch culverts over a highway, essentially creating a tunnel. The arch culverts allowed for creation of a more natural crossing for the wildlife with high earth berms connecting the ridge tops on both sides of the highway. The earth berms are supported on each end of the tunnel by large precast-panel retaining walls built higher and more perpendicular than WYDOT's previous use of the walls.

The use of the arch culverts made it possible to build the overpasses within the existing highway right of way.

The President's Project of the Year award is sponsored annually by the Wyoming Engineering Society to recognize excellence in engineering and surveying projects that benefit Wyoming residents.

- Dave Kingham

Below, Trappers Point overpass prior to earthwork (left) and nearly complete.



Photo: Carlie Van Winkle



Photo: Bruce Burrows