

Saving Colorado's Berthoud Pass



A sediment storage system is helping preserve the pristine environment surrounding a scenic highway in the Rocky Mountains.

No one said it would be easy. Reconstructing a narrow highway that cuts through a mountain range, winds its way up 3,446 meters (11,307 feet), and passes through some of Colorado's most pristine alpine environment

(Above) This aerial photo shows two tight switchbacks of Berthoud Pass highway (U.S. 40) as it winds its way up the mountain. The construction work is not only widening and improving the roadway but also protecting the local environment and water quality. Photo: Gregg Gargan, CDOT.

would have its share of challenges. At the least, the engineers would need to reconcile the frequently conflicting aspects of roadway geometry, safety, wildlife and forest impacts, aesthetic considerations, and water quality requirements.

The Berthoud Pass highway (U.S. 40) climbs through the Arapaho National Forest between the ski resort communities of Winter Park to the north and the towns that lie along I-70 to the south. In the mid-1990s, officials at the Colorado Department of Transportation (CDOT) determined that the road

through the pass needed to be upgraded for a number of reasons. The tight curves, steep switchbacks, and narrow pavement made travel treacherous. From a safety perspective, with minimal shoulders, the highway offered few safe zones where drivers could pull over or recover from errors. Old highway cuts from past years were eroding, causing rock and mudslides in the summer and icy spots in the winter and making driving potentially treacherous year round.

Environmental considerations also factored into the equation. Wildlife