

Colorado Highway 7 (Lower) Flood Recovery Project

Project Details

In September 2013, a severe rain event hit Colorado's Front Range and caused catastrophic flooding and damage. In Boulder, just one of the many hard-hit communities, rainfall for the week exceeded 18 inches, contributing to a monthly rainfall total far exceeding any other month since recording began in 1893. Boulder's average September rainfall is less than 1.6 inches!

Flood waters saturated the mountainous terrain of Colorado Highway 7 (CO 7), causing numerous material slides, ditch damage and erosion to the roadway embankment. After eroding the highway embankment, the floods washed out the road in several places. Large amounts of debris, rock and sediment were deposited in the creek and, as a result, redirected water flows - further contributing to the erosion of the channel banks and the undermining of the highway.

By November 2013, crews had completed extensive temporary emergency repairs.

Permanent Repairs

The goals of this project are to maintain access during future flood events, build a safe system accommodating multi-modal transportation options and work in harmony with ecological river functions in the corridor based on commitments to the US Forest Service. The Colorado Highway 7 Project will provide longer-term improvements along Colorado Highway 7 between Lyons and Raymond. Pending funding availability, improvements may include:

- Resurfacing and repairing approximately 14 miles of roadway
- Adding shoulders and rockfall ditches
- Replacing multiple pipes conveying stormwater drainage under the highway
- Rehabilitating several miles of the St. Vrain Creek disturbed during the emergency repairs
- Improving multi-modal mobility options along the corridor
- Building in resiliency to improve emergency access during flood events

Project Benefits

Whole System / Whole Safety

- Minor rock scaling to reduce the risk of future rockfall events
- Replacing guardrail to current standards
- Signing and striping improvements
- Improving emergency access during future severe flood events

System Preservation

- Extending pavement life with proper sub-grade construction
- Reducing future risk by installing larger culverts
- Rehabilitating the river in key locations to bolster post-flood recovery

Post-flood Emergency Mobility

 Putting rocks and cement-treated dirt beneath sections of roadway to strengthen the foundation, increasing the likelihood of maintaining canyon access after the next flood.

Improve future access for emergency service ingress and evacuation egress.



Multi-modal

• Adding a 4-foot uphill shoulder where feasible to improve safety for all users.

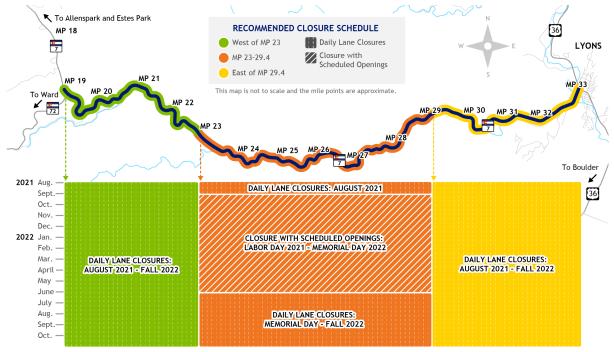
Proposed Traffic Plans

CDOT and the project team have evaluated a number of traffic control strategies and determined that a series of full closures will be the safest and least impactful way to complete all the work outlined while providing community members with predictable and reliable traffic schedules.

- In August 2021, daily single-lane closures are expected to begin to move in equipment and start pre-construction activities.
- Following Labor Day 2021, CO 7 will close through Memorial Day 2022 between Mile Points 23 and 29.5 (see map) with morning and evening "scheduled openings" for all traffic. The "scheduled openings" will consist of one-way traffic using pilot car operations and will still result in minor delays. Emergency responder access will be maintained at all times.
- Finally, following Labor Day 2022, traffic impacts will be minimal with single-lane closures and intermittent delays through Fall 2022.

This schedule was selected by community agency representatives because it includes the months with the least traffic volumes on CO 7. While impactful, the alternative to this full closure would have involved alternating one-way travel on CO 7 with long, unpredictable traffic queues for several years.

While CO 7 is closed, drivers will need to use US 36 or US 34 to travel to and from Estes Park and Lyons. School bus services will not be interrupted, and emergency responder vehicles will be allowed through the construction area at all times. The corridor will be open to traffic over the Fourth of July, Labor Day and Memorial Day holidays.



Colorado Highway 7 will be open to all traffic for Labor Day and Memorial Day weekends.

To learn more about the project, please visit https://www.codot.gov/projects/co7 contact the team at 720-912-8870 and CO7info@kiewit.com.