I-70 Floyd Hill Project Update

Hello members of the SWEEP ITF! Hopefully you're having a great summer so far! We wanted to reach out to you with some updates that you may be interested in related to the creek realignment, riparian bench enhancements, deicing, and water quality testing.

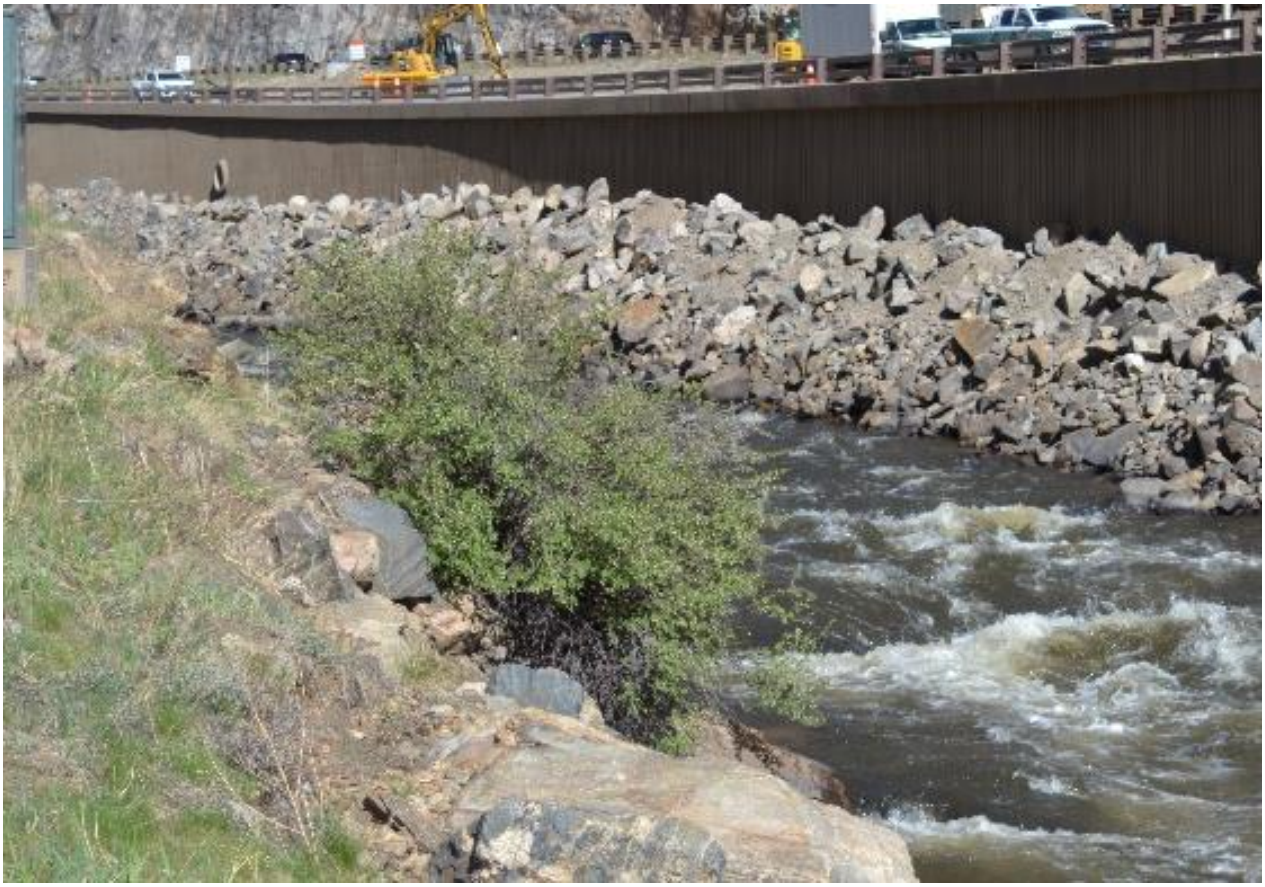
Creek Realignment

As you're all aware and discussed at the January 2023 in-person SWEEP meeting, there was originally a creek realignment needed in the West Section of the project that was then moved to the Central Section of the project. We're pleased to inform you that there is no longer a need for a creek realignment! The design team was able to shift the highway alignment north to avoid impacts to the creek in both locations. In addition, there is no longer a need for an Individual Section 404 permit from the US Army Corps of Engineers.

Riparian Bench Enhancements

The creek isn't moving, and there are no other adverse impacts to the creek or wetlands. However, the project includes enhancements with new riparian benches in both the West and Central Sections of the project to improve the functional condition of the creek. Lifting the functional condition of the creek allows it to be more resilient/resistant to stressors. These benches will be planted with native riparian vegetation that will provide additional riparian habitat through the corridor and enhance the aesthetic and recreational values of the creek.

Here's what existing conditions look like in one location in the West Section:



Here's a simulation of the enhanced riparian bench at that location:

Deicing Update

On May 19th, we had a Technical Team meeting where CDOT Maintenance and CDOT's deicer manufacturer presented on winter maintenance practices and deicer products and environmental impacts. They provided a lot of great information, and we wanted to share that with you since it has been a high-interest topic. Below are links to some of the deicer materials and the others are attached as well as the slides from the Technical Team meeting.

- https://blog.iceslicer.com/deicer-impact-on-the-environment
- https://blog.iceslicer.com/pm2.5-vs-pm10-understanding-particle-air-pollution
- https://blog.iceslicer.com/is-ice-slicer-safe-for-the-environment
- https://blog.iceslicer.com/balancing-public-safety-with-environmental-safety
- Meltdown Apex Spec 2022 (attached)
- Meltdown Apex Product Brochure 2023 (attached)
- Meltdown Apex One-Pager (attached)
- TT Slides (attached)

In an ongoing effort to understand and minimize effects of deicers on the creek and vegetation, CDOT has funded a research project with Colorado State University to look at deicing effects on high-alpine wetlands, including fens. The results of that research study will provide additional data on deicer impacts and will be shared upon completion.

WQ Treatment

As we continue to optimize winter maintenance product application, the Project will continue to implement treatment for other roadway pollutants of concern as it would for a project in CDOT's MS4 boundary with treatment facilities. Other uncaptured highway runoff is proactively being mixed with offsite runoff where possible and slowed down with engineering controls in order to minimize high concentration chloride pulses to the Creek.

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Corridor Water Quality Monitoring

Lastly, CDOT has been conducting water quality monitoring for more than 20 years. That monitoring program includes sampling of Clear Creek to look at a variety of parameters, including chlorides, and has sampling points between the Eisenhower-Johnson Memorial Tunnels and US 6 (Two Bears). As part of the Floyd Hill Project commitments, CDOT is considering whether additional sampling points east of US 6 would provide more information on the highway impacts to Clear Creek that should be included in the monitoring program. The addition and location of the new sampling points will be determined in coordination with Clear Creek County.