



Floyd Hill Design Technical Team Meeting Summary

February 24, 2023, 9:00 AM to 12:00 PM

CDOT Golden Office – Lookout Mountain Conference Room and Virtual (Zoom)

1. Introductions, Meeting Purpose and Project Updates

CDR Associates opened the meeting and reviewed the agenda.

The purpose of the meeting was to discuss:

- *Project Updates*
- *Discuss/Confirm:* East Section Review & Commitment Tracking
- *Introduce:* Greenway Introduction & Kick Off
- *Next TT Agenda & Next Steps*

TT members confirmed the meeting agenda with no changes.

2. Project Updates

- **Early Projects:**
 - Genesee Wildlife Crossing: the team has successfully diverted traffic, meaning they will be able to work through the day and begin construction on the bridge.
 - Homestead Roundabout: this project has been focused on relocating utilities. Once that is taken care of, drainage work is slated to begin in the first few weeks of March.
 - Empire Wildlife Crossing: approaching final drawings/MOT, tracking for June advertisement.
 - Pegasus parking lot: difficulty with EV charging stations, still moving forward while working out those details.
- **Public Meeting (3/7):**
 - The upcoming public meeting will be held at Clear Creek High School from 6-8pm. The Project Team will present at 6:30pm. Commissioner Wheatlock, Margaret Bowes, Jessica Micklebus, Matt Hogan, Kurt Kionka will be presenting. The presentation will be followed by an open house format for Q&A.



- **1041 Submittal (Clear Creek County):**
 - April 4th hearing date set. Clear Creek representatives highlighted that Air and Water Quality will factor in as key concerns with the Commissioners.
 - **TT Question:** Will there be a 1041 Submittal for Idaho Springs?
 - **Project Team Response:** That will be relevant for the West Section, so we will work on that as we further West Section Designs. The East Section will not impact the Idaho Springs area.
 - **Project Team Comment:** CM/GC presents challenges for the typical 1041 process, as not all project plans will be completed at once. However, this iterative process will incorporate more touch points through the construction process.

- **Air Quality Monitors:**
 - Monitors have been installed and are collecting data. The team is developing the Dashboard, keeping in mind that this monitoring should be consistent throughout the state, while meeting obligations through the EA. The project team identified the future need to meet with Clear Creek County and discuss the considerations while waiting for long-term guidance from CDOT. Clear Creek County may be able to provide additional, historic data to augment comparative monitoring.

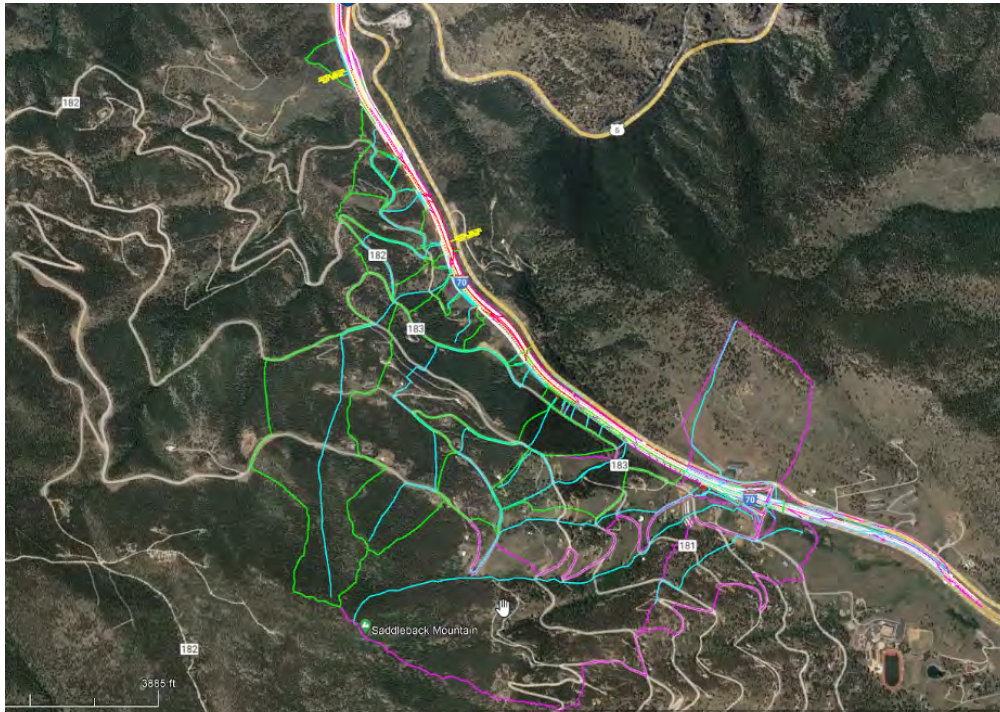
- **Additional Updates:**
 - Still on track for East Section (construction set to begin in June)
 - Right of Way (ROW) Process: will be necessary for Central and West Sections, at the Saddle Cut area and the Hidden Valley Interchange. The process typically takes around 12 months, but will likely be expedited due to the thorough planning process thus far.

3. Discuss/*Confirm*: East Section Review & Commitment Tracking

In light of the updates, the project team directed the TT to the primary topic of discussion: East Section Review and Commitment Tracking.

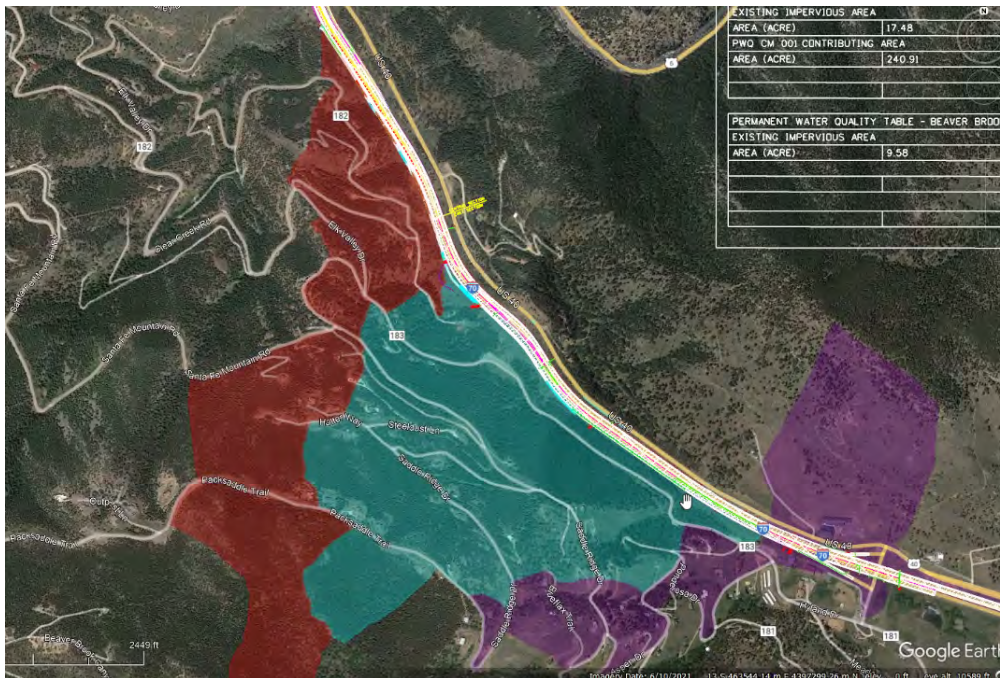
Drainage & Water Quality:

- **TT Question:** Overall, how and where does water reach the creek?
 - **Project Team Response:** at a high level, there are three drainage areas/basins (see map below). Once the water reaches the I-70 Corridor, water moves longitudinally, not crossing the roadway.



Above: Map of drainage streams surrounding the East Section of the project area.

Below: Map of drainage areas surrounding the East Section of the project area.





- Once water reaches the I-70 corridor, flows are directed through culverts, pipes, sedimentation ponds, and pipes along the East Section.
- This combines onsite & offsite flows, diluting salinity.
- In the Drainage Area Map above, the teal area drains into a collection pond and runs downhill through US 40 open ditch. The red area runs into Johnson Gulch.
- The culverts along this area include drainage spillways that slow water and catch sediments, reducing erosion.
 - **TT Question:** Do these culverts require regular maintenance?
 - **Response:** They may require periodic cleaning, similar to a ditch.
 - **TT Question:** How does the water get to the creek from the culvert?
 - **Response:** The water follows an existing ditch along US 40 to Johnson Gulch, then drains into the creek.
 - **TT Question:** Will there be any vegetation along this area where salinity is a concern?
 - **Response:** There is existing vegetation that should persist in most areas along this ditch, areas where the ditch needs to be widened, will be revegetated.
 - **TT Comment:** Will there be salinity testing throughout different phases of the project? As we have identified, salinity numbers are rising and we would like to understand the sources of salinity better. Are there opportunities with drainage basins and ponds to identify places for testing points?
 - **Project Team Response:** Regular salinity testing will continue throughout the project.
 - **TT Question:** Will this impact the water table/wells of community members above the project area?
 - **Project Team Response:** No, it should not impact the water table.
 - **TT Question:** Does the drainage planning impact the CDOT maintenance procedure for snow treatments?
 - **Response:** Yes, a maintenance plan must be discussed with CDOT teams, i.e. not throwing snow over viaducts. The Project Team is working to find a time when CDOT maintenance can join a TT meeting.

Having responded to the main TT Questions about drainage, the project team identified next steps:

- CDOT Maintenance joining a TT/ITF meeting to discuss current maintenance practices, different treatments for bridges, concerns and best practices moving forward.



- Drainage Report: once the project team feels confident in the final drainage plan maps, those can be shared to the group.

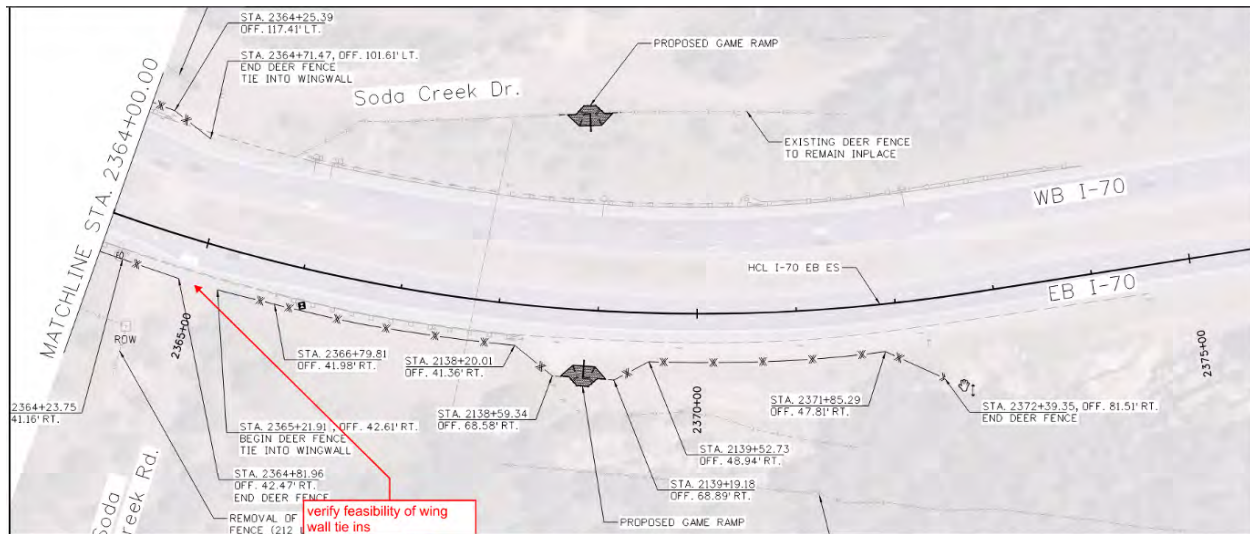
Wildlife Fencing:

The Project Team presented information on the East Section Wildlife fencing. Two main questions related to fencing included: how will the fencing get around trees and how can the fencing be installed in a manner that doesn't put wildlife at risk during the process. The fencing is planned to be relatively close to the highway, not on CDOT Right of Way, which would have a greater impact on trees and habitat. Escape ramps for animals are included near interchanges, as those are potential breach areas. The fencing will tie into natural barriers (e.g. rock faces). Coordination with biologists will continue beyond the design phase.

In regards to phasing, the fencing may take some time to complete. It's a best practice to build fencing on each side of the highway simultaneously to avoid trapping animals between the fencing and the shoulder on a single side. Another option to avoid this undesirable outcome is to install posts and escape ramps first, then install the mesh so throughout construction animals can maneuver freely.



(Wildlife fencing in white, ROW shown by blue line)



Barriers & Barrier Types:

The Project Team reviewed the barrier locations and types for the East Section. The types of barriers include:

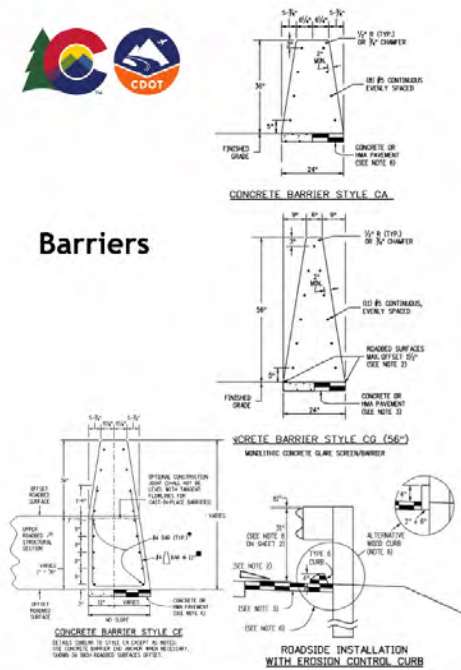
- CA: typical, single slope, 36" tall concrete barrier
- CG: single slope, 56", concrete barrier w/ glare screen
- CGE: Used when there is a grade difference on either side - 36" on the shortest side, taller from the lower side.

Barriers associated with Walls & Drainage: drainage requires a barrier alongside the road and ditch as well as a barrier+wall structure. The following images depict the barriers to be used in the East Section. More information is available in the FOR plans for TT review.

TT Agreement: The Barriers for the East Section make sense to the TT and are approved to move forward



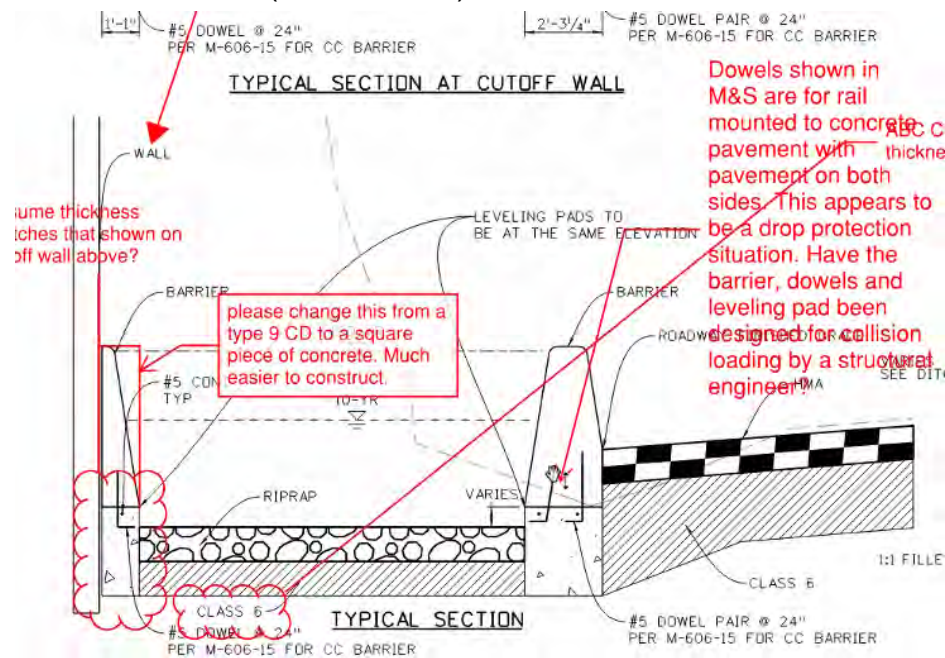
Barriers



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Walls:

Walls vs. Barriers (over 2.5 feet)

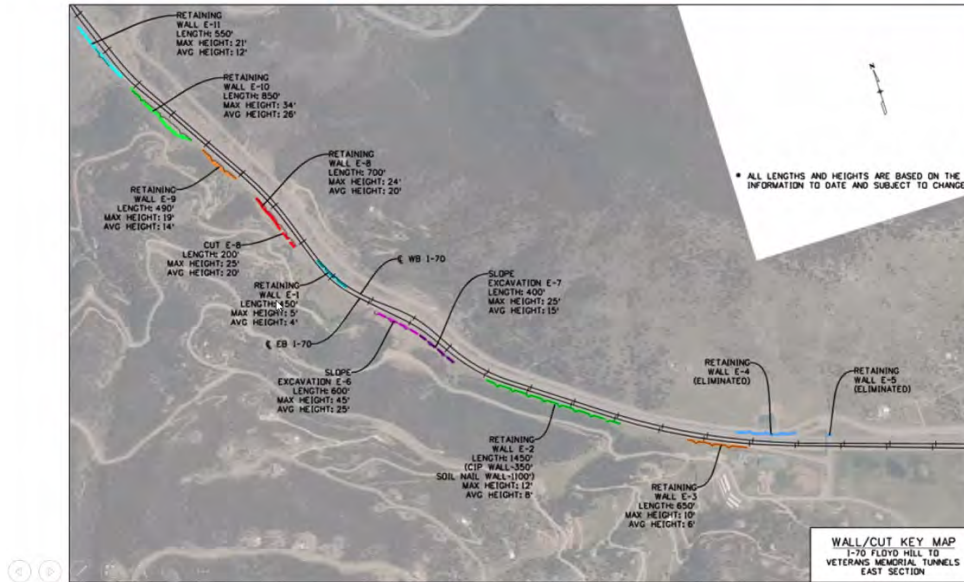




Review of Wall Key Map



East Section: Walls & Rock Fall



Decisions:

E1-E3 = CO RR
E4, E5 = Eliminated
E6, E7 = Excavation
E8-E10 = Shotcrete

Update: Wall E1 was originally going to have CO RR on a small section, with barriers on either side, but now will just include a continuous barrier.

Commitment Tracking:

The Project Team led a brief discussion to advance the process of commitment tracking through construction. The East Section Tracking Sheet is being developed and designed to document the decisions and commitments made during the design phase. The sheet will be referenced during construction as a touch point to ensure commitments are being met. The TT agreed the sheet should include the following:

- Key issues
- Decisions and Commitments
- Responsible Parties
- Monitoring Record
- Plans and relevant page numbers

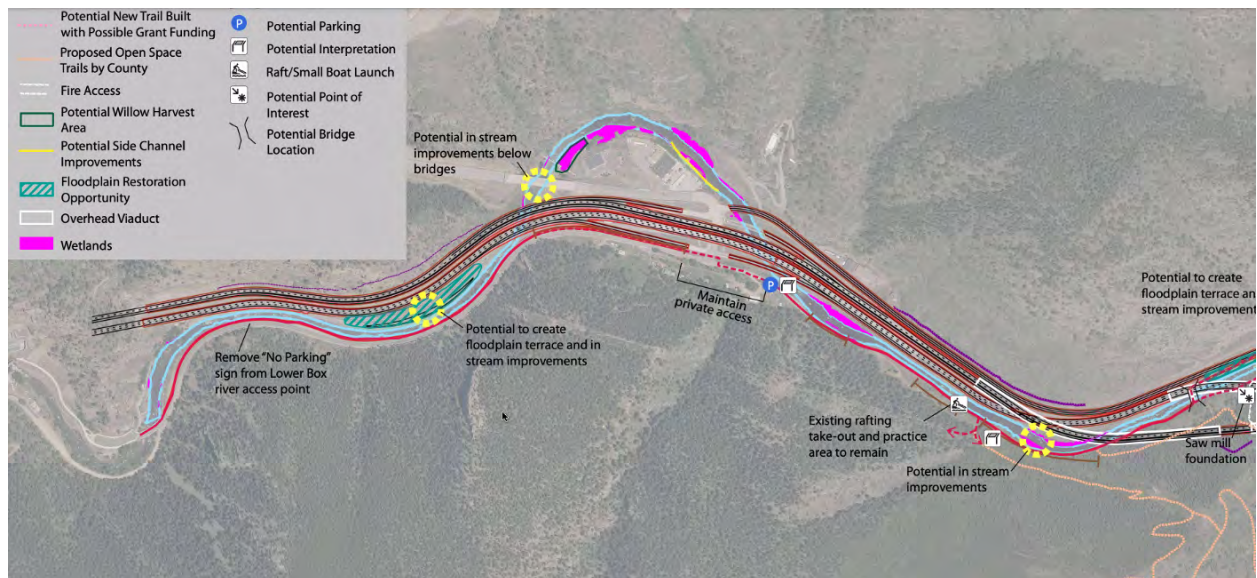
TT Agreement: TT agrees to the general structure and content of the Tracking Sheet



3. Introduce: Greenway Introduction & Kick Off

The Project Team reviewed a Greenway map that included a range of available features that an eventual Greenway could include. The goal was to identify areas of interest for further discussion, which will take place in the TT or Greenway ITF. Not all of the aspects discussed will be included in the Floyd Hill project or paid for by CDOT, but the objective is to understand areas of interest and develop plans for implementation.

Greenway Overview Map:



- **Legend Review:** existing trail to remain, to be paved, potential new trail alignment, environmental considerations, safety considerations, recreational amenities (parking, access), willow harvesting areas, position relative to new I-70 viaducts
- The Team walked through the map west to east, noting the following:
 - Potential riparian habitat improvements are a known interest (it was noted the horseshoe curve area is privately owned which may limit access).
 - The current asphalt part of the trail will be converted to concrete, staying on the north side of road and south side of creek.
 - Another known interest is connectivity to other nearby trails.
 - The portion of the creek that was planned to be relocated will now remain in its current location, which maintains a rafting training area. Steep banks and erosion in this area could be improved.
 - People are accessing the creek in various locations. A desired outcome of the project is to direct access to specific areas.



- **TT Question:** How do decisions related to the Greenway get made? Is there a plan for managing funding?
- **Response:** Currently, the discussion is intended to gain a better understanding of priorities. There are likely opportunities for matching funds from the local community. We are awaiting the finalization of the infrastructure plan for Central and West sections to better understand what the major impacts will be to the area, then we can delve more deeply into funding.

- **TT Question:** Is there an opportunity to charge for parking spaces to generate funding?
- **Response:** Potentially, but that requires changes to land ownership so the parking lot is not in public right of way.

- **TT Comment:** Clear Creek County is interested in a potential partnership with Jefferson County to pursue funding for the Peaks to Plains trail connection via a GOCO Centennial grant. The grant application is due in April. Floyd Hill presents an opportunity to leverage funds and timing to bolster the case for the Centennial grant.

- **TT Question:** Will CDOT sample aquatic habitats before construction of the Greenway begins in these different areas for habitat restoration/improvements?
- **Response:** CDOT has existing sampling locations in this area. As part of construction, CDOT will test for runoff & water quality.

How to work through Greenway decisions?

- Which is preferable for these discussions: TT or ITF?
 - **TT Comment:** It's helpful for the full TT to have an overview, then a smaller ITF group of individuals representing areas with direct impacts can deliberate in greater detail.
- What about timing?
 - **TT Comment:** It would be helpful to meet during the usual TT time (every other Friday). TT members who don't need to join do not need to attend Greenway-specific discussions.
 - Can intersperse TT meetings when necessary and use the Friday time slot creatively to convene TT or ITF as needed.



5. Next Steps

The consultant team thanked all participants for joining and indicated forthcoming information including: the East Section Tracking Sheet for review and next steps for the balance of Greenway ITF meetings and further TT meetings.

Summary of Action Items, Agreements, & Decisions:

TT Agreement: TT agrees to the general structure and content of the Tracking Sheet

ACTION: Project Team to begin drafting East Section Tracking Sheet, review with TT, and distribute for comments.

ACTION: TT to provide comments on East Section Tracking Sheet once available.

TT Agreement: TT and Greenway ITF can share Friday 9a-12p meeting time as necessary.

ACTION: Determine members of Greenway ITF and balance of TT/ITF Schedule moving forward.

6. Attendees

Cindy Neely, Amy Saxton (Clear Creek County); Jessica North (Clear Creek County School District); Mike Raber (Clear Creek Bicycle User Group); Sam Hoover, Joe Behm (Central City); Margaret Bowes (I-70 Coalition); Brian Dabling (FHWA); John Curtis (Upper Clear Creek Watershed Association (SWEEP)); Gary Frey (Trout Unlimited); Jonathan Cain (Idaho Springs); Lisa Wolff, Bill Coffin (Floyd Hill POA); Paul Winkle (CPW); James Proctor (Bridge Enterprise/AECOM); Tracy Sakaguchi (CMCA); Steve Cook (DRCOG); Kurt Kionka, Jeff Hampton, Tyler Brady, Margo Mcinnis, Badr Husini, Ryan Sullivan, John Gregory, Joy Wasendorf (CDOT, CTIO); Anthony Pisano, Matt Aguirre, Alan Carter, Jordan Falzetti (Atkins); Matt Hogan, Koichiro Shimomura, Tim Maloney, Brandon Simano (Kraemer); Mandy Whorton (PEAK Facilitation); Tammy Hefron (HDR); Kevin Shanks (THK Associates); Daniel Estes, Cara Potter (CDR Associates)