



## MEETING NOTES

<b>PROJECT:</b>	21685 I-70 West Vail Pass Auxiliary Lanes
<b>PURPOSE:</b>	Technical Team Meeting #8
<b>DATE HELD:</b>	May 8, 2019
<b>LOCATION:</b>	Avon Branch Library, 200 Benchmark Rd, Avon, CO
<b>ATTENDING:</b>	Joel Barnett, FHWA John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 David Cesark, Environmental Manager, CDOT Region 3 Drew Stewart, Design Team, CDOT Region 3 Matt Klein, US Forest Service Ben Gerdes, Eagle County Dick Cleveland, Representing Vail Town Council Tracy Sakaguchi, Colorado Motor Carriers Association Pete Wadden, Town of Vail Greg Hall, Town of Vail Michelle Cowardin, Colorado Parks & Wildlife Len Wright, Eagle River Water & Sanitation District (ERWSD) Benjamin Wilson, USACE Stephanie Gibson, FHWA Richard Duran, Colorado State Patrol Kevin Sharkey, Eco Trails Eagle County Kelly Russo, Colorado Parks and Wildlife Scott Jones, Colorado Snowmobile Association Tyler Bowman, Wood Stacy Tschuor, David Evans & Associates Kara Swanson, Consultant Environmental Task Lead, David Evans and Associates
<b>COPIES:</b>	Attendees

### SUMMARY OF DISCUSSION:

#### 1. Introductions & Agenda

- a. Kara Swanson did introductions, covered the agenda, and described actions taken since the last Technical Team (TT) meeting.
- b. Reviewed purpose and need
- c. Tyler Bowman presented updated current proposed action design plans and described minor improvements to curves and adjustments to the roadway to minimize impacts.

#### 2. Design Option Considerations

- a. Chain stations/Truck Ramps
  - i. Variable speed limits will assist trucks in/out of chain stations
  - ii. Plans call for more signs and lights for visibility
  - iii. Chain station at MM183 is was not used this winter as it created a hazard.
    1. High grade leading to it and limited parking creates issues on I-70 with trucks either stuck on the mainline grade approaching it or trucks double-parking at the chain station to avoid stopping on the steep grade.



2. Another chain area at MM184, but not used because it is not developed enough (no lights, not obvious pullout) and was considered a hazard by maintenance.
3. These upper chain stations are used more during the shoulder seasons when the snow line is higher.
4. No decision has been made on plans for upper chain stations, but considering:
  - a. Improving MM 183 area – adding more capacity would be needed to fit more trucks off the mainline to eliminate the hazard
  - b. Larger shoulder areas along the EB lanes that function as chain station for just hazmat vehicles that need to chain up past the chain station at 178
  - c. Tracy Sakaguchi would rather double the capacity at MM183 and keep it as a formal chain station with signs and lighting
    - i. Capt Richard Duran mentioned that the MM184 chain station has issue with maintenance. Snow removal is currently not sufficient, but could be useful if it were improved with an increase to capacity.
  - d. Tracy is worried about the wide shoulder option because trucks tend to use a lighted developed area more than basic pullouts.
  - e. John Kronholm mentioned the problem with maintenance at MM 184 is location of the wall. There is nowhere to push snow.
  - f. Capt Duran mentioned it would be good to keep the upper pullout for overflow. Tracy agreed.
  - g. John said that it probably wouldn't be improved with lights and signs, but could still be kept as a wider shoulder for a safer pullout.
  - h. Karen asked how much the MM 183 area would be used.
    - i. Capt Duran said it would be very beneficial to get the hazmat vehicles out of the town chain up area.
  - i. Tracy said that the additional capacity is needed for overflow, but matching the capacity of the MM 178 area is not absolutely necessary.
- iv. Improve truck pullout areas and parking at the top of pass
  1. Locations along uphill and downhill were identified for widened shoulders for truck pullout areas prior to large uphill grades and for downhill hot brake areas.
  2. Improving the truck parking layout at the existing truck parking EB prior to the rest area would allow trucks to take a break before driving downhill grades
  3. Tracy and Capt Duran agreed that this would be helpful.
- v. Truck Ramps
  1. Currently design is substandard due to curves not designed for posted speed.
  2. Design improvements include straightening the runaway truck ramps



3. Tracy asked what other safety improvements are being considered
  - a. Tyler responded that options are being looked at, however, there are maintenance issues to consider
  - b. Tyler mentioned that there will be some sort of catch system planned for the top of the ramp, could involve barrels or nets.
4. Dave Cesark was concern that studies show most trucks losing their brakes are driven by inexperienced drivers or drivers with no experience driving in the mountains. He asked Tracy if she has any input for educating these drivers.
  - a. Tracy agreed education is needed and that CMCA is looking at ways to do this.
  - b. Dick Cleveland asked if CDOT will start tracking information about ramp usage.
    - i. John responded that there is a grant in place for a study with CDOT and that we are also tracking the information and it is presented monthly at the I-70 Mountain Corridor Meetings. He also mentioned that there is a hot-brake map being developed.
    - ii. Stephanie Gibson asked how the data is collected
      1. Tracy responded that trucks pulled over with smoking brakes or trucks that have used the truck ramps are being recorded.
    - iii. Greg Hall asked if there had been an infrared (IR) camera installed.
      1. Tracy confirmed that there are Weigh-in-Motion (WIM) monitors as well as IR cameras, however there have been maintenance issues keeping them working.
    - iv. Dick asked if the Floyd Hill downhill warning signs had made any difference in truck issues
      1. Stacy said there have been reports of an initial difference in crashes involving trucks but eventually returned to prior operation.
- vi. Emergency access
  1. Wider shoulders will be planned to allow vehicles to get to incidents.
    - a. Tracy asked if you lose shoulder room due to snow storage how would the responders get up the pass.
      - i. John responded that it is a problem, particularly at the top of the pass, but we eventually try to clear it with snow blowers or other heavy equipment.
      - ii. Snow plows can throw snow about 15 feet behind barrier and a snow blower throws snow about 30-40 feet. These distances are being considered with the design.
  2. Emergency response during construction will be addressed with phasing and intermittent pullouts
  3. Improved turn around areas
    - a. Widen specific turnarounds for truck access.



- b. Currently 6 turn around areas, planning on 5 with improvements.
        - c. Increase signing to discourage public use.
  - b. Corridor Character and Aesthetics
    - i. Working on an existing conditions report and identifying the users for impact decisions.
    - ii. Greg asked about the revegetation plan
      - 1. Kara responded that the Crest of the Rockies plan includes guidelines for revegetation, as do CDOT standard specifications.
    - iii. Dave asked about if there was any feedback on the facility look, specifically how important was the color of the GR.
      - 1. Greg said Vail only uses brown
      - 2. Matt Klein said that USFS supports only using types that blend into the background. Dick agreed. POST MEEETING: Joel sent language from the Federal Lands/FWHA IGA regarding aesthetics of guardrail and cable rail.
  - c. Enhanced Environment & Water Quality
    - i. Following guidance from the NEPA analysis
    - ii. Greg commented snow removal plans and water quality need to be reviewed together, and needs to be addressed with the maintenance crew.
      - 1. Kara responded that there has been a mitigation menu developed and maintenance was involved in the development of those options.
      - 2. Kara stated that the ITF groups will be involved at the beginning of design and construction to make sure the mitigation intent is being carried out.
    - iii. Kara presented the implementation plan
      - 1. The Sediment Control Action Plan (SCAP) update will be a part of the process and will be completed prior to final design of the first project phase.
      - 2. Dick mentioned that a maintenance plan should be a part of the SCAP because that is usually what gets dropped
        - a. Stephanie mentioned that it is a constant struggle with other areas in the state
        - b. John mentioned that CDOT is actively meeting with the Black Gore Creek steering committee to cover these issues.
  - d. Wildlife Enhancements
    - i. Kara stated that in addition to the second ALIVE ITF meeting, additional coordination was conducted with USFS and CPS. These groups discussed various options for wildlife – underpasses, fencing, glare screens...
    - ii. The EA will commit to the number and approximate location of underpasses and will include the target species for each location. The reason for not including exact underpass dimensions is because funding has not been identified, construction is at least several years away, and conditions may change by the time final design occurs.
      - 1. Team suggests reconvening the ALIVE ITF prior to construction to reevaluate recommendations.
        - a. Michelle asked if structure size was not identified at this point





- vii. Pete Wadden mentioned the environmental benefits to keeping the trail near the highway and the concern that the matrix seemed to prioritize user experience (human factors) over the environmental criteria.
- viii. Karen said that the challenge is that the other options have poor ratings for the environmental criteria, so the hybrid option brought the criteria up to fair. The criteria were not weighted to prioritize one Core Value over another.
- ix. Dick brought up that there are technical aspects to building the trail that will be used to mitigate the environmental impacts and is satisfied that the hybrid option is best solution for this point in the design process.
- x. Greg brought up that with Option 1, as it moves further from the interstate, it encroaches on the creek (toward the 100' buffer) and impacts a timber stand
  - 1. Michelle was asking about the timber stand that is being avoided because it didn't seem very large. Avoiding that timber stand in the challenging 0.3-mile segment may not be needed.
    - a. Kara said it was avoided as a part of an effort to balance environmental concerns.
- xi. Stephanie suggested tabling the final decision on the alignment for this short segment (0.3 mile) until the project is further in design. The EA can be completed with the specific alignment within this small area not determined, noting that more design is needed to figure it out. Later design and mitigation techniques may reveal solutions to minimize impacts.
  - 1. John was concerned that we could not complete the EA without final decisions. Stephanie said that the EA could be completed with a final alignment for a small section.
  - 2. Stephanie mentioned that pushing to omit options now might preclude a best option in final design.
- xii. Michelle questioned how much the user experience is improved.
  - 1. Kevin Sharkey responded that all options make the trail better, but his biggest concern was Option 1 would create the biggest construction impacts and closures.
- xiii. Michelle had varying concerns on the walls, mostly where a wall was adjacent to an I-70 wildlife crossing. However, her largest concerns were wetland and water quality impacts.
- xiv. Kevin asked if water impacts could be mitigated with the hybrid design would that be acceptable?
  - 1. Greg said that if wetlands were spanned by bridges, it would help to make this design more acceptable,
  - 2. Michelle wanted to run the concept pass CPW biologists.
- xv. Dick brought up that the offline option could be built easier in advance of the highway resulting in improved phasing
- xvi. Benjamin Wilson asked if the funding for the trail was distinct from the road?
  - 1. Karen said while we don't have funding for any of the project, they would likely not be separated.
  - 2. Benjamin pointed out that a lack of funding would most likely not be used as a limiting factor in mitigating some of these impacts. The



trail is a very small portion of the overall funding, so it would be difficult to argue that avoidance is not possible due to cost.

3. Stephanie noted that moving the highway would make it difficult to separate out the costs.
  4. Kara noted that as funding is identified pieces could get separated, (i.e. there could be funds to rebuild the trail but not the road immediately).
  5. Matt asked if the path would be built before the road
    - a. John said that would be ideal but the phasing would be reevaluated closer to construction.
- xvii. John noted that the stakeholder input for the trail would continue as the project proceeds.

### 3. Level 2 Screening

- a. Level 2 was not used since the preferred alternative came out of the level 1 screening. However, the level 2 screening criteria was used to refine design options and address issues.
- b. Kara stepped through the Level 2 criteria and the status of each analysis.
  - i. Stacy noted that the safety analysis of the proposed action is in process. There may be minor changes as the evaluation considers the corridor design refinements and traffic forecasts. The initial preliminary draft results show a potential 35-45% corridor wide crash reduction with the proposed action, compared to the no action condition.
- c. There was more discussion about not committing fully to one option on the trail alternatives.
  - i. Michelle has mixed feelings about not getting to one option for the trail alignment. The group has been working together for a long time and leaving it open would push it down the road, maybe to new people who may not have as good a background on the project.
  - ii. It would only be left open in the limited, short (0.3-mile) area. It would not have to be kept totally open, but could be defined as one of the two options (Option 1 or the hybrid).
  - iii. Making the decision later may open up more details related to mitigation and opportunities.
  - iv. Greg asked if those design details should just be worked out now?
    1. Karen said that would require more survey and more detailed design, which is too costly and would open up issues if it is only done for this small area. It is better to complete those refinements and design details with the next steps of the projects.
- d. Greg asked about the AGS alignment and if the project team has shown that it isn't precluded, as required with the PEIS.
  - i. He asked if the design shows that there are larger walls or footprint that makes the AGS more cost-prohibitive.
  - ii. CDOT responded that they are committed to showing the AGS alignment with the Proposed Action in the EA and that it is not being precluded.

### 4. Wrap Up

- a. Kara asked for final comments on the materials within 2 weeks (by May 24th).



- b. After comments received and addressed, the proposed action will be considered final to proceed with the environmental impact analyses.
- c. There will be one more public meeting during the 30-day EA review period. The intent is to meet with the TT prior to the public meeting.
- d. Greg asked what the shelf life of an EA is.
  - i. Stephanie responded that there is no shelf life. EAs will be reevaluated for the projects that move forward to compensate for changing conditions.
- e. Len asked how we know that the mitigation for water quality is actually mitigating the impacts from the road (i.e. if we aren't monitoring the effluent from the BMPs, how do we know it's working?) Stephanie explained that because the project is only at 5 percent design, it is not possible to provide specific detailed mitigation and that FHWA (and CDOT) is prohibited by regulation from starting final design of a project during NEPA. The mitigation identified will be more process-based, explaining how the details will be worked out in coordination with the relevant stakeholders once we have more design detail to look at the specifics for the mitigation/treatment of the water that will be coming off the roadway. CDOT will be able to use the latest and greatest technology at the time, and not be locked into a specific type of mitigation which might become outdated.

Subsequent to the meeting, Matt Klein provided USFS comments related to the meeting, which are summarized below:

- Regarding the bike path alignment, we understand that when it comes to the design and alignment of the bike path, there are competing considerations that must be balanced. None of the design options are ideal for all Forest resources.
- Consequently, it is our position that the alignment closest to the highway itself provides long-term benefits (i.e. avoidance of crossings of Black Gore Creek; avoidance of impediments to wildlife accessing the creek) that outweigh the costs (i.e. longer construction times impacting public recreation and outfitter businesses; less-than-ideal user experience for less than one mile; use of tree stands adjacent to the highway).
- Regarding Gore Creek campground, we request as much advance notice as possible of its closing, for two reasons: One, so that we can notify the public that this very popular campground will be closed and unavailable for reservations/use. Two, so that we may plan our own infrastructure improvements to this campground during its forced closure (assuming such campground enhancement work would be compatible with CDOT's concurrent highway work).
- Regarding the hiking trails (Two Elk, Gore Creek), we request that closures of the trailheads be minimized (if unavoidable) and dates provided with as much advance notice as possible.
- Regarding Vail Pass Winter Recreation Area (VPWRA) parking at Exit 190, we cannot accept any net loss of parking for the general public, including and especially roadside parking along Black Lakes Road for snowmobile trailers. Please ensure that there is sufficient storage/accumulation space for plowed snow along the eastbound shoulder near Exit 190 so that such snow will not encroach upon this essential parking area.
  - Due to limited recreational parking in the winter, CDOT must avoid using Black Lakes Road as a location for equipment/material staging or work crew parking.
  - Additionally, it would be greatly appreciated if CDOT could provide improved signage and road striping along the access roads at Exit 190, in order to minimize the number of motorists who mistakenly enter the already-crowded VPWRA parking area when trying to find CDOT's highway rest area.



- Regarding water quality and protection of aquatic species, we generally agree with other comments already received stating that water quality measures for Black Gore Creek should be an integral part of the project design, and we stand ready to discuss any additional land use needs that may arise from the planning of additional or enhanced water conveyance structures or water treatment traps/basins.
- Regarding wildlife protection, we are pleased to see that no fewer than six new underpasses of various sizes are planned, and that these underpasses will be designed based on the best science available at the time of design. Additionally, we strongly encourage the inclusion of any design features which will keep human activities away from the wildlife underpasses.
  - Wildlife fencing should be integrated into the highway design so as to effectively channel wildlife species toward underpasses. Accumulation of plowed snow should be monitored and (if necessary) maintained so that wildlife cannot use accumulated snow banks to climb over fencing in winter.
- Regarding noxious weed / invasives minimization, during construction all heavy equipment must be visually inspected for plant matter and thoroughly cleaned of all organic materials before entering the work site. This is a simple but effective practice for halting the propagation of invasive plant species.

Subsequent to the meeting, Michelle Cowardin provided CPW comments related to the designs presented during the meeting, which are summarized below:

- CPW is largely supportive of the design put forth by CDOT including the trail alignment option depicted and the proposed new wildlife-crossing locations. Following are CPW's comments and concerns for the West Vail Pass Auxiliary Lane Project:
  - The wall construction along the proposed trail at the Polk Creek intersection of I-70 (~mile marker 185.2) under the existing span bridge is of concern for impeding wildlife movement. CPW recommends keeping the wall height as low as possible and providing breaks in the wall for wildlife to move through. Wall heights of 8 feet or higher measured from a distance 4 feet from the wall to include slope would be a barrier to large ungulate movement and smaller mammals.
  - Historically, opportunistic parking by hunters to access the forest has occurred along the upper reach of the project area. Loss of this access is of concern to CPW.
  - CPW believes the crossing of Black Gore Creek between the 186 and 186.5 will have a negative impact on wildlife, wildlife habitat and aquatic ecosystems. There will be no new impacts if the trail is maintained between the highway and the creek. By crossing the creek, you are increasing containment to the water and providing easy access to habitat currently not disturbed on the south side of the creek. The trail would have to cut through a small clump of trees if it is moved to the north side of the creek; however these trees provide very limited habitat to wildlife and is not as valuable as the undisturbed area on the south side of the trail.
  - Realignment of the trail to locations further from the Interstate and the existing trail location will impact wildlife by increasing the area of influence of human disturbance. This disturbance and impact is further exacerbated by placement of the trail in previously undisturbed or impacted areas. The indirect impacts from human disturbance using the trail will be greater than the actual direct impact from the realignment.
  - CPW is pleased that CDOT has planned for no fewer than six new wildlife-crossing structures. We realize that the exact dimensions will be determined during the



design phase. The size of some of the structures should allow for large ungulates such as moose, deer, and elk to cross. Other structures should be designed for forested carnivores such as black bear, mountain lion and lynx. In addition, some adaptations to the crossing structures may be beneficial for smaller mammals such as pine martens and weasels.

- Attention to wall design especially near the entrance of crossing structures is important. Walls should not be designed that would impede or limit wildlife movement around the structures (see wall design at the 187.8). In addition, human activity should be discouraged at or near the wildlife crossing structures.
- CPW would support the wildlife-crossings being overpasses, underpasses or span bridges based on future research, funding and the ALIVE team recommendations.