



MEETING NOTES

PROJECT:	21685 I-70 West Vail Pass Auxiliary Lanes
PURPOSE:	SWEEP Issue Task Force Meeting #2
DATE HELD:	February 11, 2019
LOCATION:	Avon Library
ATTENDING:	Andy Herb, Alpine Eco Dave Cesark, Environmental Lead, CDOT Region 3 Paula Durkin, CDOT Region 3 Jen Klaetsch, CDOT Region 3 John Kronholm, Project Manager, CDOT Region 3 Becky Pierce, CDOT Devin Duval, Colorado Parks and Wildlife Taylor Elm, Colorado Parks and Wildlife Kara Swanson, Consultant Environmental Task Lead, David Evans and Associates Siri Roman, Eagle River Water and Sanitation District Caroline Byus, Consultant for Eagle River Water and Sanitation District Larissa Read, Consultant for Eagle River Water and Sanitation District Pete Wadden, Town of Vail Matt Klein, USFS Brad Bettag, Wood
COPIES:	SWEEP ITF Members

SUMMARY OF DISCUSSION:

1. Introductions & Agenda

- a. Kara apologized that this meeting has been rescheduled three times in an attempt to better accommodate ITF member schedules and the weather, but still some are unable to attend today.
- b. Karen offered one-on-one meetings with any ITF member requesting additional discussion.
- c. Kara reviewed the agenda. Will discuss how SWEEP ties into future parts of the project.
- d. Meeting goals- everything presented today ties back to the implementation matrix from the MOU

2. General Project Information

- a. ITF Responsibilities
 - i. Recommendations to take back to PLT – decisions lie with CDOT and FHWA – identify mitigation and enhancements
- b. Project Purpose & Need
 - i. Purpose and Need is to improve safety and operations on West Vail Pass
- c. Recap SWEEP Meeting #1
 - i. Introduction to the project, CSS, SWEEP MOU, - this was prior to field work or proposed action, reviewed list of background data sources, used to refine data work.
- d. Project Status



- i. Kara described the alternatives screening process.
 1. Criteria for Level 1 screening was based on Purpose and Need (P&N), if any alternative answered “no” to safety and operations questions, it was eliminated as CDOT cannot carry forward an alternative that does not meet P&N, other than the No Action. ,
 2. There were also criteria based on Core Values, but only ones that could easily be answered as “yes” or “no” since Level 1 is not a comparative analysis between alternatives and we didn’t have enough information to answer “yes” or “no” for most of the Core Values. However, understanding that the Core Values are extremely important, many of them were used to develop the Level 2 criteria.
 3. After Level 1, only one action alternative met the P&N, which was the auxiliary lanes with curve and ITS improvements alternative. Because of that, the criteria from the Level 2 screening will actually be considered during the impact and mitigation assessment for the EA.
 4. After the Proposed Action was identified, there was an internal design team workshop and to start incorporating design options such as wildlife crossings, water quality, recreation path realignment, etc.
 5. The team also met with CPW and USFS to discuss wildlife and the trail.
- ii. Caroline – when will you complete the EA? Kara – public can submit comments at any time, looking towards the end of the year for the EA. There will be a 30 day time period for public comment on the EA,
- iii. Caroline – regarding public comments, how do the comments fit into the final report? Kara- the comments are included in the decision document,
- iv. Larissa – will there be a draft and final EA? Kara – no, only the final EA for review and comment. Any changes would be included in the decision document.
- e. Stakeholder Comments Summary
 - i. Kara went through the slide –conversations and involvement of ITF will still happen as the project moves forward and into design

3. Sediment Management Implementation Flow Chart

- a. The flow chart focuses on sediment management – water resources tech memo happens during the EA – this all feeds into the EA and decision document, blue box first and then move into the green box, will incorporate both project specific and other mitigation measures outside of the project
- b. John – this EA will commit to re-doing the SCAP as part of the design process

4. Project-Specific SWEEP Implementation Matrix

- a. Talks about how we are addressing each one of these categories
- b. Sediment Management
 - i. Brad reviewed the matrix. There are a lot of limits to what we can incorporate due to space. Developing maintenance manuals for BMPs. Continued monitoring in basin.



- ii. 2002 SCAP project review – numerous SCAP recommendations have been implemented in the time since the 2002 SCAP. Those that are marked “complete” are green, partially complete are yellow. There were instances where certain BMPs were recommended but something else was implemented. Corridor has not been static. There has been noticeable improvement since 2002. Some things that have been implemented haven’t been structural- better equipment and training, shoulder cleaning, increased use of deicing elements other than sand, etc.
- iii. Not all recommended improvements have been implemented. What’s next? Low-hanging fruit have been implemented. A lot of the additional BMPs would be good to implement with large project construction. Opportunities for BMPs to be installed when traffic is being diverted. Since 2002 there has been a lot innovations in BMP technologies. Project team has been looking at other states and SCAPs for ideas.
- iv. Taylor- are the “green” BMPs still going to work with the proposed action? Brad- if the BMP will be impacted by the alignment, we will have to replace or mitigate for it.
- v. Siri- what level of detail will be in the EA vs. what will come later? The concepts will be identified in the EA but will not specifically where items will go because we’re only at conceptual design. At the decision document we will describe the intent.
- vi. Don’t make water quality an afterthought- input from stakeholders will continue throughout the EA process.
- vii. Funding? CDOT is trying for a freight grant. Will look at phasing for other funding options. Can’t be funded solely from asset funding. There are other funding options out there, but need to have a phasing plan in place. The project will be assessing impacts and mitigation as a project as a whole and not be identified piecemeal. This corridor is #1 for crashes per volume of traffic in the state.
- viii. Pete- back to the alternatives- we looked at several different options of alternatives. Did they consider other options such as traction law enforcement, carpooling, etc. We had a PEIS, which identified a preferred alternative. The PEIS identified and implemented non-structural measures for the I-70 Corridor. We took it a step beyond that and analyzed additional alternatives. A TDM type alternative wouldn’t have necessarily helped with safety.
- ix. Brad described project-specific BMPs. Will describe locations the type of BMPs that may be useful at that location. The BMP menu will allow the designers to pick and choose BMPs based on intent, site constraints, etc.
- x. USFS- have any of the BMPs in the menu been previously installed from the 2002 SCAP? Yes, some have, others have been used on other projects. These have also been vetted with CDOT maintenance in terms of ease of maintenance. Type D WQ inlet- Brad discussed the pros of them. But may not be good because of the volume of sediment. Karen- we compiled BMPs we know work well and others we found through research.
- xi. The goal isn’t necessarily to fill in everything from the 2002 SCAP but to create a new one that looks at feasibility of the previous recommendations, changes in roadway alignment and what’s feasible.



- xii. When does the analysis occur for sediment loading? When does modeling occur? Usually there will be initial examination during the alignment. There are also very specific requirements for the technical report for the EA that can be found in CDOT's NEPA manual.
 - xiii. How will this project enhance the environment? Proactive rather than reactive. Instead of a band-aid, it's a holistic approach. From a wetland perspective, there are opportunities for wetland enhancement. Looking at areas where we can enhance wetlands. We have the opportunity to be proactive. Can attract wildlife and have them use the underpasses.
 - xiv. In terms of the sediment impacts in the future- are you trying to capture 100%? It's always the goal, but can't guarantee anything. We will try as best as possible to capture everything but there may be areas we miss. We need to honor where we are in the process. Andy- also talking about redundancy- not just going to drop an inlet in. There will be secondary and tertiary opportunities as well- veg swales, riparian enhancement.
 - xv. Siri- thinks there should be adaptive management. The ERWSD wants it documented well. Less interested in what we're implementing but focused more on the intent of the mitigation measure. Let's focus on the science- what can we achieve? Would like to see defined goals.
 - xvi. Larissa- when would the SCAP update happen? A little more definition of the timeline of when the SCAP will happen.
 - xvii. John- some of the items for the SCAP update may be outside the scope of this project. Monitoring the stream would be one of those. This project will implement the construction of physical features within the project limits and does not pay for other items, such as monitoring. Monitoring has already been put into place by the State since 2001 and is on-going.
 - xviii. Martha- Collaborative Effort ensures that the PEIS is followed.
 - xix. Karen- how has CDOT's approach been in the past? Jen- Straight Creek-TMDL was done right after the SCAP was completed. Committed to 25% of sand pick-up. Continue to track that and just revisited past numbers. Varies year to year – lots of variables. Have been talking to maintenance about the variances.
 - xx. Karen- will need to talk as an organization on how we can commit to meeting our goals. Can we even commit to a certain level of chlorides?
 - xxi. Siri- structures only work as well as they're maintained. Could you look at averages for goals? The board talked about it last month. They really want to have a monitoring approach- doesn't matter how it happens, just that we work together to do it.
 - xxii. Larissa- monitoring is integral. A FONSI needs to be truly a FONSI. They need more confidence in what "no significant impact" means since FHWA doesn't have a standard for what significant is.
- c. Section 303(d)
- i. Brad reviewed 303d listing for BGC. BGC has been delisted from 303d for Macroinvertebrates, but is still listed as M&E. The stretch of BGC above Miller Creek has also been delisted from 303d for sediment. The lower portion remains 303d listed for sediment. We are specifically targeting sedimentation impacts and that we are addressing those concerns with this project.



- ii. Siri- Dave Reece is sampling macroinvertebrates. New data is available linking macro to mag chloride. Siri would be happy to have Dave present to the project team.
- d. Wetlands Protection
 - i. Andy presented an update on the wetland information. Andy conducted field work this past summer/fall. All mapped wetlands are shown on the handout maps. Wetlands were mapped based on hydrophytic vegetation and hydrology, not soils. When we are ready to permit, they will be officially delineated. Andy also recorded wetland type, classification, water source, stressor, photos, and mapped them. Each wetland was given a score – A, B, C, D. there are some “A” wetlands. A lot of other “B” ones. Ones close to the road are “D” as they are primarily created by roadway runoff.
 - ii. Where are the high-functioning wetlands and what do they mean to the project? They will be color-coded on maps but the only way to determine if there are fens/peatlands is to check soil, which will be done in 2019.
 - iii. Larissa- will wetlands be analyzed in the EA? Yes.
- e. Maps
 - i. A couple highlights- MM 182. Wetland study area is the green line. There may appear to be truncated but it’s just because of the study area. MP 184- there are some big wetlands above Timber Creek. As you travel up the pass, MP 187- large wetland complexes along Black Gore Creek and more and more wetlands as you go higher in elevation. Andy has identified wetland enhancement/mitigation opportunities, which can be included in the EA. The actual mitigation package will be done when it’s time to permit the project.
 - ii. Will do the soil confirmation for fens after the snow is gone.
 - iii. USFS and CNHP both did fen studies, we have that data.
 - iv. Generally, wetlands closer to the road are lower quality and stormwater fed, with a few exceptions. Creeks and tributaries hold a lot of restoration/enhancement opportunities.
- f. Special-Status Aquatic Species
 - i. Jonathan Lowsky is our biologist and has been talking to Kendall with CPW and the USFS. The USFS doesn’t recognize any special status species in this area. CPW does recognize native cutthroats in some tributaries. Our recommendations are to maintain the existing fish barriers. There are other tributaries near 183 – at the ALIVE meeting we discussed whether we should remove the culverts and restore the tributaries or keep the culverts in place. The decision was made to keep everything in place because an open channel could fill with sediment.
 - ii. * Follow up with Jonathan on the toads. There is a beaver pond/wetland area there too. The pond is outside of the project limits.
 - iii. Caroline- how far west does the project start? East Vail. 180-190. Another concern is the potential for accidents/spills for hazardous materials. How does that factor in to this project? Karen: We haven’t looked at it yet. Martha: The responsible party (trucking company) is responsible for the impacts. We are looking at improving truck ramps.
 - iv. Existing BMPs could be improved to help reduce the hazmat reaching the creeks. Existing BMPS have helped collect hazmat spills, an example is the



- hydrochloric acid spill at MP 183 that a sediment pond helped to capture and prevent the spill from spreading.
- g. Aquatic Species as a Recreational Resource
 - i. Pete – gold medal fisheries are downstream (5 miles). Impairments start in East Vail. It's been worse in Gold Medal section. East Vail area – there is a very definite impact to macroinvertebrates. Could be close proximity to highway. More pavement along with other impacts cause issues in the creek. In that area, the highway is primary land use and there is concern about macroinvertebrates.
 - ii. Siri- The downstream Gold Medal Fishery should be considered. Thinks it should at least be acknowledged as an input. She thinks that if we have enhancements from the project that it would directly improve that area too.
 - iii. Martha- macroinvertebrates goes down near East Vail to the wastewater treatment plant?
 - iv. Vail tends to deemphasize impacts from I-70 since residents don't have much control over that.
 - v. Siri - Impacts to the Gold Medal stream are from urbanization of Vail
 - h. Information and Research Needs
 - i. Jen presented the water quality monitoring reports for Black Gore Creek- what's measured and when. CDOT has been monitoring BGC since 2001 and issues reports every 3 years.
 - ii. Connectivity and chloride are measured year round. Turbidity probes are used in high run-off times.
 - iii. With suspended sediments there is a correlation to erosion. Phosphorus was also found to be high. Highway runoff is dominated by chlorides. Sodium chloride is high as well as mag chloride. This data has been shared with other groups and the consultant will summarize the 18 years of data and share it.
 - iv. Siri- for mag chloride- are there proprietary ingredients? Jen- had talked to maintenance but they haven't gotten the MSDS sheets yet. We can try to get those again. Pete- Chris Kobesach- CSU- worked with CDOT and got the slurry to do his tests and the impact of that product on water quality.
 - v. Siri- take the wet effluent and test that. Kara requested that ERWSD send any results they may have.
 - vi. Jen- the "ice-slicer" mixed with sand is also used, which is proprietary.
 - i. Trail Discussion
 - i. *send out the 11x17s of the trail relocation maps and the detailed matrix. Add sections that are within 100 feet of the creeks.
 - ii. The end result will likely be a hybrid of the alignments shown today. John reviewed the three different alignments. Least impactful one is likely the one between the current road and the creek. The stretch that we're impacting is 2.5/3 miles of the trail. We will leave the rest of the trail where it is currently. Feedback we're looking for is for concerns regarding locations of trail realignment.
 - iii. Pete- minimize creek crossings – there is more potential for people to use the creek. User experience is important but keeping it on the same side as the road and use walls or barriers to separate the trail from the road.



- iv. Taylor- crossings and wetland impacts are a concern – should minimize the trail paralleling the creek through wetlands. Try to make crossings perpendicular instead. Will talk to Kendall after this as well.
- v. Devin- sediment accumulation on path that could run off is a concern. Should mitigate the runoff from the path.
- vi. Pete- might be opportunities to also capture sediment from path. Karen- yes, we've been discussing that.
- vii. USFS – have you looked at how potential walls could interact with wildlife crossings? Yes, these areas were identified and moved where appropriate.
- viii. Andy- most of the orange alignment is not in wetlands with the exception of higher up.

5. Schedule and Next Steps

- a. Matt- please let the USFS know if we do have any data needs.