



## MEETING NOTES

<b>PROJECT:</b>	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
<b>PURPOSE:</b>	SWEEP ITF #5 Meeting
<b>DATE HELD:</b>	September 16, 2021
<b>LOCATION:</b>	Online Google Meet Meeting
<b>ATTENDING:</b>	John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 Rob Beck, Program Engineer, CDOT Region 3 Matt Figgs, CDOT Region 3 Cinnamon Levi-Flinn, CDOT Paula Durkin, CDOT Becky Pierce, CDOT Jen Klaetsch, CDOT Cinnamon Levi-Flynn, CDOT Region 3 Tripp Minges, CDOT Ben Wilson, USACE Melvin Woody, US Forest Service Kristin Salamek, CDOT USFWS Liaison Julie Smith, EPA Region 8 Matt Hubner, EPA Region 8 Nolan Hahn, EPA Region 8 Robert Jacobs, Summit County Pete Wadden, Town of Vail Len Wright, Ph.D., ERWSD Larissa Read, ERWSD Jen Bradtmueller, Kiewit Mark Gutknecht, Kiewit Holly Huyck, Pinyon Environmental Randal Lapsley, R S & H Jeb Sloan, R S & H Jake Maybeck, R S & H Mary Jo Vobejda, Jacobs Jim Clarke, Jacobs Pat Hickey, Jacobs Loretta LaRiviere, Jacobs
<b>COPIES:</b>	Attendees

### SUMMARY OF DISCUSSION:

#### 1. Introductions & Meeting Purpose

- a. Karen introduced the attendees at today's meeting.
- b. Mary Jo said we are going to give you a quick review of where the project is, the revised schedule for completing this ITF work, the upcoming site visit, status of the SCAP and Maintenance Manual, a wetlands update and next steps.

#### 2. Project Progress

- a. Mary Jo said construction has started for the first construction package which includes the truck escape ramp and WB highway closure system. The rest of the scope of work for the INFRA project which will be built in different packages is all at 30% design stage and will be reviewed at a FIR meeting later this month. Because it is broken into

different packages, the design will continue through 2022. The TT has met monthly to review the project progress. There have been some Design Exceptions that our Design Exception team has reviewed, which then goes to the TT for endorsement and then goes to the PLT for their recommendation.

### 3. Revised Schedule

1. Holly you have received most of the SCAP and Maintenance Manual. The schedule will be revised because:
  - CDOT has decided since the INFRA Project portion of this design is already underway, that section should be placed in the Map Book as designed. This will minimize duplication of effort. However, the drainage design for two of the Construction Packages will not be completed with enough detail to add into the SCAP until March and the design for Construction Package 4 will not be completed until December 2022.
  - You will receive the rest of the SCAP, Maintenance Manual and Map Book for MP 180 – MP 185 in around Thanksgiving for review. We could have the final ITF meeting as originally planned on December. But that means you will not have a chance to comment on the upper half of the SCAP design.
  - The other choice is to receive and complete the review the same items in November but wait until April to see the full Map Book and have a final ITF Meeting then.

Karen said she is willing to have two more SWEEP Meetings, one when we finish MP 180 – MP 185, and then one when we finish MP 185- MP 190. There are a lot of advantages to having two more meetings versus just having one because once we've laid out half of it, we can probably get some good feedback from you if we are heading in the right direction, and if this what you were expecting; incorporate that feedback into the design of the top half. Then we would have one more meeting when it is all done so that we get feedback on the top half.

1. Mary Jo asked if we would still have the meeting in December and do you have an estimate on when the last meeting would be? Karen said they are working closely with our design team working through SCAP and SWEEP features. I would think we would be ready sometime in the spring. We would have a meeting in December and the last one in the spring when we have the drainage for MP 185 – MP 190 more developed.

Ben and Matt agreed this was the right approach

### 4. September 27<sup>th</sup> Field Visit

- a. Holly said we will be meeting at 12:30 and go until 3:00.
- b. Karen said the field visit is something we committed to in the EA. We timed this visit to hit before the winter season so we could get out and look at everything. We were going to focus on three stops in the INFRA project and we were trying to find stops with different scenarios. Places where we have more space for SCAP features, some areas where we have less space for SCAP.

- c. Karen emphasized the top priority for CDOT is safety. If you want to join the field trip, please respond if you have not done so already. We're going to try to keep everyone in CDOT vehicles, everyone wears a mask and stay together more as a group. We're trying to figure out safety from a COVID perspective as well as safety on the side of the road. If you do have a hard hat and safety vest, please bring those because we are asking everyone to wear them while we are out walking around, especially close to the road. Also, no open toed shoes. We will be sending out more information prior to the meeting with where to meet.
- d. Holly said they believe four stops is the limit for the amount of time we have. She reviewed the potential stops:
- Black Lakes where we have both sanding and erosion.
  - Wildlife crossing at MP 188.3 to talk about sediment control around the crossing.
  - Polk Creek westbound, talk about moving the bridges away from the creek. All three of these are within the INFRA project.
  - The fourth stop could be Big Horn Road or the eastbound chain-up area. Both of these are outside of the INFRA Grant project. At Big Horn you can look under the bridge and we can talk about managing sand that comes off of bridges including managing the windrows that come off along the sides of the bridges. And also talk about a balance between local access to flat areas and sediment control. At the eastbound chain up station the discussion would be more about vegetative berms and other BMP control measures.

Karen said if you have time to think about the stops, feel free to add something to the chat. Karen said people may be looking forward to being up on the Pass with a team member who can actually explain what we are building in the next three years and what it is going to look like and hear a more literal context for the project.

1. Melvin asked how the project will impact the Timber Creek crossing. I was up there recently and there was a lot of sand entering the creek from that bridge.

John said our project starts at the Polk Creek crossing and in that area we are planning to provide permanent maintenance access to get down under the bridge for any potential cleanup in those areas but with this scope of work we won't be doing anything to the Timber Creek bridge.

## **5. Goal and Purpose of SCAP**

- a. Holly said the goal of this SCAP is to provide guidance for designers to control sediment to improve stream and wetland conditions, consistent with the original SWEEP MOU for the I-70 Mountain Corridor and the West Vail Pass EA commitments.

The first SCAP was created in 2002. This SCAP has been updated to reflect the proposed scope from the EA, water quality projects completed to date, and incorporate lessons learned in other areas we have installed water quality control measures. The SCAP will serve as a guide to current and future designers for what type and size of control



measures can be used in different locations and how to maintain them over time. It is a guidance and is not as specific as some people might expect.

## **6. Progress since last IFT**

- SCAP and Maintenance Manual Outlines revised.
- SCAP Sections 1-5 and Maintenance Manual Sections 1-3. These have been consolidated from the earlier outlines and drafts for review have been completed.
- SCAP Map Book legend and reference pages accepted by CDOT.
- Beginning to fill in Map Book for MP 180-185. This is the area below INFRA Grant area.

## **7. Refined SCAP**

- a. Holly reviewed the current outline. She said you have all of the sections except the Opportunities for Partnerships and Summary.
- b. Holly noted you have yet to receive the Table of Existing and Recommended Sediment Control Measures and the Sediment Control Map Book. Some appendices were removed to focus on sediment control and the Summary of Maintenance Manual was removed out of concern that changes in one document might not be reflected in the other. The two documents are separate and self-contained as much as possible.

## **8. Summary of SWEEP Meeting #4 Discussion**

- a. Holly reviewed what was discussed at the last meeting:
  - History of Black Gore Creek SCAP
  - Control Measures Built to Date
  - Overview of Sand and Salt usage
  - Current Watershed Status for Black Gore and Upper Gore Creek
  - Maintenance Questionnaire results
  - Lessons learned from Straight Creek
  - Identification of Control Measures being used or will be used
  - Example Map Book Sheet
2. Larissa asked how the SCAP and Maintenance Manual will be used? I want to understand from a private operations standpoint of view, how all the detail in the SCAP will actually be used by designers sitting at their computer and by the crew doing maintenance on the Pass. This is really where the rubber hits the road in terms of all those mitigation measures in the EA and the SCAP actually getting done on the ground.

Holly said this information is shared with the design engineers to incorporate into their designs. For example, we are assuming the future use of sand will be the same as it is now. It has come down about 40% since 2002. There is the trade-off; they are using more salt and liquid deicer instead. We went with the assumption that CDOT will continue to use the same amount of traction sand they do right now. We then increased the amount to account for the two east and westbound lanes. The engineers have a goal for designing to capture the sand plus a little bit for erosion. We added in several safety factors and the designers know how much sand they



need to capture and how much sand they need to convey to the sediment basin.

Karen said Holly did a great job explaining how designers are going to use the SCAP. It's a template for designers but also I think for future planners so that we can program funds better to incorporate sediment control improvements. In future design, either by CDOT or our partners, we will be able to go look at this document and know what the priority projects are for CDOT. It will also be useful for us when we are planning future sections of our larger project to figure out identifying the right estimates because we already have a concept layout for what these might look like.

Holly said that was what how the 2002 SCAP was used. The EA has a number of the items that were identified in the 2002 SCAP which have been completed so having that planning document was helpful as people worked along West Vail Pass. In some cases, there are some fairly specific comments about how to design these basins and how to calculate what the volumes need to be depending on the distance between them. The SCAP needed an update to reflect on what is happening now.

It will not be put on a shelf and forgotten about. Experience with the previous SCAP was that local stakeholders in particular made sure that CDOT was addressing the SCAP.

Holly also mentioned that when what is proposed in the EA is completed and constructed, less than ten of the approximately 60 existing sediment basins will remain. All of the rest will be impacted by the widening. So, this provides an opportunity to put in the appropriate number of sediment control measures along the Pass.

## 9. Control Measure Categories

- a. Holly noted a few items have been removed and a few added from what was proposed in the EA and the SCAP. The category of Prevention has been added because it is the most cost-effective approach to sediment control, and it is to keep sediment from getting into the streams to begin with, or to keep erosion down and also to stabilize existing slopes.
- b. Conveyance is roadside swales/ditches, drainage rundowns and shoulder and embankment paving.
- c. Two things have been added to the Control Measures Treatments: coir logs and "polishing wetlands." Coir logs are used to stabilize steep slopes or at transitions from gentle to steep slopes and also to keep sandy windrows under bridges from eroding into the adjacent streams.

Polishing wetlands are to be placed above sensitive areas and can remove fine sediment in order to protect those areas. They will only be used where traction sand is unlikely to reach them. So, if placed below sediment control measures they have to be outside of edge of pavement by at least 30' which is about the planned limit of snow plowing during the winter.

1. Ben asked if the polishing wetlands existing or created?



Holly said there are a few on the Pass. They have been added into the Map Book, but they are on the upper half. The idea is to provide added help above sensitive areas so if sand gets that far, the constructed wetlands that will help to remove sediment before it can get into sensitive wetlands or fens.

Pat said the hope is the sediment basins do their job of removing sediment along with other control measures. The polishing wetlands will be below the other BMPs by using mother nature to help cleanse and clarify that water before it continues downstream. The tricky part is finding locations where they will fit in this steep confined valley.

Holly said the SCAP will be used by design engineers for making sure there are enough sediment control measures along the Pass to help the Black Gore and Upper Gore Creek continue to improve the water quality. They are both already improving but this is to help the water quality continue to improve.

- d. Holly said that the SCAP includes either a picture or a drawing and description of how each control measure works, and what the pros and cons are of each one. For example, Type D inlets are very small. Catching large volumes is done by the sediment basins. But Type D inlets are used where it is too tight to put anything else, like medians.

## **10. Purpose of the Maintenance Manual**

- a. Holly said the Maintenance Manual focuses on how to maintain what is built.
- b. The purpose of the Maintenance Manual provides guidance for optimal inspection timing and maintenance of sediment control measures and supplements the current CDOT Winter Maintenance Plan. We are not replacing that plan, what we are doing is working to provide guidance for maintenance to clean out sediment control measures. We don't have a summary in the SCAP because we wanted to make sure there was only one place that discussed these and there would be no internal inconsistencies.
- c. Holly said the number of Maintenance Manual sections has been reduced. You have received everything except the Recommended Documentation and Reporting and the Sediment Control Measure Inspection Checklist appendix. That checklist is being added so that crews can look at specific features of each control measure.

For the Maintenance Manual we have taken all of the control measures and broken them into prevention, conveyance, and treatment, just as in the SCAP. There is a table that lists what actions need to be done around which sediment control measures and the kind of equipment that needs to be used--particularly for conveyance and treatment--to make sure the sediment and control measures do get cleaned out. There is an action section that lists the timing, some more frequently than others. For example, the Basin of Last Resort which is the really big basin around MP 182.5 should be cleaned out as least every 2-3 years, but most inspections should occur annually

The table plus the checklist will give maintenance staff guidance to keep an eye on the Pass and tells them to inform the LTC Ops Management if they see something that needs to be addressed. LTC Ops will discuss the issue with the appropriate environmental or engineering staff about the next steps. The maintenance people are out on the Pass every day and they know the Pass.



The Maintenance Manual also has a description and picture of each of the control measures. There are comments on how you get into it and where to start digging. It's focused on maintenance, so they have a different emphasis than the SCAP.

- d. Holly noted when you received the SCAP and Maintenance Manual to review, there was a link to a comment matrix. We appreciate if you would put your comments in the matrix so we can be sure to address them for the final versions. You can also email comments if that is easier for you. It would be really helpful for you to get us your comments by the end of September so we can incorporate them before sending you the final versions. We expect that to be done by around Thanksgiving, so you have time to review before the December meeting.

## **11. SCAP Map Book Reference Sheet and Map Book Example**

- a. Holly said the SCAP Map Book will show proposed sediment control measures that are based on the sediment volumes the designers use for calculating how much needs to be captured where. There is a reference sheet that shows the symbols for the different items.

Holly presented an example with all of the things that will be in the Map Book. The legend will show the location, and which sheet we are looking at so that you know where you are in the system. It will also show what is there now versus what we recommend being installed. There are several areas where we are recommending coir logs and revegetation or sediment basins to help stabilize what at the top of these very steep sides to the creek, so it is not sluffing off into the creek.

These are recommendations and things can change over time. When it comes down to it, they may decide we can't put it right there, but they'll move it 50' in one direction or another. We want to make sure the engineers are thinking about this.

Anyone who has been involved in this project knows that you shouldn't build it if you can't maintain it. Maintenance needs access to safely clean them out.

One other thing, although I'm not a big fan of the Type D inlets they will be used in some areas. Most snow is thrown to the right side of the road by the plows, so the medians tend to have less, unless one side is sloped so sand comes sluffing off the median.

## **12. Next Steps**

- Field Trip on September 27<sup>th</sup>
- Complete development of SCAP and Maintenance Manual; send drafts for review.
- Continue development of Map Book; send draft of MP 180-185 for review.
- Submit final SCAP and Maintenance Manual in early 2022.
- Submit Map Book after incorporation of INFRA design (estimated late spring 2022). The INFRA focuses on eastbound but it is also going to build wildlife crossings and other work on westbound I-70. We need for the design to be done before we add in other items that would accommodate the addition of the third westbound lane. That is why the final piece won't be ready until spring.

## 13. Wetlands

- a. Jim said we completed our field work a few weeks ago for the wetlands and biological work. The biological work was mostly doing the sensitive plant species for the Forest Service Sensitive Species. The delineation was done per USACE requirements and protocols which is standard practice but also an EA commitment so I thought I would mention that.

There was only a preliminary wetlands identification done for the EA which was essentially a walk over survey where the consultant looked at the vegetation, plants and hydrology but didn't have time to dig soil pits, so we did that work this past summer. As we expected, the wetland boundaries that were shown in the EA had to be refined and updated.

The biggest change was some of the non-CORPS jurisdiction roadside ditches along I-70 didn't meet the three criteria to be considered a wetland so those were eliminated. Fens, as most of you know, are high quality wetlands that exist in these high alpine environments. Pat and his team did discover two new fens, but one that was identified during the preliminary EA work isn't a fen, so we eliminated that from the mapping.

We are almost done processing all the wetlands' data we collected this summer and will be getting that information to the designers in the next few weeks and continue to work with them on wetlands avoidance and minimization. As the designers have been designing these different construction packages they have had to work with the preliminary EA boundaries which wasn't ideal but was required from the schedule standpoint. Now they will have the more accurate boundaries and we will be sitting down with them to continue those conversations. They have been doing a good job, but we've pressed on them a little harder to minimize those impacts.

We will be working on what is called a preliminary Jurisdiction package that we will send to Ben.

After the 30% design phase this fall, we will be updating our impacts estimates for all of the remaining construction packages with the exception of the one being constructed now. That will allow us to revisit the quantities of acreages that we need to mitigate. Throughout the summer we have been looking at mitigation opportunity recommendations that were identified during the EA process. We've had some other ideas and there is opportunity to potentially do some restoration of a fen wetland that is above and behind the maintenance shed near the top of the Pass where the hydrology has been cut off for years.

The next construction package is the recreational trail. Sometime early next year we will be putting together a Section 404 permit submittal and then for the later construction packages we will continue to work with the designers and address the 404 permitting into next year.

1. Nolan asked if you know the acreage of the new fens.

Pat said we haven't actually measured it yet. It's a small fen, probably 5,000 sf within a drainage that flattens out. And there is another larger fen that we didn't map out the entire area because it runs out of our project area. For



that one we would have to make some assumptions about the boundary on the far side. We just didn't have time the time to map the entire thing.

2. Paula asked would it be better to submit an approved JD request to the Corps?

Pat said we can talk through with Ben the merits of having a formalized JD versus just assuming the boundaries are jurisdictional that we provided. The issue I think is that may create a difficult situation for Ben to approve what we consider to be non-jurisdictional wetland systems that are roadside ditch kind of scenarios.

3. Paula asked if we would get mitigation credits for polishing wetlands?

Nolan said constructed wetlands for stormwater are not considered mitigation.

Jim said that it is important to point out that per policy, CDOT mitigates for all wetlands impacts whether they are under Corps jurisdiction or not. When we talk about jurisdictional versus non-jurisdictional impacts, that's really what it means.

Pat said that is another thing I would like to talk through with Ben too. In the past we have gotten wetland mitigation credit for these rundowns or stormwater wetland systems as long as we can show there is adequate pre-treatment of that water off the roadside, so you have to have some sort of containment or forebay or alike. In theory the sediment basin should perform that function, so I'd like to have that conversation with Ben and the CDOT people.

Ben said it is his opinion that no wetland is the same as the next, so each mitigation plan is viewed and calculated or quantified independently. What you are proposing, and the functionality is site specific.

4. Nolan said I'm sure you're aware, but we are back under the pre-2015 (Rapanos) WOTUS definition so a PJD would need consider all possible waters under that definition, not NWPR.

Pat said we are familiar with what is going on at the federal level for jurisdictional issues and we would be applying the 2008 Rapanos for Corps decisions and the associated significance tests to the wetlands and waters to provide jurisdictional determination. We assume that will probably be the case going forward.

Ben said we should talk about it. One thing I will not do is. I'm not going to allow for something that is obviously not obviously jurisdictional under current regulations. I will say the PJD is not the preferred path in my mind. We'll talk about it more when I get to see the delineation.



5. Ben asked when he will be asked to review the delineation in terms of timing and where and other things.

Jim said later this year or early next year. We are still sorting through the data we collected. We finished our work just recently so we're a little bit off before we can put a package together you're your review.

6. Ben asked if I should see the site first? With the timing, we could get out there sooner than later even though it's not finalized.

Pat said it would probably be a good idea to get out there fairly soon so you have a good feel for what we are talking about, we can walk through some examples of what we are delineating and what we are not. And I think it would be good to have that conversation on site with the CDOT staff as well.

Ben said his schedule is pretty tight, but he will make time to meet up there if we have some sort of map to use. He will send Jim his availability so he can use that when he sends out the Doodle poll to find out availability for CDOT and

Pat said he thinks that is a good strategy so we aren't going back and forth and guessing about things and you will have an opportunity to look firsthand at what we were seeing and then we don't have wait all the way until next June to go back out there. He will get a preliminary mapping of the entire area, so you have something to look at. We can meet out there talk through some questions that may be remaining and then formalize it after that. e.

## 14. Schedule

- a. Karen said we are planning four different construction packages. The first is the lower truck ramp and westbound closure system. The second package is the recreation trail and that will be going to agreement around February. The third is the bridge replacement and wildlife crossings and that is going to agreement in May. Design for everything else will be finished up through the end of 2022 and construction will continue through the end of 2024.
- b. The next SWEEP meeting will be focused on the bottom of the Map Book from MP 180 – MP 185. Karen noted that receiving comments for the SCAP and Maintenance Manual that you have received would be very helpful. Please put comments in the link by end of September, as Holly had mentioned.
- c. Karen said we will plug in another SWEEP meeting for around the March timeframe and then finalize the SCAP update after that meeting.
- d. We've been hitting the ITFs pretty hard this year just to give you some perspective on the project we have been meeting with the TT monthly and have three 106/Aesthetics meetings, three ALIVE meetings during this design phase. We have been having Design Exception meetings as needed in conjunction with the TT meetings and we have had four. We have had one Emergency ITF meeting and are going to hold another one in early 2022. We are also following up with emergency services at least once a year to



check in on upcoming construction and seeking feedback and sharing information about impacts for each year.

- e. Karen said they will find out today if we are adding another bridge to this project. That will be the sister bridge to the other bridge we are replacing at MP 185. What that allows us to do is shift the bridges further north and getting a more efficient alignment for both bridges. We would go from having one bridge that is 1200' long to two bridges that are 600' long. The nice thing for this group is it moves the bridges further from Black Gore Creek which runs parallel on the south side of I-70 in that area. If we get approval to add that bridge most likely we would be continuing construction into 2025.