

I-70 TRAFFIC & REVENUE STUDY ISSUES TASK FORCES

ALIVE TASK FORCE MEETING MINUTES

- ▶ **Meeting Date:** *January 15, 2014* ▶ **Time:** *9:00 – 12:00pm*
- ▶ **Meeting Place:** *Fossil Trace Conference Room, CDOT – Golden, Colorado*

▶ **Distribution / Attendees ('):**

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|---|--|--|
| ▶ Paul Nikolai Parsons | ▶ Wendy Wallach Parsons | ▶ David Singer CDOT R1
Envir. Mngr |
| ▶ Ashley Nettles USFS | ▶ Alison Michael US FWS | ▶ Jeff Peterson CDOT -
Wildlife |
| Adam Springer Clear Creek Cty
Planning | Paige Singer KMW | Elissa Knox CPW |
| Francesca Tordenato CDOT R1
Enviornmental | Julia Kintsch ECO-
resolutions | Wendy Magwire USFS –
White River |
|
D. Summerlin USFS |
Lynn Deibel USFS |
Brock McCormick USFS |
|
Ty Petersburg CPW |
Jen Babbington Parsons |
Julia Barker Parsons |

	Technical Issue/Challenge	Solution	Client Benefits
1.	Pipe Size needed for small animal / boreal toad crossings	48” minimum for cross culverts	Standardization of size and ability to identify pipes needing to be upsized and to capture that cost
2.			

Meeting Notes
New Business
<p>Topic #1 – Team Introductions</p> <ul style="list-style-type: none"> David Singer kicked off the meeting. The group did introductions and then David recapped the project for the group, because there were some new faces. He asked if there were any questions and no one responded.
<p>Topic #2 Review of Proposed Crossings</p> <ul style="list-style-type: none"> Paul then said what we had been working on from the last meeting. Julia Kintsch had been working with the Parsons Team to review LIZ recommendations and make changes to accommodate target species and to work with each of the Alternatives. Discussions moved forward with mention of each item # from the LIZ Identification Spreadsheet developed by Julia K. Each site was looked at in a plan view graphic showing it’s overall location in the area and at a detailed scale. Discussion occurred per site as the group deemed it to be warranted.

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Terrestrial Species - Structures

- Enhancement of the “natural land bridge” over EJMT such as boulder placement and more cover was discussed. Could there be a possibility of another entity being responsible through partnership? The target species include Bighorn Sheep, goats, wolverine, Lynx and Pika.
- Item #5 is a complicated and constrained location. It was decided to move the terrestrial crossing over and identify a wildlife overpass but there is uncertainty on exact location. The location will shift in Level 2. Big horn sheep and Boreal Toads are both target species in this area. There was a suggestion by Wendy Magwire to develop Boreal Toad ponds at a “borrow” site just northwest of item #5 and it was suggested to do this after I-70 construction.
- Ty commented that Item #7 should shift further east in Level 2. The movement is more to the east at milepoint 220.5-220.7.
- At item #6 the team recommended an extensive bridge that would cover multiple species at the same time as well as solve aquatic concerns better
- Highway 6 crosses under I-70 at item #10. A multiuse bridge that goes all the way across clear creek is being considered. The box culvert under Hwy 6 also needs to be modified to enhance aquatic connectivity.
- Item #12 is an aquatic site and a bridge structure would be implemented for aquatic species and medium size terrestrial activity. Ty mentioned that sheep often sit on the hill to the north. This location is outside of the LIZ and may be eliminated once further prioritization occurs.
- Item #13 on the Hwy 40 interchange is considered the most important connection for Bighorn Sheep on the corridor. There are many constraints in this area and given the current circumstances, the team recommends encouraging wildlife to go to the sides instead of cutting through the middle. The south side of this site is on private land and there is a conservation easement just south of it, however this is the one that really needs improvement. Julia explained that this is not part of the project and Paul mentioned that this should be considered an enhancement cost but not ALIVE crossing cost.
- Ty commented that the creek will be a natural crossing but we should fence it to funnel animals to the crossings. Bears are known to travel between Empire and the Easter Seals Camp. Paul asked about spanning item #15 all the way across US 6. What is the cost of spanning the second structure? David S. said we need to be fiscally responsible and Ty said he would not worry about crossing both roads. We don't need to span the frontage road and the location will shift in Level 2.
- There is a 12 mile distance between the Empire Junction LIZ and the Clear Creek LIZ. Wendy and Brock looked at the space for Fall River drainage around milepoint 238 as it is the biggest drainage connection through this stretch. Wendy thinks that with the reconstruction of bridges, this can accommodate large mammals as well as aquatic species. Julia K. said that connectivity is lost between the two drainages but in Level 2 things may change and we can prioritize to add terrestrial connectivity here. Julia B. also noted that bridges may be much larger with new FEMA requirements.
- From Fall River to Idaho Springs there are more culverts. Wendy said a lot of these are big drainages but a crossing could accommodate terrestrial species as well. The group thinks that they

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may already be using these crossings. Brock mentioned that near Water Wheel there is significant wildlife movement. We want to make sure improvements don't interfere with connectivity that already exists.

- CDOT recently updated and improved some ALIVE crossings near Hidden Valley. At milepoint 242 there are large mammals using a crossing and a second bridge was completed as part of the Twin Tunnels so good connectivity already exists.
- The Twin Tunnel "natural land bridge" is an area where enhancements could be done similar to the EJMT land bridge. Brock said that there are habitat improvements that could be helpful. Ty asked if the improvements are associated with the westbound bore. David said there are rock cuts associated with the wider tunnel. Francesca and Ty are working on how wildlife will be accommodated through the changes. They may be able to remove trees to have a contrast between the hillside and tunnel for motorists and to open the area up for sheep.
- At item #16, the roadway geometry will need to be finalized before the crossing can be put in. There is an opportunity to shift it a little further west. When talking about the target species the Bighorn, Elk, Mountain Lion, and Deer were the main species considered. Wendy asked about the Lynx as a target species because of the low elevation. The USFS data has been modified to not have Lynx habitat below 9,000 feet elevation. She also asked about Prebles Jumping Mouse. Ty said that the Bighorn move east to west but not north to south here. Paul said we should create an earthen bench above the creek for the animals to cross on. Brock said that we don't need all types of crossings in one location and that there are better locations for that.
- A bridge (item #17) under I-70 is being considered at the approach to Floyd Hill. This area is very constrained so the alignment may be slightly shifted to the east. Each alternative's geometry here changes significantly. Therefore Paul suggested to cost in a crossing for each alternative but not worry about the location for now until some Alternatives are eliminated and the roadway design is more finalized.
- Item #18 is a location where, as Ty and Wendy said, there are many animals moving down the north slope. A bridge is currently being considered. Ty said that the simplest solution would be an underpass and the Parsons team confirmed. This location will need to be verified in the field to use the best location based on up-hill landforms to ensure animal use with minimal land reshaping.
- The Beaver Brook LIZ includes the top of Floyd Hill near JeffCco and Clear Creek. Item #19 is in this area and is close to wetlands. Adam pointed out the private land is already subdivided for development. Adam said that four lots have been plotted right near Beaver Brook. There is also a riparian corridor near this area. In this area there are also three bridges anticipated. Alison mentioned that there have been sightings of Prebles mice in the area. Julia K. said we definitely need to implement SWEEP mitigation for the mice, and we need an oversize culvert. The culvert may be too long for mice but Paul offered that we could channelize the creek for a shorter crossing. Julia K. asked if we had a PJM expert. Alison is concerned because the longest structure they have travelled is 300 feet. It was suggested to contact Lance Carpenter who knows about PJM. Mark Bakeman from WASHDOT also has experience. The Project may want to eliminate small crossings and upgrade the culvert for PJM and small animals.
- According to Julia K. item #22 has unique issues. It is near Soda Creek and there is a separate

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culvert for Soda Creek. She recommends a multi use bridge crossing both Soda Creek Road and the Soda Creek. David S said that there is a lot of private land in this area and asked what will happen if residents aren't willing to voluntarily sell land for crossings. Julia K. explained that it depends on county zoning and planning and we will try to get JeffCo to work with us. Land trusts, such as the Mountain Area Land Trust, are another potential option. Adam from CCC said that if we finalize our recommendations, they can call it an "interference zone" to prohibit development and this also makes it easier to sell. It was mentioned that JeffCo will be harder to negotiate with than CCC. Paul could talk to Scott Burton on the mitigation ITF. This will be discussed further in Level 2.

- East of Floyd Hill there is not a lot of roadway bridge construction so all crossings will be at full cost. Julia also mentioned that the roadway template is already very wide so there are not many opportunities to look at variations.
- Item #23 may need to be shifted west in Level 2. There is a large fill slope in this area and we have regularly spaced large underpasses.
- Item #24 may need to be shifted to the east or deleted in Level 2. Mt. Vernon, Buffalo Overlook and Denver Mountain Parks own land here. There is wildlife fencing to keep the bison in. Wildlife is blocked from using the culvert in the area because of high AVC. The curve in this situation also limits possibilities. Paul suggested this remain an opportunity for now and coordination with City and County of Denver occur later to discuss options to make this crossing a wildlife alternative as well.
- Julia K. is very interested in item #25 and would like to see a large bridge. This is another area with almost exclusively private land so easements would likely need to be arranged by CDOT.
- At item #26, the Team recommends another bridge at this location.
- Highway 40 eastbound (item #27) is an area where enhancement is being considered. A crossing of I-70 is being considered along with an adjacent crossing of SH 40. Ty felt crossing SH 40 was not needed based on low volume and slower speeds. The 2nd bridge could be made smaller or deleted. At this location, through Mt. Vernon canyon, there are a lot of bear and lion collisions. deer and elk are not necessarily an issue as they are more resident and not migratory. Paul asked about the use of a culvert for going under Hwy 40. Ty said there isn't a lot of concern about this location.

Aquatic Species - Culverts

- Item #2 is the Straight Creek drainage. There are several areas of Straight Creek where the Project Alternatives provide access for greenback cut-throat. Wendy M. said there is drainage to the east of Hamilton Creek. Cut throat spawn on Hamilton between I-70 and Straight Creek so we need fish connectivity at Hamilton Gulch. This is considered part of SWEEP cost. The waterway to the east at the tunnel entrance is less important and does not require mitigation
- Item #5 can be deleted because the terrestrial item #6 addresses this. Level 2 work needs to verify if connectivity is needed at this location.
- Item #7 at milepoint 221.4 is a natural upstream barrier so no action is needed and was deleted.
- Wendy asked if culverts are going to be replaced, will we look at enlarging them at the same time. She understands that the Project is recommending a lot of mitigation and that it is costly; however

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she don't want to lose this opportunity to make these structures really work even if they call for enhancement. She said that the highway will not be rebuilt again soon so she wants to make sure what is there is effective. Julia K said the potential is there but we can implement guidelines but can't mandate them. Julia agreed to distribute guidelines and repricing but would wait for direction from the group to move forward.

- At milepoint 228.2 Silver Gulch the recommendation is for an oversize culvert that could integrate terrestrial. Brock suggested that we should do this wherever there is a crossing in the 12 mile gap. Paul asked for more information on minimum pipe circumference to accommodate terrestrial. Julia K. will look into the information for Paul. Paul said that every bridge that is not in urban environment will have a pathway.
- Items #19 and #20 are considered terrestrial and appear on the terrestrial matrix.

Topic #3 – Next Steps

- Paul will start price estimates for all items.
- Level 2 process will not begin as directed

Action Item Register – See Below.

These notes are an interpretation of discussions held. Please provide any additions or corrections to the originator within seven days of the date signed, otherwise they will be assumed correct as written.

► Prepared By: Wendy Wallach- Parsons Date: 1-20-14

Next Meeting: January TBD

ACTION ITEM REGISTER

► **DISCIPLINE Task Force** ► 1-25-14

Item	Action	Responsibility	Due	Status
1-A	Assimilate information on Animal Vehicle Collisions, And camera information and topography	Julia K, Jen B and Paul N.	January 5, 2014	Closed
1-B	Add any updated information from Jeff Peterson	Julia K.	January 5, 2014,	Closed
1-C	Add information and crossing locations to maps	Julia K, Paul N.	January 5, 2014	Closed