

Copper River EVOS

Site Visit

October 10, 2018

Purpose of site visit: Introduce design engineers to local partners and discuss design considerations for COP 43, 44, 45

Attended By:

Tanya Bratslavsky, BCE
George Uligan, BCE

Bill Spencer, HDR
Kyle Walker, HDR

Chantel Adelfio, CRWP
Kirsti Jurica, CRWP
Kate Morse, CRWP

Mark St. Denny, Surveyor
Ralph Bullis, Survey asst.

Luca Adelfio, USFS
Franklin Dekker, USFWS
Heather Hanson, USFWS

Site visit notes (compiled by CRWP, submit changes to kate@copperriver.org or chantel@copperriver.org.)

Disclaimer: weather was very wet and rainy so tracking communication was difficult!

- Robbie Mattson (local ADOT) unable to attend because he was out of town for training. Kate requested another local representative when she contacted the office but was told his perspective is the best.
- This site largely designed by beavers. Dams downstream of crossings backwater culverts.
- Heavy rains lead to some overland flow into local ponds in addition to constant, year-round flow from springs surfacing not too far upstream of crossings.
- Site sketches from Kirsti will be added to the project website—they have been distributed with these meeting notes FYI.
- Spring-fed system that runs year-round—stable temperature. Kirsti has seen adult spawners in the open water in January.
- May need to consider new pipes for Cop 42 (20100507) and/or Saddlebag 1(20101898) because of flooding. Potentially just larger pipes vs. fish passage pipes—ultimately the plan needs to fit within project budget. There are salmon moving through Cop 42 and Sad 1, too. Ranked lower than 43, 44, and 45 because of ecological score. Lower habitat length and quality upstream of culverts.
- Kirsti believes best potential “reference” reach is the channel above Cop 44. While the reference reach isn’t going to completely dictate project design in this beaver-influenced system, we still want to know what the fish are experiencing while moving through this system beyond the influence of the road (Heather).
- Boxes vs. culverts—there is very little fill on top of current pipes, and we don’t want to create a roller coaster-like ride with large “speed humps” on top of new culverts. To use culverts the grade of the road would need to be significantly increased to accommodate additional fill needed to bury pipes. Boxes are lower profile and wouldn’t need as much fill on top. Still will require an increase in fill depth.

- Aluminum box vs. concrete (Bill): For a box 12 feet wide, the depth of the concrete = minimum cover for aluminum. Anything greater than 12 feet aluminum is cheaper and easier to install.
- Cop 45: Goes underground quickly upstream of crossings. Connected via ditch-line to Cop 44 and 43.
- What about accommodating beaver activity—if the downstream dams go, the water levels drop and a crossing might need to be able to accommodate such changes in water levels. Should surveys include dams? I think the answer was yes.
- Gauges are installed at Cop 42 and 44 (there wasn't any flow at 43 when Franklin was here to install gauges). Plans to use 44 as a reference for 45.
- Could install small overflow culverts to accommodate high flows (Heather).
- Bill concerned with migration of Saddlebag River (currently flows to the west of project site but could migrate back east and towards these crossings).

Group disbanded. HDR stayed at site with surveyors to discuss survey needs and to explore upstream of the crossings.

CRWP and USFS helped BCE mark the remaining sites for drill crew expected over the weekend.

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