Copper River Watershed Project

Upriver and down, salmon are common ground

Little Tonsina Project Update

November 5, 2019

Attended by:

Gillian O'Doherty, ADF&G/Fish Passage
Mark Somerville, ADF&G/Biologist (Glennallen)
Maria Wessel, ADF&G/Habitat (FBX)
Judy Chapman, ADOT&PF/Planning
Mike Knapp, ADOT&PF /Bridge Hydraulics
Lauren Little, ADOT&PF /Right of Way and Utilities
Elmer Marx, ADOT&PF /Bridge Design
Jeff Stutzke, ADOT&PF /Hydraulics
Loch Anderson, BLM AK State Office, TAPS realty specialist
Tim Sundlov, BLM Glennallen Field Office
David Phillips, Chugach Alaska Corporation
Kristin Carpenter, CRWP
Lisa Docken, CRWP
Kate Morse, CRWP

Topics of Discussion:

- Expand on the update re: USACE and ADOT funding
- Review what we have so far: topo survey, geotechnical drilling, hydrology data collection (not analyzed yet)
    - Most project files we have are available here: https://copperriver.org/little-tonsina-fish-passage-restoration-project-page/
- Determine next steps—HEC-RAS analysis, concept design (foundation and cost estimate), other steps?
    - estimate rough timeline and get cost estimates for these steps.

Next steps:

- Connect ADOT, USFWS with Mike S at BLM Glennallen field office for recent gauge data.
- Confirm with Heather that there is an interest in her doing hydrology analysis before the end of the year.
- Re-distribute link to project website that is intended to be the clearinghouse of information collected on this restoration site so that partners all have access to the same information.
    - https://copperriver.org/little-tonsina-fish-passage-restoration-project-page/
- ADOT will work on estimate for the work to be done in order to get this project to construction-ready—will submit estimate to CRWP by end of November.

Discussion Notes:
Kristin Carpenter, update on ACOE Section 206 funding: Ultimately have dissolved our agreement with ACOE. Have been working for about three years with ACOE and when they broke out specific parts of project, it was determined the actual bridge work was a relocation and section 206 funds could not be used for relocation. If bridge costs were removed, the partnership would have been left to raise upwards of $5 million to construct project based on ACOE estimate (includes 40% contingency). Decided this wasn't feasible so terminated agreement. Wanted to re-group with rest of the partners to figure out what we have and what we can move forward on.

Gillian asked about Heather's thoughts on project cost: Kristin recalled Heather's rough estimate two years ago about $2.5 million. (Heather was in the field today and unable to be on call, but has been in regular communication with CRWP regarding strategies for implementing this project)

Kristin: Have connected with Judy at ADOT and have $1 million set aside in an emergency bridge repair fund. Working on a funding agreement with ADOT. Judy confirmed that a project start has been initiated—secured the funds in an account so to speak so they can be used for the project-hope to reserve these funds for actual construction, but they are flexible funds. Need to do an agreement with CRWP for the use of the funds, but figured we'd do that with a new estimate for the bridge and talk to this group for where we could find the remainder of the funds.

Lauren with ADOT (design): could do design of bridge in house if we have funds to charge to for that piece.

Kristin: Currently CRWP has about $100,000 with USFWS and BLM funding in existing agreements with USFWS—what can we use this funding for?

- Question re: Hydrology analysis—should Heather do it, or should ADOT do it? What is ADOT's capacity to take it on, and even if Heather did initial analysis, would ADOT still need to do their own?
- Lauren briefly mentioned that an independent consultant was probably not the best bang for the buck to accomplish these tasks and doing it in house was better.

Mike Knapp: would likely want to do own hydraulic analysis, but this could include the review and integration of the work Heather does. Warrants a little bit of a discussion for what we'd want to get out of analysis:

- What water levels are we dealing with in an ice freeze situation? Look at model to set low cord elevations and should there be additional considerations re: ice, debris? Need an open channel water level to get started.
- Also looking for hydraulic regime for that reach for scour/counter measures.
- ADOT could do generic lay-out work and get a rough idea if we're matching channel geometries and get a rough layout for bridge (know downstream channel is not natural but still can help with rough layout), but need to know if there are road profile considerations and vertical clearance for small watercraft (don't believe it's a

navigable waterway, but vertical clearance is an example of something that has to be considered), etc.
- As it relates to HEC-RAS modeling, willing to take other people's data.
- Mike's availability for analysis is months out (not within next two months, when Heather said she could likely do her analysis of the data—before the end of the year)
- Another option-we have shared design work for tasks with regional staff and if they are available/open, Luke or Jeff could do it as well. Jeff confirmed they are also busy through the end of the year so couldn't get to it before Heather.
- Not expecting an extensive field review—autocad with 1-foot contours ideal—work with Elmer and foundations engineer for bridge-type selection and location thoughts.
- Also a buried fiber-optic line that will be something to deal with/figure out.
- Overall need to determine how are we going to build it, what sort of constraints to those provisions have on site/access requirements, what are we needing to do for folks who have cabins/live out there?

Jeff added it is a rather shallow embankment, can't help but think it's going to require a grade raise—has there been consideration of other structures to convey flow. Box structure work?

- Kate responded that in an earlier call Heather had mentioned the size of the culvert structure required could make any alternatives just as costly as a single-lane bridge.

Kate asked about additional steps beyond hydrology analysis and concept design?

- Mike Knapp brought up Right of Way—if it's a new bridge location there could be ROW-related steps that often times can delay a project.

Once we get a cost estimate from ADOT for the work remaining to get us to a construction-ready design, CRWP and ADOT can set up an MOA for transferring the funds and setting up a ledger code for ADOT to charge hours.

Elmer provided a bit more background on the ADOT process. Both bridge and roadway engineers need to be involved—the considerations for roads and bridges are analyzed separately and integrated by the project lead, in this case Lauren Little. She determines the final project approach (might not end up with the least-cost bridge, but this could help to save costs on ROW or road design, etc.). Not ready to do anything on the bridge front yet because they need site plan/road plan/re-route requirements information first.

Lauren confirmed roadway needs to come first. We already have come up with vision and it seems reasonable (without having an idea of criteria out there). Elmer explained a lot but it could happen quickly.

Lauren asked if the team was happy with the alignment we have today and should ADOT run with that vs. re-inventing the wheel? Current plan has bridge just north of current culverts—on Chugach Alaska Corporation land—David confirmed CAC is on board with

CRWP and BLM to re-do alignment. KC not sure if it means vacating old one and creating a new ROW?

Lauren: because ROW with Alyeska shared it's a little more challenging. A ROW map is required that explains this is what we want to acquire and from whom. This can be running in parallel with the other tasks—just a step that has to be taken.

Construction goal? Kristin stated summer of 2021 would be great (will be pursuing additional funding in the meantime)

Lauren asked if permitting agencies had done any wetland mapping? Jurisdiction/interest in the project? Kristin responded that nothing more formal than partner discussions with ADFG and USFWS-no NEPA analysis yet. Lauren not worried, but without federal highways as a funding partner there are a few extra steps ADOT will have to do—but not a show stopper.

Kate asked about timeline for receiving a cost estimate for ADOT to get project to construction-ready phase. Will $100,000 be enough? There are other fish passage improvement projects we can use our USFWS funding for, so if $100,000 is more than enough, it would be helpful for our other fish passage project planning efforts to have a sense for what we need to reserve for this specific project.

Lauren: gut is that it will go far, but don't want to over promise and under-deliver. Will do ADOT estimate by the end of November. Thinks $2-2.5 million is a good construction estimate—wild card is utility piece (but this could cost in the $100,000s not millions).

Tim: Please make sure to connect USFWS and Mike Knapp with Mike Sondergaard (BLM hydrology, Glennallen Field office)—has flow data for past 3 years.

- Also, first week in June is usually when higher elevation snow melts—typically when water tops culverts. Plan to go down and do high flow measurements in June 2020 and try to get high discharge measurement (Tim and Mike S at BLM).
- Mike K-is it open channel or icy/slushy? Tim said open channel. Will share photos.

Kate asked about ROW work to be done: Is there something we can be doing or is this within ADOT's "to do" in order to get project to construction-ready phase. Lauren asked if formal base-mapping been done? Or just an informal review of boundaries? Base-mapping requires surveyors for property boundaries and contacting recorder offices to go through layers of land ownership.

Kristin explained there is some documentation and it's posted on the project website—not sure what else we might need?

Dave Chugach Alaska Corporation: has conveyance document that shows right of way and will share it with partners via CRWP.