

Final Notes, Skagit Watershed Council Technical Working Group (TWG)
June 15th, 2023, 1:00-3:30pm,
Hybrid Meeting at Skagit Watershed Council and via Zoom

(decisions underlined, *action items in bold)

Attendees: Rick Hartson (Upper Skagit Indian Tribe, committee chair), Aundrea McBride (Skagit Watershed Council), Regina Wandler (Skagit Land Trust), Jeff Fisher (Seattle City Light), Taylor Scott (Skagit Conservation District), Emily Derenne (Skagit County), Colin Wahl (Skagit River System Cooperative)

Absent: Pat Stevenson (Skagit Fisheries Enhancement Group)

Guests: Richard Brocksmith (SWC), Jenny Baker (WDFW), Alison Studley (SFEG), Yuki Reis (SFEG), Mike LeMoine (SRSC), Lindsey Desmul (WDFW)

Convened 1:05pm

Beginning Business

Introductions and check-in: Quorum achieved. Introduced Yuki Reis, new Restoration Ecologist at SFEG.

Agenda review: Approved the agenda by unanimous consent with the addition of the “Samish projects on 4 Year Work Plan” topic added.

Notes: Motion to approve May notes by Colin, seconded by Taylor, all approve.

Committee Updates

Board: Met 6/1/23. Approved the Riparian Proviso Phase 1 report, but SRSC wasn't there. Approved the 2023-2024 budget. Richard shared that he will be resigning. The Board created a search committee.

Protection: Did not meet.

Riparian: Met June 7. Began planning the conference. The focus will be invasive species.

M&AM: Did not meet. Note that the SRSC monitoring project was approved by the Region's PSEMP Salmonid Work Group so now it just has to get the NMI designation cleared at the state level to get funding for the \$50,000. The additional \$9,000 of the total project cost will still need to go through the LECC.

Smolt Capacity Workshop by Mike LeMoine

This workshop is based on the 2005 method for predicting smolts produced by estuarine habitat restoration area presented in the Skagit Chinook Recovery Plan (SCRIP). There has been learning and improvements to the method since then, but to compare to SCRIP targets we will

be learning the 2005 method. Whether the original or updated method is used depends on the questions the restoration practitioner is asking. The original method was based on stock recruitment curves up to 2004. Skagit fish dynamics have changed, and we have newer stock recruitment curves.

The SCRP is based on the Chinook life history, which makes it unique among recovery plans. The recovery goals from the SCRP are for sustainable harvest plus sustainable returns. Fish use different habitats for different life history strategies and stages. 88% of the delta habitat has been lost (including the Samish/Padilla Bay area). There is evidence for density dependence in the estuarine habitats, which means capacity is limited (too little habitat for all the fish that currently could use it). The total abundance goal set in the SCRP was described in terms of habitat goals. This is not fixed; it is one possibility for reaching the adult fish abundance goals. More restoration in one kind of habitat will make more fish in that habitat and thus require less restoration in another type of habitat. Fish survival is estimated by life history strategy. The SCRP lists some ideas for places we can restore to get to the 1 million smolt target. An attempt was made in the SCRP to distribute restoration across the landscape and life histories. Locations were not meant to be exact, but to accomplish productivity. This model focuses on delta-rearing juveniles.

The SCRP exists because it is required by the federal government to get 4F of the Endangered Species Act checked off by NOAA. We want 4F checked off so we can use 4D, which impacts all kinds of human activities regarding threatened and endangered species (harvest, transportation, etc.). We are ultimately trying to get to the recovery number of adults to get delisted and not have to deal with the Endangered Species law at all.

This approach for delta habitats assumes:

- There is density dependence in the delta (research proven)
- That habitat conditions can be controlled for (temp, discharge, salinity, tidal drop). These all relate to connectivity. This was a transition in thinking.
- That fish are evenly distributed (this assumption is not realistic)

This is a habitat quantity tool, not a habitat quality tool. See page 93 in Appendix D of the SCRP for formulas.

Things to note:

- We can't observe fish in vegetation, so we are focused on channel area only.
- Greg Hood's allometry tool for predicting channel area development in restored marshes only works for reference conditions. More recent iterations of the tool have improved this (more channels digitized).
- The capacity estimate doesn't work if both the channel area and the number of channels need to be correct. If the project design didn't have enough outlets, you should question the results of the smolt capacity estimate.

Model Parameters:

- Landscape connectivity = $1/\Sigma(\text{order} * \text{length})$. See table for assigning order (weighting) if bifurcation is not even. You need an origin (where does the estuary start?). SRSC is working on automating this. Has been hand done, so different every time. Connectivity is measured to the middle of the project site if there are no existing channels, or to individual channel mouths if some exist.
- Static depth (0.64m)
- Tidal channel area (digitized). There are 3 ways to determine channel area:
 - Historic conditions mapping
 - Social/project limitations
 - Hood allometry model
- Assumes fish use of 150 days
- Assumes fish residence of 35 days

The number of adults is the recovery goal. Acres of habitat needed is variable depending on capacity. That's why the capacity model is needed. We can expect to get results within an order of magnitude (not precise). All that has been covered today is in the 2005 SCRP. Now we are all in possession of spreadsheets that can calculate capacity. We are empowered to evaluate future applications' claims of habitat capacity.

***This presentation will be shared with TWG when made available.**

Discussion of using the capacity calculations tool for project evaluation: It was generally agreed that the tool is beyond the effort that project reviewers are likely to spend on project reviews. It would be helpful to have a summary that provides a range of capacity estimates for a project of a given size/general location. Capacity estimates are not required to be included in proposals.

Other discussion: It is important to evaluate capacity post-project through monitoring to understand project effectiveness. This is an important information need for engagement with non-fish partners.

Should Samish Projects be Included in the 4 Year Work Plan?

Two sponsors asked if they should include Samish projects in the lists they are preparing for the 4 Year Work Plan update. Discussion

- Is there a separate 'salmon projects' list that Samish projects or other non-Chinook projects could be stored on?
- USIT believes salmon restoration should continue to focus on the Skagit until more progress has been made.

- We are talking about listing projects beyond what would go to SRFB to give those projects an advantage in other venues that require projects be on a list somewhere.
- We (SWC) need to be able to more easily write letters of support for projects other than Chinook projects (i.e. Samish projects, Skagit projects outside the Strategic Approach target areas).
- We encourage sponsors to include Samish projects on their proposed 4YWP updates lists and we will consider this topic at the July meeting.

Sauk Plan

Comments came back from WDFW, USIT and SRSC (yesterday). We will wrap up the project by scheduling a project workshop 4-6 weeks out. Major comments included pulling out the ELJ project component as a separate appendix and considering it a suggestion to be further investigated and explaining how the community impacts piece of the assessment worked. The question was also asked how much do we want to rank projects and how do we use the criteria? ***Richard will address the comments as best he can before the workshop and then schedule the meeting to discuss further.**

All acknowledged that lots of work went into the report.

DeBays Slough Project Update

The County is requesting to transfer project sponsorship to WDFW and needs the TWG's approval for the change. Without this transfer the County will be returning the funding to SRFB. Mike reiterated that SRSC was bringing match to the project and still wants to support the project under WDFW leadership. Skagit County was awarded additional funding to include a fish use study and outreach, which SRSC match was being included on. This amendment has been completed with SFRB. The County is not currently contracting with SRSC which impacted the ability to complete the project as described. This County policy regarding SRSC is impacting other projects as well. The funding side of the transfer was approved by RCO. The project needs an extension for WDFW to accept it but they have begun outreach, a title report, and assigned Lindsey Desmul as staff PM.

Motion by Aundrea, seconded by Regina to approve transfer of the DeBays Slough project to WDFW and approve the extension. Approved by all.

There is some overlap between this project and work happening in E.F. Nookachamps by USIT.

Good of the Order

Taylor got employee of the year at SCD!

***Aundrea will send Yuki the 4 Year Work Plan update form.**

***Jenny will send out a Doodle Poll for a site visit to Wiley Slough.**

Adjourn 3:30

Upcoming TWG Meetings:

July 13, 9:00-4:00, TRC meeting followed by a short TWG meeting

No meeting in August for summer break
September 21