Klawock Lake Sockeye Salmon Stakeholder Meeting

Fisheries Rehabilitation and Enhancement Opportunities Workgroup Meeting notes

Meeting #1: 09/07/2017

Participants: Christine Woll, TNC Southeast Alaska Program Director; Jeff Lundberg, Klawock River Hatchery Manager; Sam Rabung/Mark Stopha, ADFG State Enhancement Program; Bob Christensen, Sustainable Southeast Partnership; Danielle Peele, POW School District/concerned citizen; Steven SueWing, fall meeting facilitator

Facilitator: Deborah Hart

Others interested in working group but unable to attend call: Steve Heinl/Scott Walker, ADFG; Sheila Jacobson/Jeff Reeves, USFS; Quinn Aboudara/Lawrence Armour, Klawock Cooperative Association; Mary Edenshaw, Klawock Heenya Corporation; Millie Schoonover, Shaan Seet, Inc.; Dennis Nickerson, local harvester

Introduction to meeting and working group:

* Round robin of introductions of workgroup participants
* Debbie and Christine introduced the fall stakeholder meeting and its [goals](http://www.seakfhp.org/wp-content/uploads/2017/06/KlawockLakeSockeyeStakeholderMeetings_Overview.docx)
* Debbie introduced the Fisheries Rehabilitation and Enhancement Opportunities Working Group and its goals:
	+ ID current information and perspectives around the subject of rehabilitation and enhancement in Alaska in general and Klawock Lake specifically and assess current thoughts regarding impacts to Klawock Lake sockeye from work occurring in the Klawock River Hatchery (coho enhancement)
	+ Determine information needs for fall meeting including speakers/presentations
	+ ID potential “next steps” for Klawock Lake, to discuss further at meeting

ID current information and perspectives around the subject of rehabilitation and enhancement in Alaska in general and Klawock Lake specifically and assess current thoughts regarding impacts to Klawock Lake sockeye from work occurring in the Klawock River Hatchery (coho enhancement):

* Christine provided an overview of the history of enhancement efforts near Klawock Lake, and at the Klawock River Hatchery (details of this can be found in the [Retrospective Analysis](https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/alaska/seak/Documents/TNC_Klawock_Lake_Retrospective_Analysis.pdf) on page 72); highlights include:
	+ blaming the hatchery for sockeye predation by emerging enhanced coho, management of the weir leading to mortality of adult sockeye returning to the lake, other general concern in changes to sockeye in lake due to coho enhancement such as net pens attracting other predators
	+ Also interest in using the hatchery for sockeye rehabilitation and/or enhancement (general community interest in new technologies emerging -mist incubation/Wrangell example)
* Sam Rabung shared an overview of fisheries rehabilitation and enhancement efforts in Alaska; highlights include:
	+ shared what enhancement is and is not in Alaska (fish farms are illegal in Alaska), difference in how programs are operated in Alaska (to date no impact has been found on wild fish from AK hatchery practices);
	+ shared the differences between fisheries restoration, rehabilitation, and enhancement. Gave brief overview of the hatchery permitting process (three-legged stool, need to be a non-profit status hatchery and requires a [permit](http://www.adfg.alaska.gov/index.cfm?adfg=hatcheries.hatchery), separate [fish transport permit](http://www.adfg.alaska.gov/index.cfm?adfg=hatcheries.transport) required (required for each specific species in the hatchery, public process, pathology review, and included in one of the State of Alaska’s [comprehensive salmon plans](http://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheriesPlanning.enhance) ([Phase III, is the plan for SE AK](http://www.adfg.alaska.gov/static/fishing/PDFs/hatcheries/plans/se_comprehensivesalmonplan_p3.pdf))). Annual management plan reviewed by enhancement review team. Details can be found on the [ADF&G website](http://www.adfg.alaska.gov/index.cfm?adfg=fishingHatcheries.main). Jeff noted the Klawock River Hatchery does not have a sockeye FTP. Sam noted that sockeye, of all the salmon, are more difficult to raise in the hatchery due to security risks (quarantine requirement, water quality issues). Other related tools are helpful to understand: remote release sites, terminal fishing areas, cost recovery options, salmon enhancement tax, etc…
	+ Bob asked about successful rehabilitation examples; Sam shared the Malina Lake rehabilitation project on Afognak example, five yrs in operation, its issues were with over harvest and not associated with habitat degradation issues;
	+ Bob asked about examples of predator control programs in the state – Sam and Mark noted pike control in South Central;
	+ Sam’s main point was the need to understand why sockeye are depressed? Often this may be a result of habitat issues or some other cause and rehabilitation or enhancement may be at risk if those underlying issues are not identified or addressed; some issues in Klawock may be a combination and include spawning habitat degradation, general increase in water temperatures due to habitat degradation and local urbanization; additional issues may be present
* Group also discussed Traditional Knowledge regarding predator control efforts in the lake to protect emerging sockeye (cutthroat trout and dolly varden, managed under Sport Fish Division regulations)
* Jeff shared general hatchery perspectives:
	+ When the hatchery was operated by the POWHA coho were released in the lake, this practice was ended; releases now occur in the estuary (no coho smolt are re-entering the lake) doing this to prevent any predation on sockeye smolt; it appears the coho smolt make a run for the ocean upon release; for two years now the release has been staggered in multiple releases in May
	+ Christine inquired if he has any knowledge of predators attracted to the net pens? Jeff noted the potential exists but does not seem to fit with sockeye behavior (net pens are in the middle of the lake, sockeye seeking refuge etc…)
	+ Jeff also noted that If habitat conditions are not conducive for sockeye spawning and rearing, then any rehab or enhancement is at risk

Determine information needs for fall meeting including speakers/presentations:

* Sam Rabung/ADFG: General enhancement operation and practices in Alaska (including history of sockeye enhancement in SE/strengths and weaknesses/potiential benefits and draw backs
	+ What is and is not possible in Alaska
	+ Define and detail: Restoration (happens when a wild run has been decimated), Rehabilitation (wild run is depressed but still there), Enhancement (allows for above and beyond what nature produces) – What happens depends what the stakeholders want and if it can be successfully permitted and implemented
	+ Describe the two permits available that allow propagative activities in Alaska – hatchery permit; research permit
	+ Share information on new emerging technologies (Mist incubation, Wrangell example – tentative result low results for investment, requires viable rearing habitat)
* Jeff Lundberg/Klawock River Hatchery (SSRRA): History of hatchery in Klawock lake and response to general community concerns and interests regarding future activities at the hatchery
	+ What the hatchery has done to minimize impacts of coho enhancement (movement of releases/weir management)
	+ What are the opportunities and challenges for sockeye enhancement (FTP required, sockeye “issues”, ……)
	+ Are there any barrier lakes near Klawock? Comprehensive Area Management Plan for input? (May look for input from Steve Heinl and Sam Rabung on this topic)
* Support from the Lake Ecology Workgroup: Fisheries ecosystem in Klawock Lake
	+ General sockeye behavior (lake residence/rearing issues – eating, predation, temperature thresholds/migration)
	+ Natural coho in Klawock Lake
	+ Other fish species (cuts/dollys)
	+ What are the temperatures in the lake? Jeff has some temperature and dissolved oxygen data will update through 2016
* Support from the Habitat Restoration Workgroup: Condition of the habitat and how that impacts possible rehab/enhancement opportunities
	+ What kind of habitat standards exit? Kodiak example? to justify moving to rehabilitation
* Presenter TBD: Funding – this is in the hands of the stakeholders – will require grant funds, landowner participation, etc…

Participants agreed to continue to review information needs at next meeting and begin to identify “next steps” for further exploration – next meeting to be scheduled tentatively during the last week of September, Debbie will send draft notes for review and doodle poll to select next meeting date.