Klawock Lake Sockeye Stakeholder Meeting
November 14-15, 2017
Klawock Vocational and Technical Center

The Klawock Lake Stakeholder meeting was a two-day forum to present information about a suite of topics tied to the community of Klawock, the Klawock Lake watershed, and the life cycle of sockeye salmon. Approximately 75 people attended the two days of full-day meetings and/or the evening community event. Throughout the two days of presentations and dialogue participants were encouraged to ask questions, offer feedback on the information presented, and offer potential next steps to be taken.
The potential actions to be taken identified at this gathering are captured in four topic areas: Community Engagement, Habitat Restoration/Lake Ecology, Fish Abundance and Management, and Enhancement. A follow-up survey from the event also prompts participants to offer other potential actions or activities.

Agenda

8:00 Social- coffee and continental breakfast

8:30 Welcome and Introductions

- What sockeye salmon mean to Klawock? - **Mayor Armour**
- Why are we meeting? - **Christine Woll and Michael Kampnich, The Nature Conservancy**
- Agenda overview and Introductions **- Steve SueWing, Meeting Facilitator**

Sharing Sessions:

9:30 – 11:00

- Community Perspectives and Priorities
  - Community input, priorities, and survey - **Mayor Armour and Quinn Aboudara, Klawock Cooperative Association**
  - **Public comment and discussion opportunity**

11:00- 11:15 Break

11:15- 1:15 Working Lunch

- The Klawock Lake Story- **Christine Woll, The Nature Conservancy**
  - Sockeye salmon life history – **Hal Geiger, St. Hubert Research Group**

        - A Brief Look at Sockeye Salmon
    - History of activities within the watershed **- Christine Woll, The Nature Conservancy**
        - The Klawock Lake Story
    - Current status of the watershed: Recent inventory assessment results and compared to past assessments- **Cathy Needham, Kai Environmental**
        - Klawock Lake Watershed Sockeye Spawning Habitat Assessment
    - Klawock Lake predation study- **Quinn Aboudara, Klawock Cooperative Association**
    - General perspectives from habitat stakeholders (landowners, agencies, others)
    - **Discussion Activity**

1:15-3:00

- Fish Abundance and Management
    - Escapement- **Steve Heinl, ADF&G Division of Commercial Fisheries**
        - Klawock Lake Sockeye Fish Abundance
    - Commercial fisheries management- **Scott Walker, ADF&G, Division of Commercial Fisheries**
    - Federal subsistence management- **Jeff Reeves, USFS**
        - Federal Subsistence and Klawock River/Lake
    - Household harvest survey- **Lauren Sill, ADF&G, Division of Subsistence**
        - Harvests of Wild Foods in Alaska
    - Commercial fisheries harvest- **Serena Olive, ADF&G Genetics Laboratory**
        - Fisheries Genetics in Alaska
    - **Discussion Activity**

4:30- 5:30 Break

5:30- 7:30 KLAWOCK Community Event @ ANB/ANS Hall

5:30 Coho Dinner- served by the Klawock City School Band

5:45 Welcome and Introductions

6:00 Heinyaa Kwaan Dancers

6:30 Meeting Announcements, Presentation and Community Input

- Meeting purpose and 1st day summary
- Highlights related to community interest topics (community survey, sockeye abundance in Klawock Lake, lake ecology and habitat status, hatchery activities and best management practices, overview of sockeye enhancement process)
- Klawock Hatchery Story - Jeff Lundberg, Klawock River Hatchery Manager
- Questions and Answers, Community input

7:30 Event conclusion

DAY 2

8:00- 8:30 Social- coffee and continental breakfast

9:00- 12:00

- Introductions
- Agenda review
- Review Day 1
  - Listening sessions overview
    - Comments and questions
      - Community perspectives
      - Klawock Lake – ecology and habitat condition
      - Sockeye abundance and trends, management opportunities and challenges
  - Community event overview
    - Comments and questions
- Klawock Hatchery Story- **Jeff Lundberg, Klawock River Hatchery Manager**
  - History
  - Present Activities
  - Future plans and activities
    - Klawock Hatchery History and Activities
  - **Discussion Activity**
- Salmon Fishery Enhancement in Alaska- **Mark Stopha, ADF&G, Assistant PNP Hatchery Coordinator**
  - Define the State's current roll
  - Overview of the State enhancement permitting process
  - What are options for sockeye enhancement?

        - Salmon Fishery Enhancement in Alaska
    - **Discussion Activity**

Correction from Mark Stopha on a statement he made during presentation:

'Kitoi Bay Hatchery is a sockeye system with a Coho hatchery. Also does sockeye hatchery production. Bear Lake is a sockeye system with a Coho release from Trail Lakes hatchery and also sockeye hatchery releases there.'

12:00- 2:00- Working Lunch

Taking Action:

To identify potential next steps three breakout groups were formed to discuss next steps to be taken, how these step are monitored, and who pushes the next steps forward with accountability. Groups:

1. **Fisheries management**
2. **Sockeye enhancement**
3. **Lake ecology and restoration**

The groups were given three questions to seed the discussions:

1. **How do we continue this energy to support this work moving forward?**
2. **What are some short-term objectives and actions to be taken?**
3. **What are longer term objectives and projects within your subject area**

Possible Objectives and Next Steps

This list is a product of the three discussion groups outcomes and also objectives and ideas collected after each presentation section.

Community Engagement

1. More community input is needed to establish community goals and stronger support of goals
2. Continue gatherings and retaining community and landowner buy-in, participation and engagement

    - Community engagement with practitioners and staffs needs to be a reciprocal relationship with good communication between all stakeholder groups
3. Establish a local committee to examine enhancement goals, benefits, and risks, to ultimately make a "purchasing decision"
    - Next Alaska Board of Fisheries meeting concerning Southeast Alaska fisheries is in 2021. The community can propose changes through this governing body and the Alaska Department of Fish and Game can assist with drafting a proposal.
4. Find funding/partner to conduct Household Harvest survey with the Alaska Department of Fish and Game program
5. Identify more opportunities to engage K-12 education students in the value of the Klawock lake watershed
6. Educate subsistence users on the value of reporting; local leadership must encourage more accurate reporting of harvest
7. Community outreach and education about the fish weir on the Klawock River
8. Improve communications between government agencies, stakeholders, and harvesters
9. Better communication between stakeholders and Southern Southeast Regional Aquaculture Association (SSRAA)
10. Southeast Alaska Fish Habitat Partnership coordinate next meeting of stakeholders
11. Identify specific community concerns with Coho salmon in the watershed, investigate scientific response, and respond- estimated per year cost $15,000

Habitat Restoration/Lake Ecology

1. Conduct assessments of prior restoration projects:
   Road-surveys, landslide stabilization, and riparian thinning projects
2. Use assessment outputs to determine goals and more defined next steps to be taken

3. Prioritize stream rehabilitation opportunities
4. Reassessment of previously identified recommendations - what work still needs to be done to complete these recommendations:
    - Spawning surveys completed, but not habitat surveys
    - City water reservoir - proposal to restore sediment to the 1/2 mile creek that may have been captured by the reservoir – verify if any work on this has been done
5. Set-up lake monitoring programs for:
    - Nutrient levels
    - Smolt monitoring projects
6. Assess Half Mile Creek drainage and Klawock Lake lakeshore spawning habitat
7. Expand assessment of Three Mile- inventory of completed restoration efforts and assess if these efforts are working and see what parts of watershed plan were completed. Examples:
    - Results of road closures and erosion control efforts on current sedimentation processes
    - Where riparian thinning was completed
8. Decide if a watershed level beaver management plan needed
9. Klawock Cooperative Association Transportation Department has approved the bridge at Three Mile as part of the tribe's inventory, if the Three Mile creek project was made a community priority, and the bridge was chosen to be installed at this location, the KCA has funding to assist
    - Klawock community would need to support the prioritization of this project
10. 2018 predation study will provide more data for next steps conversations
11. Explore trout fishing days as a management technique
12. Half Mile & Three Mile creeks' culvert removal
13. Set-up water sampling plan for around runoff near Viking Mill

14. Approximately $75,000 in restoration funds available from the U. S. Forest Service Recreation Advisory Committee

Three-mile creak field trip

The Nature Conservancy organized a field trip to Three Mile Creek on November 16th. This drainage is a prominent stream emptying into Klawock Lake and has historically been identified as the most important spawning stream for sockeye in the Klawock Lake watershed. Participants on the field trip represented, Kai Environmental Services, Klawock Cooperative Association, Prince of Wales Tribal Stewardship Consortium, Prince of Wales Watershed Association, Southeast Alaska Fish Habitat Partnership, Southeast Alaska Watershed Coalition, Sustainable Southeast Partnership, The Nature Conservancy, U. S. Fish and Wildlife Service, and U.S. Forest Service.

The group observed and discussed various impacts on the Three Mile stream system beginning at the highway crossing. Intensive logging in the watershed for over 35 years and housing developments over the much of the flood plain were identified as primary impacts to the productivity of this stream. Current culverts were also identified as spawning habitat challenges on this stream.

An outline of the various issues for Three Mile Creek and the broader Klawock Lake watershed is being developed incorporating the discussions of this outing, potential actions identified at this meeting, and research. The outline is under development with staff at The Nature Conservancy. A draft will be completed by the end of January 2018. This will serve as a guide to begin restoration efforts.

Fish Abundance and Management

1. Continue to monitor escapement on July 1st and amend the SSRAA management plan to make sure the hatchery still does this even if government funding changes
2. Alaska Department of Fish and Game will work with local entities s to improve reporting on the subsistence fishing recognizing that more permit returns means better data to make management decisions
    - In-season and local subsistence surveyor- estimated per year cost $15,000 –U.S. Forest Service has a Citizen Science Program with funds up to $25, 000 available with a tribal partner
    - Permit drop box location in Klawock

    - Community design of a smart phone application for subsistence reporting
3. Seek funding for better sampling from commercial harvest through genetic testing, estimated cost is $75,000 for three years of genetic sampling program
4. Community can voluntarily reduce subsistence harvest limits
5. Tribal Stewardship Consortium is setting up a program to collect fish consumption data for the Clean Water Act, with funding from the Environmental Protection Agency. Once the program design is approved, annual funding is $128,000. If 30% of that is dedicated to fish consumption data, match funding is available.
6. Explore options with Alaska Department of Fish and Game to change opening dates and harvest limits for Sockeye salmon
    - Stagger commercial and subsistence openings
    - Develop sockeye escapement goals and/or a fisheries management plan

Enhancement and Hatchery Management

1. Establish a local committee to examine enhancement goals, benefits and risks, to ultimately make a "purchasing decision"
2. Small-scale enhancement to reduce harvest of naturally produced sockeye Example discussed: flying a small amount of eggs to a remote hatchery and then return to Klawock hatchery
3. Establish long-term hatchery sockeye production within the lake
4. Prince of Wales Tribal Conservation District's top priority is sockeye salmon enhancement on Klawock River. The District is just now starting the process of scoping the possibilities and is open to input from stakeholders.
5. Establish more local representation on SSRRA board
6. Hatchery continue to release more Coho salmon at off-site areas and maintain reasonable Coho escapements

Post-meeting feedback survey

A meeting feedback survey was open for two weeks. Nineteen people participated in the survey.

90% of respondents indicated that most of the information was relevant in establishing a common base of knowledge

90% of respondents thought the information presented was useful in determining potential next steps to be taken

Frequent comments throughout the 10 survey questions:

- More community outreach, promotion, and involvement for this meeting and future meetings around this subject
- More input from subsistence users
- Identify approaches to involve more youth in future meetings and next steps to be taken
- More in-depth habitat discussions and the specific condition of current habitat
- A "realistic view of how long nature will take to return the watershed characteristics to the pre-logged days
- Continuation of any activities needs to be a collaborative community process

Fourteen of the nineteen respondents made commitments to next steps around this continued meetings and activities around Klawock Lake and sockeye salmon. Commitments made:

1. Stay engaged in process and activities
2. Community education and outreach
3. U.S. Forest Service support for habitat restorations discussions and planning
4. Follow continued research developments tied to the Klawock Lake watershed
5. Advocacy for improving Klawock Lake watershed
6. Technical advice for potential stream restoration work
7. Direct involvement in enhancement activities
8. Connecting agencies with community partners

9. Involvement in community conversation to reach shared goals and/or vision

For meeting organization and facilitation responses were 5.5 stars out of 6 with all 27 comments very positive about the organization and delivery of the gathering. For improvement at least three comments were made about allowing more time for small group work.

Common Terms/Glossary:

- **Stream habitat restoration** – a variety of actions related to reestablishing form and function of streams including establishing stream connectivity, stabilizing stream banks and shorelines, reestablishing stream bank vegetation, rehabilitating associated riparian habitat, and repairing unique in-stream functions related to flow and habitat complexity
- **Salmon stock**[1] – a locally interbreeding group of salmon that is distinguished by a distinct combination of genetic, phenotypic, life history, and habitat characteristics or an aggregation of two or more interbreeding groups which occur within the same geographic area and is managed as a unit
- **Salmon run**[1] – total number of salmon in a stock surviving to adulthood and returning in a calendar year to vicinity of natal stream; it is composed of both harvest and escapement
- **Salmon escapement**[1] – salmon that successfully pass through various fisheries and return to fresh water to spawn (i.e., spawning ground or hatchery raceway)
- **Salmon abundance** – is a consensus count for the number of salmon at a specified moment in time and is often reflected in reference specific to adults or juveniles
- **Salmon production** – the number of salmon produced from a specific watershed or identified spawning location
- **Supplemental salmon production**[1] – salmon produced by methods other than natural spawning; for example, enhancement and/or rehabilitation techniques
- **Salmon productivity** – Productivity is the ratio of output to input in production. Related to salmon, productivity references the survivability of a salmon population or the rate at which salmon are produced (often used to

[1] Definition from Comprehensive Salmon Enhancement Plan for Southeast Alaska: Phase III, ADF&G http://www.adfg.alaska.gov/static/fishing/PDFs/hatcheries/plans/se_comprehensivesalmonplan_p3.pdf

describe the number of salmon produced in the wild per specific escapement area, or number of salmon anticipated from a hatchery release site)

- **Salmon enhancement**[1] – strategies designed to (1) supplement the harvest of naturally produced salmon species by using artificial or semi-artificial production systems (2) increase the amount of production in a natural habitat through physical or chemical changes or (3) apply procedures to a salmon stock to supplement the numbers of harvestable fish to a level beyond what could be naturally produced.
- **Salmon rehabilitation** – strategies designed to increase existing natural salmon stock when that stock is deemed at risk and/or not producing to anticipated abundance levels
- **Salmon restoration** – strategies used to restore salmon to a system that no longer produces salmon
- **Private nonprofit (PNP) salmon hatcheries** in Alaska produce salmon to enhance commercial, sport, subsistence, and personal use fisheries. PNP hatcheries are typically owned and operated by regional aquaculture associations or independent nonprofits, though several hatcheries are state owned and leased to PNP operators.
- **Sport fish hatcheries** in Alaska produce fish specifically to enhance sport fisheries. These facilities are owned and operated by ADF&G.

Attendees:

1	Al Insel	Klawock		
2	Allison Gillum	Southeast Alaska Land Trust	Executive Director	allison@setrust.net
3	Bill Gass	Southern Southeast Regional Aquaculture Association	SSRAA-Production Manager	gass@ssraa.org
4	Bob Girt	Sealaska Timber		bob.girt@sealaska.com
5	Cathy Needham	Kai Environmental Services		cathy@kaienvironmental.com
6	Chandler O'Connell	Sitka Conservation Council		
7	Cheryl Fecko	POW Watershed Association		cherylfecko@gmail.com
8	Christine Woll	The Nature Conservancy	SE Alaska Director	cwoll@tnc.org
9	Craig Schwanke	Alaska Dept. of Fish and Game-Sport fish (ADFG)	POW-based SF biologist	craig.schwanke@alaska.gov
10	Deborah Hart	Southeast Alaska Fist Habitat Partnership	SEAKFHP Coordinator	coordinator@sealaskafishhabitat.or
11	Dennis Nickerson	Prince of Wales Tribal Stewardship Consortium		dennis@kasaan.org
12	Donna Jackson	Klawock		crgkiwsr@ccsjuneau.org
13	Ellen Hannan	Klawock		ehannan32@gmail.com

14	Eva Rowan	Klawock City School		eva.rowan@klawockschool.com
15	Harry Jackson	Klawock		
16	Hal Geiger	Saint Hubert Research Group		geiger@ak.net
17	Helen Sladek	U.S. Forest Service-Tongass National Forest	Hydrologist, Craig RD	hsladek@fs.fed.us
18	Jeff Lundberg	Klawock Hatchery		jlundberg@hughes.net
19	Jeff Reeves	U.S. Forest Service-Tongass National Forest	Subsistence Biologist	jreeves@fs.fed.us
20	Jim Williams	Klawock Cooperative Association		
21	Jon Bolling	Craig City Administrator		jbolling@aptalaska.net
22	Karen Cleary	Votec Administrator		kcleary@powtec.org
23	Keegan Krantz	U.S. Forest Service-Tongass National Forest	Hydrologist, Craig RD	kkrantz@fs.fed.us
24	Lauren Sill	ADFG-Subsistence Division		lauren.sill@alaska.gov
25	Lawrence Armour	City of Klawock/Klawock Cooperative Association	Mayor/Tribal administrator	tribaladmin@klawocktribe.org
26	Machelle Edenshaw	Prince of Wales Tribal Stewardship Consortium		
27	Mark Minnillo	ADFG-Habitat	POW-based habitat biologist	mark.minnillo@alaska.gov
28	Mark Stopha	ADFG-Mariculture		mark.stopha@alaska.gov
29	Mary Edenshaw	Klawock Heenya Corporation		khc@aptalaska.net
30	Matt Anderson	U.S. Forest Service-Tongass National Forest	District Ranger	mdanderson@fs.fed.us
31	Mead McCoy	U.S. Forest Service-Tongass National Forest	Fish Biologist, Craig RD	charlesmccoy@fs.fed.us
32	Michael Douville	SE Regional Subsistence Advisory Council		douvillema@gmail.com
33	Michael Kampnich	The Nature Conservancy	POW field rep	mkampnich@tnc.org
34	Mike Bush	Klawock		b3con@aptalaska.net
35	Millie Schoonover	Shaan Seet, Inc./CTA		millie.schoonover@powtec.com
36	Neil Stichert	U.S. Fish and Wildlife Service		neil_stichert@fws.gov
37	Serena Olive	ADFG- Genetics Lab		serena.olive@alaska.gov
38	Patrick Dierney	Prince of Wales Siviculture		3akef13@gmail.com
39	Patrick Tyner	F/V Rauma/SSRAA		aktyners@gmail.com
40	Patti Rowan	Klawock Cooperative Association		patti.rowan@klawockschool.com
41	Quinn Aboudara	Sustainable Southeast Partnership	Community Catalyst with KCA	kcacatalyst@klawocktribe.org
42	Rob Cadmus	Southeast Alaska Watershed Coalition	Executive Director	rob@sawcak.org
43	Scott Walker	ADFG-Commercial Fisheries Division	Fisheries Manager	scott.walker@alaska.gov
44	Sheila Jacobson	USFS Tongass National Forest	Fish Biologist	sajacobson@fs.fed.us
45	Steve Heinl	ADFG-Commercial Fisheries Division	Salmon Research Manager	steve.heinl@alaska.gov

46	Steve Sue Wing		Facilitator	steve_sue_wing@hotmail.com
47	Tylo Kennedy	Klawock Cooperative Association	Environmental Assistant	epatech@klawocktribe.org