

SFNR Watershed Group Meeting
March 8, 2017
Meeting Summary

Participants: Theresa Sygitowicz, Doug Couvelier, Bill Baroch, Ross Cline, LeRoy Harkness, Harry Patz, Brandon Larsen, Tricia Stevens, John Stephens, Emily Pederson, Dominic Moreri, Cindy Fabbri, Gabe Epperson, Elvin Kalsbeek, Rand Jack, Cheryl Costomiris, Steve Powers, Jim Abernathy, Gordon Bakke, Chris Hatch, Eric Davis, Jamie Huson, Jeff & Amy Margolis, Carol Delahoyde, Ian Smith, Anna Martin

Guest Presenters: Mike Maudlin, Ned Currence, Treva Coe,

Facilitators: Lesley Rigg & Erin Suda

Notetaker: Mardi Solomon

Overview

Twenty-five residents and landowner representatives and three guest presenters participated in this meeting of the SFNR Watershed Group. The goals of this meeting (the third for this group) were:

- To build common understanding of habitat restoration efforts in the watershed
- To refine the list of goals, principles, and objectives
- To begin thinking about the future of this group

Goal of the Process:

- To develop a framework for talking about conservation and restoration efforts in the South Fork and engage in watershed planning.

Agenda:

1. **Welcome, Ground Rules, and Introductions**
2. **Develop a common understanding of habitat issues and strategies in the South Fork**
3. **Test for agreement on *Goals, Principles, and Objectives*, from our last meeting**
4. **Consider options for the future of the Watershed Group**
5. **Finish worksheets**
6. **Wrap up**

1. Welcome, Ground Rules, and Introductions:

Review Ground Rules:

Participants went around the room and introduced themselves and their associations. Those participating for the first time shared...

- *Name, associations*
- *Where do you live in the valley?*
- *What are your hopes for this process?*

GROUND RULES:

- Arrive on time and be prepared
- Participate, speak up and share info
- Don't monopolize time
- Raise hand to be recognized to speak
- Respect everyone's ideas
- Avoid disruptions
- Be open to new ideas and thinking
- Avoid repeating
- Try to think win/win
- Be concise and stay on topic

2. Develop a common understanding of habitat issues and strategies in the South Fork

Mike Maudlin, Forest Resource Protection Specialist for the Nooksack Tribe, presented to the group www.sfnooksack.com/wp/wp-content/uploads/2017/01/Habitat-Restoration-in-the-SFNR-Maudlin. Mike is a licensed geologist in the state of Washington working on rivers in the Pacific NW. He has worked on Nooksack watershed habitat recovery projects since 2000, first for the Lummi Nation and now for Nooksack. He has been involved with project planning, design, implementation and effectiveness monitoring for many engineered logjam projects in the South Fork Nooksack watershed.

Participants asked many questions during the slideshow and these were answered by Mike, Ned, and Treva of the Nooksack Tribe Natural Resources Department.

Slide #3:

Q: How were estimates of historical chinook population abundances established?

A: The EDT Model used inputs of best estimates of the physical habitat attributes (ratings 1-4) in chinook habitat reaches, and the model outputs were estimates of the chinook population abundances and productivities that the habitat conditions could support.

Q: When is earliest solid estimate of what salmon runs were and how they have deteriorated?

A: There is a report by the US Commission of Fish and Fisheries on Fisheries of the West Coast that includes 1895 Nooksack River catch data pounds of chinook, coho and steelhead that was sold to the canneries and fresh fish market. 840,200 lbs of coho, 496,820 lbs of chinook, and 660,160 lbs of steelhead were sold. If average weights were 10 lbs for coho and steelhead and 20 lbs for chinook, this translates to over 66,000 steelhead, nearly 25,000 chinook, and over 84,000 coho. These totals omit tribal catch, settler catch, marine catches, and salmon and steelhead that spawned. The report mentioned that commercial fisheries on the Nooksack R. were just developing.

Q: When did reliable annual data collection begin?

A: 1940's spawn survey data.

Q: Are Salmon Recovery Habitat Model numbers based on real data?

A: Yes, in part. Data was used where available; where it wasn't available, local biologists familiar with the habitat qualitatively assessed habitat conditions. S. Fork Chinook range up to mile 31.

Q: How to explain the difference between the North/Middle and South Fork basins seen in slide #3?

North/Middle Fork watersheds are larger and have more available habitat. These glacial forks are more dynamic channels than the South – more braiding. Model results estimate reach scale impacts to different life stages. The forks are not really comparable. North/Middle forks have glacial runoff so they are colder in summer, but redds can get dewatered or scoured out during high flows.

Comment: Used to be 45-50 lb. kings and huge numbers of humpy's in the river when Gordon Bakke was a child. There was lots of logging and farming, clear cutting and the fish used to be there.

Q: Do spawning surveys reflect decline?

A: Yes.

Slide #4: Goal is to recover S. Nooksack Chinook. Skookum Hatchery has a chinook population rebuilding program, and 2014 & 2015 saw the first returns of S. Fork chinook from the program.

Q: With such a small population (20-160 fish), does it create problems with genetic diversity?

A: It can. One of the things in our favor though in S. Fork is the underlying genetic diversity from the juveniles seined from the wild that were used to found the program from. A parent analysis showed these were from hundreds of parents.

Q: What happened in 2013 & 2015 (very small numbers of fish)?

A: Can partially be explained by very big pink salmon runs masking where the S. Fork Chinook spawned. We consider those low numbers to be minimum estimates of chinook for those years.

Slide #5: Have learned it's most important to focus restoration work in the forks, where the spring chinook spawn.

Most of the South Fork watershed is in private and forest lands. These property owners and foresters are very important partners.

Q: What are primary sources of funding?

A: Salmon recovery funding board for in-stream projects. NRCS and Dept. of Ecology for tree-planting projects. Bureau of Indian Affairs supports tree-planting too. All of it is competitive grants. All the local organizations working on salmon and habitat recovery are competing with each other for funding to implement a common strategy.

Slide #6: Until watershed processes are restored and creating habitat on their own, we need to keep working on habitat restoration.

Slide #7: Define WRIA 1 – Water Resources Inventory Area 1. There are 62 WRIA's in the state. WRIA 1 is a geographic area including the Nooksack watershed plus some independent drainages such as Dakota Creek and Chuckanut Creek. Habitat restoration is broken up into different planning areas.

Q: Are there any deep areas in the river further upstream? What constitutes a good situation for the hatchlings or the eggs? Where they laid eggs the year before could be totally out of the water now because rivers move. How deep should the water be and how do we set up something like that?

A: With changes between low flow when salmon spawn and high flows in the winter, this hydrologic variability can cause problems – the areas where the salmon spawn at low flow are also more vulnerable to scour at high flow. Ideal habitat: juveniles need slower water, good cover so they don't get eaten (like a root wad). Adults coming in need cooler water, deep water with good cover.

Q: Is there a list of potential solutions to the problems? Log jams sound like one of the solutions.

A: The 2005 WRIA 1 salmon recovery plan has a prioritized strategy. There is guidance for project sponsors. There is a one-page matrix for both spring chinook populations. That guides development and ranking of projects that are funded w/ Salmon Recovery Board funding.

http://salmon.wria1.org/webfm_send/105

Q: Do these work with other land interests (e.g., mining, logging, farming)?

A: They are voluntary habitat and salmon recovery projects.

Q: Please talk about the four H's?

A: The four H's refers to hydropower, habitat, hatcheries and harvest. Hydropower is really small in our basin so won't go into that. Not non-existent, but comparatively small.

Harvest: The Kendall hatchery North Fork spring chinook population rebuilding program serves as an indicator stock program, where coded wire tags are inserted into juveniles prior to release, and fisheries and returning adults are sampled for those tags. This program serves as an indicator for harvest rates

and locations of wild spring chinook populations. The fisheries are sampled from Alaska southward, as are chinook on the spawning grounds and those that return to the hatchery. This program serves as the indicator to estimate the harvest rates and locations for S. Fork spring chinook. Expanded results give the ability to estimate overall and location specific harvest rates. Nooksack spring chinook harvest rates are highest in Canada. Alaska and WA have somewhat similar harvest rates to one another. WA take can be no more than 10% of entire run in 2017 for all fisheries combined. Puget Sound sport is the biggest impact on Nooksack spring chinook in Washington, not the nets in the river. There is periodic review of overall rates to determine productivity and whether adjustments need to be made in the context of the Pacific Salmon Treaty, with review about every 8 years.

Hatcheries: Hatchery programs can have different purposes. For example, the Skookum coho program raises fish for harvest, while the Kendall and Skookum chinook programs are population rebuilding programs trying to increase the number of natural spawners to create more wild chinook. Purpose of the Skookum chinook program is to increase the number of chinook with native S. Fork genes on the spawning grounds.

Habitat: 225 wild Nooksack chinook forecast to return to Bellingham Bay this year. As habitat declines, the number of wild chinook produced per pair that spawn often declines. That is referred to as population productivity.

Q: How many chinook are killed by nets in the river?

A: The S Fork is not open to netting. The primary harvest of Nooksack spring chinook (most of those being hatchery fish) happens prior to their arriving back to Bellingham Bay or the river. Nooksack Tribe caught 41 spring chinook last year in our subsistence fishery (7 wild, 34 hatchery). West Coast Vancouver Island troll harvest and recreation fisheries have the biggest impact on our populations.

Q: Where do you account for a tribal net that catches more fish than anyone takes home? Have seen large piles of abandoned fish that died.

A: Not sure how long ago you saw this, but this sounds like possibly chum salmon, which have had spawning abundances of 30,000-40,000 in recent years. This would not be chinook salmon.

Q: How often are nets out there?

A: We shape our salmon fisheries to target the more abundant stocks. Our August commercial chinook fishery begins in the lower Nooksack and targets fall chinook which are considered a reintroduced, non-local stock. As the weeks of the month progress, we open additional reaches of the mainstem to allow any lingering spring chinook to move into the forks. Both Tribes voluntarily quit commercially fishing on spring chinook in or about 1978 when they could see the runs diminishing. Q: Big problem in S. Fork is rearing habitat for the young fish. Black Slough, Hutchinson Creek, Landing Strip Creek run year-round, Skookum Creek above the hatchery. We have to get more rearing habitat in the valley.

A: Ian: Have a lot more coho rearing in the river than in the tributaries. Work in the main river does improve rearing habitat too. Tributaries and floodplain channels provide important flood refuge habitat.

Slides 8-11

Comment: Tribe has tremendous power over the rivers. Would love to see tribes rebuild some of the log jams with big old growth logs. Numerous bends from Saxon down. Get big logs in there and it would be huge benefit to the river.

A: Cost for that work is the issue. Have opportunity to do this on the N. Fork. They cut down hazard trees in the National Forest and provide the logs to us for mitigation. US Forest Service requires that we use them on the N. Fork. We don't have a source of large logs like that for the South Fork.

Comment: Know of other tribes storing big logs for this purpose.

Q: What about fish use of Tawes Creek? Too small a creek to support chinook spawning, but it has coho and limited steelhead spawning.

Q: Do any salmon or steelhead use Hutchinson Creek upstream of the Cascades?

A: It is highly utilized upstream of the Cascades by winter run steelhead, nearly to the falls.

Comment: Have lost logs from engineered logjams, because they aren't tied in well and float away in high water.

A: The engineers estimate 50 year lifespan for the logjams, but the first engineered log jam project was 2001, then again in 2004. So we have limited experience monitoring them. Now structures have evolved to using pilings and/or cables.

Comment: Conservation district just got a grant to help farmers. Only to be used if an ag producer requests help.

Q: Is there no historical precedent for using logjams over time? Are there other places that have used engineered logjams?

A: First engineered logjam project was in 1996 on Cowlitz River, 3rd use was on South Fork Nooksack. Cabled logs have been used to slow bank erosion for a long time.

Q: Is it true that it's a habitat improvement for all creatures if we keep the water running naturally rather than like a freeway?

A: Logjams do create the nicest pools. Wildlife comes around logjams. Every logjam supports all the salmon species. All these efforts get at fundamental processes for all the fish. Mink, eagles, vultures, bears and other creatures benefit from salmon.

Q: Below confluence of the 3 forks, are there any logjam projects?

A: No

Q: Have you considered looking at the river in its totality?

A: Working with Whatcom County Flood to look at integrating salmon recovery with flood hazard reduction. Beginning that assessment in lower mainstem. With limited funding, need to work in highest priority areas.

Slide 12-13 Riparian Restoration

Q: Re earlier comment about how all the different groups are competing for the same grants. Do you feel like there could be more coordination?

A: We get together every two weeks. Very coordinated.

3. Test for agreement on *Goals, Principles, and Objectives*, from our last meeting

Q: Who has a right to have a say in this process?

A: Everyone who is in this room has a right to vote because they are qualified (e.g., resident or represent a landowner), accepted members of the group.

Comment: Couldn't be at the last meeting. Recreational component was ignored in the goals. It's not there.

A: Public access to the river for recreational purposes was not supported by a lot of people at the last meeting.

Jeff: We have a big park in the middle of the valley. Shouldn't ignore that.

Participants were given red, yellow, and green cards to indicate their level of agreement: green (G) = agree; yellow (Y) = some hesitation, red (R) = disagree. 75% green will be a super majority to move forward on an item.

Goals:

1) The four Long-term Community Goals were voted on as a group. (16 G, 7 Y)

Comments:

Edit Our Farms: Maintain and protect *economically* productive agricultural lands...

Edit Our Farms: Maintain and protect ag lands. Strike rest of sentence re promote ag economic viability.

Our Fish: Recover salmon populations.....

Unclear what "adequate stream flow means." It hasn't been defined how much flow is required. Need more info.

Our Fish: "ensuring adequate stream flow" – think that would be decided more by snowfall than anything we do.

Concern re Our Forests: Maintaining the workforce in the forest is affected by automation of forest industry. Statement is naïve and misleading. It doesn't have to do with what happens in the Valley. It's beyond this group's power.

Edit Our Forest: Maintain and protect forests, forest land, and promote sustainable forest practices.

The sentences in Our Families, Our Farms, and Our Forests are at a totally different level than Our Fish which lists specific techniques. This group doesn't know enough to say what is needed. Hesitant to commit to long-term community goal with this level of specificity.

2) Watershed Planning Principles

- Communication, transparency, and trust between landowners, residents, agencies, and other stakeholders in the Watershed. (2 Y)
- Respect for the ability and knowledge of local residents to manage land and water resources wisely (17 G, 6 Y)

Comments:

Should say "respect for the *knowledgeable* local residents" not all of them.

- Voluntary Agreements between landowners and community partners, with incentives or landowner's efforts to improve watershed conditions. (21 G, 2 Y)

Comment:

Not sure what's meant by "incentives." Would strike "incentives."

- Shared understanding and open dialogue around data, science, resource management, and the changing climate conditions that affect our watershed. (20 G, 3 Y)

Comments:

What's missing is "resident knowledge." It's not being leveraged as much as it should be.

I'm a science sceptic. Observation can be weighted to get the result you want.

Start with “Open dialogue” rather than “shared understanding.”

- Public education around how farmers, foresters, fishers, and other businesses are continually improving their practices to protect and improve water quality. (20 G, 3 Y)

Comments:

Great idea in concept but I’m against having the wrong people educating people.

Don’t like word “continually.” It’s an assumption. Take out “continually.”

The sentence leaves out what’s been done to date with regard to those interest groups. Insert “have and continue...”

Should add in respecting private property. Don’t go onto farmers’ land without asking permission.

Public education on what’s happening in any ag situation people don’t know about is a good idea.

Q: About voting process.

A: We chose 75% supermajority. Each time we rewrite the doc, we go for more alignment. Trying to get a sense of how close we are. Can’t continue forever.

4. Consider options for the future of the Watershed Group

We want to explore options for this group before the next meeting and consider adding a 5th meeting around the end of April. At the 4th meeting we will look at the Watershed Conservation Plan. Want the 5th meeting to incorporate feedback. Will send Plan via email before 4th meeting.

Facilitator Question: How many people in the room have an interest in continuing this group (but not indefinitely)? – (Good support for this idea.)

Please think about what this group could do in the future. Write down your ideas. That will shape group in the future.

Q: Can you send chapters of the Plan as they are completed?

Q: Why not wait to have the 4th meeting? Wait until 10 days after Watershed Plan has been circulated.

Comment: We need to have another meeting on 3/29 to come to agreement on Goals & Principles and future of this group.

Q: Would input at a 4th meeting influence the plan document?

Comment: I understand they have to have Plan written by end of March.

Facilitator: They were going to try to have plan by 3/17 but are concerned they may not have it done. Will check if we can postpone 4th meeting so you can get the plan 10 days before the meeting.

Comments:

If we approve and endorse the plan it creates more support for the plan.

At the last two meetings it’s been good to have tech info and Q&A. On 3/29 could key findings and draft recommendations discussed than have somebody send a draft.

Facilitator: Will try to meet both needs.

Comment: Ian: Part of the plan is technical assessments, current conditions and recommendations for strategies. It would be useful for group to have presentations about that. The sooner there is feedback on those elements, the better.

Finish worksheets, wrap up

Comments/Question on Easel Sheets:

More Information Needed:

- Salmon recovery plan (see website)
- Conservation District funding for ag projects
- What does “adequate stream flow” mean?
- Can Conservation Plan sections be sent out as they are finished?
- What is grant deadline for Conservation Plan?
- Make sure technical assessment section gets sent out in advance

Discussion Topics:

- Log jams – leaving and creating, big old-growth logs, tie logs into bank?
- Harvest – Canada, Alaska, WA not more than 10% of run
- 4 H’s – Habitat, Hydropower, Hatcheries, Harvest
- Rearing habitat – what can be done to create more?
- Holding habitat
- Creating shade around tributaries

Parking Lot (Topics to address at another time):

- Postpone 4th meeting to 10 days after Conservation Plan is released.
- Present plan verbally at the 4th meeting with Q&A

Q/A INPUT WORKSHEETS Watershed Group Meeting 3.8.17

1. Water and habitat: What additional questions, feedback and comments do you have about water and habitat that you would like to discuss?

- ✓ I would like to see a long term goal relating to the ecology of the watershed-not just limited to fish.
- ✓ Sofork-Watershed Project. Our farms: We want to maintain & protect & promote economically productive agriculture lands & promote long-term agriculture economic viability. All completed chapter to be send by email 10 days before the meeting.
- ✓ Too many to list but group has asked a lot of great questions, foundation for continued conversation.
- ✓ We have a not discussed in any great detail the projected impacts of climate change...so future group meetings can be used to educate ourselves and then to formulate longer range goals for the watershed as these impacts of climate change come upon us.
- ✓ Great to interact with specialists.
- ✓ Ignoring recreational significance of what transpires in SFValley. RE: Our families “rural way of life” is a shibboleth. Valley is integral part of Mass Society based on intensive vehicular travel. Rural life was characterized by intimate face to face relationships which is hardly the case throughout the valley. Rural life of past was homogenous-whereas today valley population is heterogeneous. Closing eyes to the “nature” or character, thinking that a “rural” lifestyle can be perpetuated, preempts the ability to recognize what is actually transpiring-one of those being missed pertains to recreation-to say the least.
- ✓ Are there other plants/shrubs-quick growing trees to assist in the cooling the waters? What can be planted in the water to help create shelter and cooler tempts. for eggs and young fish. Ned and Treva..I would like to have a presentation covering more about salmon restoration and log jams.
- ✓ Need to discuss the importance of floodplains reconnection to habitat restoration.
- ✓ Keeps reducing the tempts if possible for salmon & keep lowering pollutants into the watershed (diaries, people, personal choices of what they do on their land i.e. Spraying fertilizer etc.

- ✓ Feasibility study of large, old-growth log jams being used in the Nooksack, -who could pay/grants, cost? Where?
- ✓ Nothing additional
- ✓ See B. Question if water setback for logging is wider would it be shade the creeks better that feed the main river? Our fish-stream flow-decided by snowfall do not step on private property.
- ✓ Log jams, big wood.
- ✓ Rural life is too vague and maybe too inclusive. Our forests-part of the reason we have water shortage and loss of habitat is due in part to removal of trees. Reduction of tree removal at all instances id the cause pf global water, desertification and fish mortality.
- ✓ Will this groups watershed plan be utilized & respected by all other restoration groups? Will it be presented to larger DOT & BNSF entities like DOE, EPA, ARMY CORPS? We should try to speak with one voice as much as possible to these larger outside groups.

2. Looking Forward

A. Would you be interested in meeting again in about a month to review the final Watershed Conservation Plan?

	<u>TOTAL</u>
Yes.....	17
No.....	1
Maybe.....	6

Additional comments:

End of April.

Having shoulder surgery March 23rd.

I will be out of town March 20-30.

Are we ready for a final plan? I might be in California.

B. What would you like to see this Watershed Group doing in the future?

	<u>TOTAL</u>
• Continuing dialogue and education around watershed issues.....	13
• Serving as a vehicle for our community to give	

- feedback on various agency plans and projects.13
- Developing a more comprehensive Community Watershed Plan to inform and guide the efforts of future policy, funding and watershed protection efforts.....12
- Bringing more funding and resources to support landowners' voluntary efforts.....16
- Educating the public on various topics.....11
- Other:
 - This seems to be the most effective way to get anyone to agree to voluntary efforts.
 - We have been doing good management for nearly 140 years.
 - Make the Watershed Group completely autonomous and not connected to any Planning Team Person.
 - Questions or comments. Enthusiasm.

TOTAL

C. How often would you be interested in meeting in the future?

- Monthly.....10
- Quarterly.....13
- Annually.....3
- Not interested in meeting in the future.....0
- Other.....0

D. Future Meetings/Topics

Which topics would you like to discuss in more depth?

TOTAL

- Recreation on the river.....10
- Forestry.....11
- Farming.....9
- Flooding/Floodplain management.....9
- Wildlife.....8
- More in-depth on habitat restoration.....8
- More in-depth water quality.....10
- More in-depth water quantity.....8

- **Washington Water Trust.....8**
- **Upper watershed hydrology (Susan’s work)7**
- **Climate change modeling (Bob’s work)3**
- **Emergency preparedness.....7**
- **Manure lagoon management.....6**
- **Other topics.....1**
- Good strategic log jams*
- **Anything you would like to present?.....1**
- Elk forage enhancement on Seattle City light ownership-upper S.Fork.*

3. Any other suggestions at this point, for the future Watershed Group?

- ✓ More presentations on technical findings of watershed plan.
- ✓ Make it independent.
- ✓ Change in thinking of salmon recovery partners & related parties after several years of work now. Lessons learned.
- ✓ Continue to bring more experts for the groups education.
- ✓ Can we hear about actual projects that are planned and hoped for so we might better help support them?
- ✓ Open dialogue-some people will never or have little intention of having a willingness to work together. I believe most attendees who are here to assist and are eager to collaborate in the process.
- ✓ Upper watershed planning principles #5 the warming implies that there are continually improving practices at different times this may or may not be true.
- ✓ Continue
- ✓ For complete transparency for this project which is to recover Chinook salmon ALL tribal and other catch records of all salmon in the Nooksack system should be made available. These records dating back could be very beneficial to the recovery efforts.
- ✓ Sometimes less is better. We try and micromanage when we have no control over the rain or snow.

4. What did you like best about this evening’s meeting? How could it have been improved?

- ✓ It was interesting and nice to meet folks some I know and others I met for the first time.
- ✓ Good meeting. Way too much off topic questions.
- ✓ Candor
- ✓ BEST-varied community involvement. Education thru “expert” knowledge being shared. LEAST-A continued sense of being rushed.
- ✓ BEST-Interacting w/the Scientist-Q&A, PowerPoint.
- ✓ Good info from Mike –Ned
- ✓ Mikes presentation helpful. Ned’s input very helpful.
- ✓ More technical people with discussion.
- ✓ Mikes talk & answers from Ned? By Jim?
- ✓ Presentation, Q&A Mike didn’t get to finish his presentation.