SFNR Watershed Group Meeting
February 22, 2017
Meeting Summary

Overview

Thirty-seven residents and landowner representatives participated in this meeting of the SFNR Watershed Group. The goals of this meeting (the second of four) were:

- To build common understanding of the process for developing a Framework for Watershed Planning efforts
- To build common understanding of the water issues we are facing
- To test for agreement on the refined list of goals, principles, and objectives from the group's first meeting

The meeting was recorded (with permission of the participants) for airing on the local South Fork radio station KAVZ 102.5 LPFM, and will also be available via the sfnooksack.com website.

Participants
Theresa Sygitowicz, Chris Elder, Cheryl Costomiris, Oliver Grah, Jim Abernathy, Matthew Thuney, Harry Patz, LeRoy Harkness, Tom Smith, Bernie Strachila, Ross Cline, Tricia Stevens, Susan Dickerson-Lange, Bob Mitchell, Chris Hatch, Ian Smith, Eric Davis, Rand Jack, Gabe Epperson, Cindy Fabbri, Bill Baroch, Dominic Moceri, Steve Powers, Alan Friedlob, Stephen Bailey, Jason Hatch, Elvin Kalsbeek, John LaMonte, Doug Couvelier, Emily Peterson, John Stephens, Jamie Huson, Carol Delahoyde, Jane Rogers, Kelly DeKriek , Val Lloyd, Brandon Larsen

Facilitators: Erin Suda & Lesley Rigg
Notetaker: Mardi Solomon

Agenda:

1. **Welcome, Ground Rules, and Introductions**
2. **Overview of the Process: where we've come from, where we are going, and major themes from the input worksheets**
3. **Develop a common understanding of water issues in the South Fork**
4. **Review edited *Goals, Principles, and Objectives,* from our last meeting**
5. **Wrap up**

1. Welcome, Ground Rules, and Introductions

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?*

2. Overview of the Process: where we've come from and where we are going

Everyone received a yellow worksheet to record feedback to any of the issues raised in the meeting, or anything else they would like to communicate to the Planning Team. A concern was raised about when the group would address questions that were in the "parking lot" from the previous meeting (i.e. list of issues that came up that we didn't have time to discuss). The parking lot questions included a request for communication and transparency about all planning meetings minutes, emails, reports, grants, etc. that preceded the first meeting of this group. Facilitator responded that the planning team notes will be put on the website soon, a summary of results from all of the input sheets is included in participants' folders, and facilitators will ensure that the "parking lot" and "need more info" lists will be included in notes in the future.

Oliver presented about the planning process to date (posted on website)

3. Develop a common understanding of water issues in the South Fork

Susan Dickerson-Lange presented about her forest hydrology research. She got her Masters degree from WWU several years ago on hydrological modeling on the Nooksack. She was brought on board to contribute to the Watershed Conservation Report. She shared information on water quality and quantity.

The South Fork Nooksack has three primary water *quality* issues:

1. Temperatures are warmer than are good for salmon
2. Increased fine sediments impair salmon spawning
3. Elevated levels of bacteria

A challenge is that none of these are point-source pollution issues. They are dispersed. One has to consider the past conditions of the river – there would have been more channels and forest cover. It isn't feasible or desirable to go back to that, but understanding those conditions helps us understand current issues. There is no longer as much shade from forest cover in the valley. Upland clear cuts and development are contributing to sediment and bacteria runoff.

These are linked to water *quantity* issues. Consider how timing and flow of Nooksack today compare to the conditions that salmon were adapted to. With less shade and riparian forest there is:

1. Increased evaporation
2. Decreased "recharge" because of less water flowing in the summer, higher flows in winter, less storage capacity higher in the watershed, and water moving downstream faster
3. Long-term trend is 1.5 degree increase in river temperature which will influence snow pack over time, and therefore the amount of river flow

Another major factor related to water quantity is the amount we take out of the river (which relates to water rights/allocations).

Today we are focusing on how quality and quantity of water in the Nooksack affect habitat.

Q: What about the fish hatchery as a source of bacteria?
A: Point source for fish hatchery is for temperature not fecal coliform.
Q: What makes all the algae in the summer downriver of the hatchery?
A: [Need more info about this]
A: Tubers impact water quality big time. They stir it up.

Participants then wrote down their thoughts about what they read in their packets and heard from Susan. They discussed their notes in groups of three and wrote issues/common concerns on sticky notes.

Group input

- Where does use or consumption fit into the picture?
- Non-judgmental descriptions are helpful
- Commonality is helpful – We all live & breathe in the valley, need to build on what we have in common
- Water Temperature – if we could keep the river cooler, other problems might get better
- Addressing water temp – need very big log jams to create big deep pools like there used to be.
- Water flows & temps, decrease in summer volumes

- What about engineered wetlands to allow sub-surface flow to come up?
- How can we slow the river and make additional wetlands to allow the river to recharge better?
- Allow the river to spread out better.
- Property rights vs. water rights
- Detailed info about what is contributing to sediment
- Do lagoons from dairy farms, septic systems, etc. contribute to the fecal coliform?
- Question about significance of levels of coliform? How concerned should we be about that?
- Pollutants and decrease in salmon
- Question about domestic well water – Are we drawing down the aquifer and at some point will we start losing our wells?
- Logging and erosion from hillsides – how to keep hillside on the hills?
- Concern about landslides, mass wasting. Does warmer winters and more rains mean more landslides and sediment in the river?
- DNR logging practices have changed over the years. They now leave big riparian buffers and we need to acknowledge that positive change.
- Concern about S. Fork getting more restoration efforts than the lower river.
- How effective have restoration efforts been? Want to understand strengths & weaknesses.
- Is it possible to get specific numbers on riparian shade, bacteria, etc. Need to establish targets.
- Limit or prevent tubing. Could have permit process to tube the river.
- Strike a balance between all water users/entities (anything that can have an impact, ex. highway & roads) to guarantee water quality and quantity
- To what degree are each of us willing to make lifestyle changes in consumption so we can have clean water and air?
- What groups are really interested in water quality, which are interested in quantity, which are interested in both, and which in neither?
- How are watershed efforts prioritized (e.g., wetland protection, river protection)?
- Process: Difficult to crunch this amount of data and material into a two-hour meeting.
- Transparency of all data, needing correspondence.

Discussion about themes re water quality & quantity:

Q: Are there other ways to bring down water temp besides shade and log jams?

A: Ian Smith responded: channel morphology, in winter channels move a lot. Hard to establish forests. Log jams can help stabilize gravel bars. It's easier to do on tributaries. Black Slough restoration efforts have been very effective – it's now a cold water input into the river. Re data: Total daily maximum load (TDML) report presents data re water temp and quality issues. (see report on website) Summer temps are a well-defined issue. Not aware of fecal coliform issues on S. Fork. We are talking about columnaris which kills pre-smolt during high temp periods in the summer.

Q: Can anyone address the practicality of lowering stream temps in S. Fork Valley and can this lower river temp? Is there research on this?

A: Oliver Grah responded: Have been collaborating with US EPA. Two reports were just released today re quantitative impacts of temp on the river and how to address those impacts through restoration.

(see reports on website)
Q: How much did work on Black Slough result in decreases in river temp? Want some insight that isn't just speculation or personal opinion. Are there numbers?
A: Yes, that is addressed in the two reports just mentioned. It's complicated and beyond what we can focus on here. The docs evaluate how much riparian shading is needed to bring river into compliance.
Q: Clarify whether or not fecal coliform is an issue.
A: Susan Dickerson-Lange responded: S. Fork Nooksack is on the 303D Clean Water Act List for temp and fine sediment regulatory exceedances. Temp plays into columnaris. Fecal coliform is a different bacteria issue, hasn't been studied as much. Data from one year suggest elevated levels but don't have much info.
Q: What about global warming? We haven't seen snow on Wickersham Mtn. on June 15 in years. Losing glaciers on the Sisters. That's what cools the river. Shade isn't going to help. Need snowpack there all summer.
A: Bob Mitchell responded: You're correct re global warming. The only tool we have to figure out how the river will respond is modeling. Have been studying this for years. We will have reduced snow pack, maybe 50% reduction in 25 years. Less stream buffering, elevated temps. Looking at models to predict that. As snowline goes up, even if precipitation doesn't change, there will be more rain than snow, increased saturation, landslides, sediment in the river. These are ramifications of climate change.

Comment: S. Fork is having adverse reaction from lack of sediment removal from Nooksack. There were three sediment removal areas in lower Nooksack and now there are none. Heard the sediment was backed up to Deming. We could be proactive about having ongoing sediment removal on the lower Nooksack.

4. Review edited *Goals, Principles, and Objectives,* from our last meeting

The facilitator read each bulleted statement and asked participants to confirm that it was a goal or principle for watershed planning. Participants were given red, yellow, and green cards to indicate their level of agreement: green (G) = agree; yellow (Y) = some hesitation, red (R) = disagree. The number of yellow and red cards that were raised for each goal are reported here, along with additional comments.

Goals and Principles

1) Keep the rural way of life as we know it today and protect it for our children. **(1 Y)**

2) Avoid overregulation and lack of management coordination. **(14 Y)**

Comments: What does over-regulation mean? Pretty vague. One person's over regulation is appropriate for another. Wording could say "Avoid *unnecessary* [still subjective] regulation & increase management coordination"

3) Recover salmon populations and biodiversity by restoring river, wetlands, & riparian habitat. **(7 Y)**

Comments: Global warming -- Can do all the management we want but if there isn't cold water

coming from above, we won't fix the problem, it's nowhere near enough.

4) Reduce stream temperatures and ensure adequate stream flows in the summer. **(7 Y)**

5) Maintain and protect the agricultural land base, promote long-term agricultural economic viability **(1 Y)**

Comments: Is ag ultimately the way we want to go? Might need to give some up.

6) Maintain and protect the forestland base, and promote a sustainable forest industry with a skilled and steady local workforce. **(4 Y)**

Comments: Seems evident that the definition of "sustainable forestry" is a sticky wicket. Believes that clear cutting will go the direction of SW Oregon, which is wholesale forest death – drying out, disease, fire. That is one of the most important questions we could address as a group – what is forestry and what's de-forestry? Could determine by examples that have been set around the country, what sustainable forestry is.

7) Improve public access to and appropriate management of the river, parks, and public land for recreation. **(17 Y; 4 R)**

Comments: A lot of people have a problem with improving public access to the river being a goal.

The word "appropriate" should modify the whole sentence and not just the second clause.

Don't want to expand public access. If you want to float the river there are places to do that. What is the definition of "public access?" Need more info about where it's appropriate to leave car and go to river.

Some like the idea of permitting. It's restrictive and also an opportunity to educate people about appropriate behavior. People should have to earn permit through education. Could funds raised by permitting come back to improve projects on the river (e.g., restrooms, garbage disposal)?

Too many ideas in this one statement.

8) Improve public safety and water quality by addressing risks from landslides, fire, flooding, pipelines, and transportation. **(11 Y; 1 R)**

Comments: If you live in avalanche shoot, expect to be buried (metaphor). The hillsides in the S.Fork have been sliding from long before humans were here. Move.

Yes, landslides are a risk for people, but they also push sediment into river.

Facilitator asked if people would change cards to green if we took "landslides" out. Result was 14 Y.

9) Coordinate projects to ensure tax dollars are spent wisely and create opportunities that align with community interests. **(3 Y; 1 R)**

Comments: This is way out of the scope for what's realistic for this group. Getting involved in

things directly related to politics is foolish compared to other priorities that are here.

There's a variety of community interests. Making a change for one group could create a problem for another. Ambiguous statement

10) Build cooperative, voluntary agreements with landowners and community partners. **(6 Y)**

Comments: Need to add: "...to increase the health of the Nooksack" to end of statement.

Raises questions about how everyone's needs will be weighted and met?

11) Respect the ability and knowledge of local residents to manage land and water resources wisely. **(1 Y)**

Comments: It's got to be balanced with science.

This is why I'm here. There is incredible wisdom here about these issues. The people who live here will be the best ambassadors to find solutions and help other people understand our concerns.

Planning Objectives

The group reviewed each of the 2017-18 Planning Objectives and used the colored cards to indicate whether they felt each was a reasonable objective within the next year.

1) Build a framework for open community dialogue and education around land management decisions, planning, and funding. **(3 Y)**

2) Evaluate a range of approaches to reduce flood risk and increase floodwater storage, while ensuring the protection and maintenance of critical infrastructure. **(3 Y; 1 R)**

Comments: Trying to control floodwater would be an absolute waste of money. Our floods are in a short time window. Not even 12 hours later the water is all gone.

People are trying to protect their land by building up the banks. The flooding can be good because it brings sediment to the land.

I see very few if any opportunities to try to control floodwater for storage, esp. in the lower reach. Seems like a difficult proposition.

If we could change it to create more wetlands, that does address the issue of creating floodwater storage which is reasonable.

If we are interested in salmon and recharge, we should be increasing flooding.

What about victims of flooding?

Can't have everything. The more we limit flooding, the more we create other problems. Need feasibility studies.

3) Evaluate water uses, needs, and rights in the valley and develop local solutions to optimize benefits for humans and fish. **(7 Y; 2 R)**

Comments: This is already being done for ag by the EPA. We have land we can't irrigate because

they say we don't have water rights. The only way we're going to come to agreement is if we as a farming community give up water rights to someone else. Only reason we have them is because we've been in valley before other people.

There are good opportunities for solutions on the ag side. There is a legal umbrella through the trust system that can support ag uses. This will be addressed in future meetings.

4) Provide public education on topics such as sustainable and viable agriculture, forestry and fisheries, and community emergency response. **(5 Y)**

Comments: Is education needed and is this an appropriate group to provide it?

The topics are OK, but some are nebulous. Would love to see education start as something similar to what Susan brought us today, perhaps in different format. Would like to know all the resources out there. Have presentations and open Q&A. Benefit from experts' work. Would change this statement to include some of this instead of some of the other topics.

It's really a multi-disciplinary effort. Caution the group not to think of it unilaterally. Bring in experts who work on topics other than the watershed. Risk is that our friends become resident experts when we operate in a small group. It's helpful to draw from other disciplines.

5. Wrap up

Everyone will get a summary of what others wrote down on their sheets.

Because of snowstorm, 3rd and 4th meetings have been rescheduled for March 8, March 29. Everyone will receive meeting notes next week, and another info packet before the March 8 meeting. That meeting will focus on water rights if the group doesn't object. At the final meeting on March 29, we will look at the Watershed Conservation Plan and discuss the future of this group.

"Parking Lot" for other issues

- Make sure concerns from the first meeting are addressed re transparency of all communications related to the formation of this process, i.e. emails, grants, planning team minutes
- Ag & Forestry represented on planning team
- Climate Change
- Copy of grant award

Need more information

- Impacts of Skookum Hatchery on water quality
- Tubers' impact on water quality
- How much do restoration projects like Black Slough affect river temperature?
- Where is public access to river?
- WA State Water Trust
- What resources are out there?

INPUT WORKSHEETS – WRITTEN FEEDBACK FROM PARTICIPANTS 2.22.17

Process

1. **Do you have any remaining questions or concerns about the process? Any suggestions?**

- What is the Community Watershed Frame work" vs. the "Watershed Conservation Plan"? Are they related? Will we get Oliver's PowerPoint? Cam we get Susan's project on Nooksack Hydrologic Model? Can we get all relevant reports, data etc. posted on website in one spot? CEPA, WADOE, Tribal Hydrologic Model Projections for Climate.
- Good process-it'll take *time* for everyone to get on board! Print out a list of resources and contacts for those who want transparency.
- Public access-goal-more support of regce, too many goals-should be 3 to 5 objectives for group.
- How can we achieve transparency and move on?
- Maybe answered yet-I'm interested in mechanisms in place related to facing ongoing stress on watershed.
- Manage public recreation to appropriately balance recreation access and protection of the ecology of the South Fork Valley.
- The challenge of getting everyone to the table no Lummi Nation or railroad, or Dept. of Transportation WA.
- What is being done downstream to improve salmon habitat? How many salmon are being taken out of the river? Why create habitat for fish that will not make it up the river?
- No
- Not at this time
- Can the BIA Grant application be released to this group? Personally, I don't really need it, but releasing it might sooth some other folks concerns.
- In order to protect Chinook, all fishing should be stopped in order to allow the fisheries to recoup. I'm still not comfortable with the process of how the lists are pared down. I agree with the gentleman who expressed his concern about transparency issues.
- It's almost impossible to have a group this big get something concrete done, especially with consensus.
- No

WATER QUALITY AND QUANTITY

1. **What have you noticed about how water quality and/quantity has changed over the years? (changes you have noticed in the river, creeks or in your work-irrigating, drilling wells etc.)**

- River seems to be an even grade where as it use to have more rapids an deeper holes at log jams logjams are gone. Over all the river is close to the same depth.

- Lower summer flows, faster winter flows.
- Major decrease in quantity, less salmon, temp. increase.
- How does cesspools affect the watershed?
- Garbage, bottles, defecation from tubers, tubers stepping on/disturbing red beds, property rights.
- Low flow in summer, increased temp. in the summer, prolonged low flow/high temp. (number of days increasing), channel migration continues to scour vegetation, transported bed load (gravels, sediment).
- What does flood data say about frequency of flooding over past 20, 50 yrs.?
- Are there concrete goals we could aim for? % or #? wetland areas (acres), upland tree cover (acres), ground water storage, fecal bacteria level.
- We have a creek (from a spring) that was changed by illegal bulldozer work, it dries up now where it ran year around before. Nice presentation by Susan-summed it up nicely. Nothing new for me though.
- Lower volume in summer.
- The weather seems to go in patterns, warmer wetter weather, 2016- had the vest grass productivity & then gain on feeder's year. It now floods in different parts of the valley then it use to.
- More gravel, less fish, more recreation, not as deep holes. S. Fork no glacier melt increased temp. Riparian forests are returning-takes a long time, many more stream suffers exist on fish & non-fish water.
- Smaller flows in the summer. About the goals-rather than "improve" public access, how about "define & provide limited" access?
- And put the "appropriate management" issue in another bullet point.
- Years ago our family used to indicate the severity of the winter by how long the snow lasted on Wickersham Mt. It used to have snow on it the 4th of July. WE haven't seen snow past May 15th foe several years. Snow on the west side of the Twin Sisters is disappearing rapidly. It will only be a couple years until the snow is gone. Lack of snow will only decrease water flow and increase water temp.
- Haven't really noticed but looking at graphs of water temps. They're going up and appear to be continuing. I also think the later summer tubing crowd has to make a difference on the water quality/fish reds (sp?) but don't imagine any quantitative research has been done.

2. What are your biggest concerns about water quantity and/or water quality?

- Striking a balance and cooperation between agricultural needs and effects, salmon environmental needs, recreational impacts, logging and mineral extraction effects and governmental regulations and support. To guarantee water quality and availability.
- Need big wood in sharp bonds in river to create deep holes to help cool water, limit or end tubing on river-permitting to cover cost of program, restrict netting on the hole length of Nooksack River.

- Peak flow ground water saturation (winter), potential for landslides, more and more people (growing population) but not more water, land trees, ag. Land.
- Salmon impact.
- How is hatchery coliform greater than cesspools?
- Can we get more detailed information presented specifically, what estimates are available that indicate the contribution by various sectors on sedimentation of water, temp. increases, who, where, how much?
- Temperature, low flow, domestic and agriculture water rights are protected, do not feel restriction of water use will address low flow issues.
- How engineered log jams affect downstream channels.
- Water Temperature.
- Tubing-limits/permits-education
- Fecal coliform-any source-not so much affects, columnaris affects salmon in high temps.
- Without intervention water quality and quantity, in general and seasonally in critical ways will continue to deteriorate.
- Plenty of water, so also makes sense to try and keep it as clear as possible. Don't improve public access.
- Less recreation, more regulation as well as fishing regulation.
- Quan-equitable withdrawals & instream flows, Qual-temp.
- Water flows and temperature, domestic well water availability, flooding.
- My family use to (prior to the 1960's) install log jams in the river to help protect the farm from erosion, these log jams cost only a couple hundred and prevented erosion as well as provide habitat. Why not ask some of the oldtimers now to construct these log jams (at little cost)? Laying blame on forest landowners concerning water temp. & quality is short sighted. *This should include all commercial fishing. With less snow on the twins, water is getting warmer faster.
- Just that each entity (farms, forest, fish and private wells) has enough but also concerning farms and private wells are using water efficiently.
- Increased public use, climate change is the major factor less water.

3. What questions do you have about water quantity and water quality? What information is needed?

- Actual real data that spans several decades to see the trend.
- Who's doing the testing? What can we do to help w either quality or quantity?
- Global warming has a lot to do with issues in the SNF. Unfortunately, the only solution may be able to let the salmon runs die out and reintroduce them when we get global warming under control.
- Are the aquafers losing quantity & lowering? Or not?
- Since the S.Fork is not glacier fed and if the climate continues to warm-is there really a potential for decreased temp.

- Why can't we take gravel off the river bar to reduce the sediment.
- How do you balance the decision making who sets what they want?
- What interest groups are interested in water quality? Water quantity? Both?
- How are landslides beneficial?
- Historic temp. data available for upper Nooksack or main creeks?
- Can we get more scientific info. presented in easy to learn terms. Perhaps address specific ideas people have w/data. Also point people to more data & resources to self-study.
- Does the increase temp. support more algae growth in the summer?
- Low flows in relationship to channel morphology vs water use.
- Does sewer treatment have an impact on fecal coliform. Can homeless camps cause a point of quality issue. Are algae blooms in the river a result of both temp. increase and bacterial increase, or primarily just bacterial increase? How much impact on low water flows might be avoided by the moratorium on well drilling? What other uses might be effectively curtailed to positively impact the river?
- Impacts of water allocation/use? How tributaries play into this? How do we address climate change in this process? Threats? (exotic species) change in snow pack, (hydrologic model changes) etc. Mass wasting

Goals, Principals and Objectives

1. **How comfortable are you with the DRAFT goals, Principals and Objectives?**

Totals

Very Comfortable.....2

Reasonably Comfortable-close enough.....10

- Many good general principals if you don't get too hung up on language. Most bullet points are overly vague & subject to interpretation. We really each need to consider our individual lifestyles, consumption, etc. We live in a luxury compared to most of the world. We need to seriously assess the impacts of our individual lifestyles (excess consumerism, energy use, population growth) which affect water wildlife, vegetation, soils, air....

I can live with it as-is but would prefer this change: 5

- Add goal regarding watershed education, add goal about science-informed decision making.
- Statements include too many ideas. Need to simplify ideas.
- Needs detail
- The comments made during the card session.

- Get everyone involved!
- Salmon populations may not be recoverable until stream temps. And quality can be addressed.

I disagree strongly with some language and here is my suggested alternative 1

- I am going to email my suggestions

COLORED CARD SYSTEM FOR DETERMING LEVEL OF AGREEMENT

Totals

I like this approach.....5

It was okay....I can work with this approach.....11

- Takes too long

This approach did not work for me and here is my suggestion for improvement: 1

- I have no improvements except maybe group prioritize their suggestion. It made me feel like I was in kindergarten.

Statement without marking a box.....1

- Depends on outcomes-I think the goals many of them need to be reworded.

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

- I think the meeting was run well. I felt I spoke more then was my right but I had views others didn't present.
- Obviously trust is still an issue-extremely important to maintain good notes for reference & transparency
- Good open discussion.
- How to solve the problem the handful of people who want to obstruct the process.
- Well done. Have the computer ready. Take Pictures of sticky notes & other wall boards to help record them.
- More orderly than last meeting.
- I liked have some local experts. I see a lot more agreement than people see to admit.
- More time.
- Lost opportunity to present detailed info. on water quality and quantity.

- The technical info that was provided.
- I appreciate the “ologists” speaking to help clear up questions & give scientific info.