

Meeting Minutes Nisqually River Council Meeting April 20, 2018 Billy Frank Jr. Nisqually National Wildlife Refuge Information: 360.438.8715

Attendees: Council Members:

Dan Calvert – Puget Sound Partnership Molly Carmody – City of Yelm Amy Cruver – Pierce County Council Matt Curtis – WDFW

Citizens Advisory Committee Members:

Howard Glastetter Ed Kenney Fred Michelson

Guests:

Celinda Adair – Thurston County Roger Andrascik – NLT & NSS Liz Bockstiegel – WDFW Chris Ellings – Nisqually Indian Tribe JW Foster – City of Yelm Craig Higbee – DNR

Staff:

Justin Hall – NRF Joe Kane – Nisqually Land Trust Gary Edwards – Thurston Co. Commission Amber Martens – JBLM David Troutt, chair – Nisqually Indian Tribe

Robert Smith Lois Ward

Daniel Hull – Nisqually Reach Nature Ctr. Emmett O'Connell – NWIFC Etsuko Reistroffer – NLT & NSS Jim Reistroffer – NLT & NSS Ashley Von Essen – Nisqually Indian Tribe

Emily McCartan – NRF Sheila Wilson – NRF

1. Call to Order, Introductions, Approval of Minutes and Agenda

David called the meeting to order at 9:06. It was moved and seconded to approve the minutes from the previous meeting. The minutes were approved, as was the agenda for the day.

2. Committee Reports and Updates Advisory Committee Reports

Citizens Advisory Committee – Lois Ward

• The CAC members discussed the role of the CAC in the NRC, and are looking for guidance in how best to bring forward issues and continue having a voice in what's going on. The CAC chair plans to discuss with NRC leadership to develop some of those ideas. The CAC noted several successes on recent issues: advocating for Conservation Futures funding not being diverted to pocket gopher mitigation at the expense of other conservation needs; Yelm's improved wastewater management system; and greater awareness of ongoing concerns about non-native salmon net pens, RAP storage, and flood control at Alder Dam.

- Nisqually Land Trust Associate Director Kim Bredensteiner will be coming to the next CAC meeting to provide an overview of NLT properties and operations, by request.
- The CAC also formulated a number of questions to Tacoma Power about the operation of Alder Dam and possible flood hazard protections. The questions were sent to Tacoma Power and circulated to the NRC as FYI, and the CAC looks forward to learning from TPU's responses at a future meeting.
- The CAC will take nominations for new officers at next month's meeting and will hold elections in June.

Chair Report – David Troutt

- David noted the questions generated by the CAC and other NRC members for TPU to address, following on from their presentation to the NRC in November. We are thinking about setting up an entire meeting as a workshop with experts from TPU and other agencies so we can all have a common understanding of the operation. David noted that the goal from these discussions is not to necessarily reach unanimous consensus, but to understand how everything they do is connected to something else. Every decision has risks and benefits in different areas. It may be difficult for all of us to agree on every decision, but we want us all to understand how they're made it's a very complicated operation. To the extent we can suggest changes, TPU will be open to evaluating and discussing them. David thanked the CAC for raising the issue and allowing us to tee this up in a collaborative way with our partner in TPU.
- David has been working intensely on North of Falcon salmon pre-season fisheries planning this month. They reached agreement a day early, which hasn't happened in a long time. He believes the outcome reached is a positive one for the Nisqually Indian Tribe and from a watershed perspective. The fishing seasons are respectful of tribe and resource and will put fish back in the Nisqually River, forward recovery efforts, and protect steelhead, chum, and all fisheries. There is also a developing alliance forming between the tribes and other Puget Sound user groups (charter boat operators, etc.) around salmon recovery, and an understanding that more fish is ultimately everyone's goal. Hoping for these alliances to make a difference going into next big leg session. David acknowledged the NWIFC for taking a big lead on PR and organizing, which is much appreciated.
- The I-5 project is now in the planning stage. The Legislature allocated \$0.5 million this year as a down payment on the study, and stakeholders have until November to develop a plan for the rest of the funding to be included in the next budget.
- David is also working on the watershed planning process, with a February deadline for the Nisqually to stay at the front of the line for funding. Many of you will see letters from David in the next week inviting agencies to an initial meeting. There are two parts to the planning efforts: one around *Hirst* issue, mitigating potential impacts of exempt wells, and the other on *Foster*. JW stated that Yelm is submitting its initial *Foster* program to Ecology as a potential pilot program.

Staff Report – Emily McCartan

- WDFW is applying for an RCO grant to upgrade the 6th Avenue water access site. They've asked the NRC to write a letter of support. It is a State Lands Development and Renovation Grant within the Washington Wildlife and Recreation Program, and would remove cottonwoods, replant with native species, and upgrade facilities for better A.D.A. accessibility, signage, and safety. By consensus, Council members agreed to send a letter. David noted that it would be great to see the site named for Terry Turner, who worked with the NRC for many years and was a big advocate for cleaning up 6th Avenue.
- The Nisqually River Cleanup is tomorrow! It's being organized by Greg Provenzano, an amazing volunteer with the Washington Kayak Club, Recreational River Runners, and Paddle Trails. There are about 55 people signed up so far. Emily and Sheila have been providing support and will be there with Stream Stewards to help out on land.
- The work group for the NWSP status report has worked through all of the indicators to identify likely data sources, and Emily is now in the research and drafting phase.

Thurston County Nisqually Subarea Plan - Celinda Adair

- Celinda distributed postcards to sign up for email updates for anyone not already
 receiving them. She also passed out handouts on the timeline for the asphalt recycling
 consultant review process, including opportunities for public involvement (available
 at http://www.co.thurston.wa.us/planning/comp-plan/comp-plan-docket-cpa-item-11-timeline.htm and http://www.co.thurston.wa.us/planning/comp-plan/comp-plan-docket-cpa-item-11-timeline.htm and http://www.co.thurston.wa.us/planning/comp-plan/comp-plan-docket-cpa-item-11-timeline.htm and http://www.co.thurston.wa.us/planning/comp-plan/comp-plan-docket-cpa-item-11-timeline.htm and http://www.co.thurston.wa.us/planning/comp-plan/comp-plan/comp-plan-docket-cpa-item-11-berrera.htm).
- A survey on the Subarea Plan will be available soon. Celinda encouraged everyone to offer feedback and help pass it along to others in the community. Feedback received so far has been very helpful on topics including JBLM, aquatic reserves, and cultural resources. Currently it doesn't look like much will change in terms of land use, other than cleaning up some split-zoned parcels. Celinda will be contacting people about serving on the Community Work Group soon. The CWG is a chance to get early feedback so they know what questions the community has and how best to address them, and everything discussed will go out to the public and planning commission for further rounds of public hearings and review.

Allied Program Reports

Nisqually Land Trust – Joe Kane

- The NLT has had a busy month with changes in the board (outgoing president JW Foster, new president Brian Sullivan, new treasurer Suzanne Nelson, and new board member Anne Harry). Cris Peck is leaving the Land Trust on June 1 to become a sea kayak guide with Sam Kaviar's new ecotourism outfit, Kayak Nisqually. NLT is deciding how to fill and/or redefine his position. The annual dinner and auction last month was a great success, largest number of attendees ever and the second-highest total raised. Thanks to all who participated and helped make it a great evening.
- NLT signed two purchase and sale agreements yesterday. The marine conservation initiative is moving along, working on closure on Anderson Island. Three major coastal wetlands projects have upcoming applications. Three active agreements on river: 60 acres on Powell Creek (Spooner's property, will come up as a Salmon Recovery proposal); Brighton Creek property with an agreement with the Buddhist

Priory to donate part of the parcel; and the confluence of Ohop and 25-Mile Creek adjoining Northwest Trek and Upper Ohop property, closing in the next 3 months.

- NLT purchased 640 acres as the final portion of phase 1 of the Community Forest (headwaters of south fork of the Busywild). Secured a \$750,000 loan from the Conservation Fund at the 11th hour at a good rate; if the NLT hadn't been able to purchase it, it would have gone to commercial, not as friendly for salmon. The Nisqually's reputation made the Conservation Fund interested in the project, which helped a lot. The Community Forest will plan to organize a trip to the property in July. The next public meeting for the Community Forest is in Ashford on June 12.
- Joe and the executive directors of the South Sound Community Farm Land Trust and Capital Land Trust met with the Thurston County commissioners recently to talk about Conservation Futures. It was a full and frank discussion the directors heard what the commissioners are up against, and the commissioners heard the directors' concerns. Gary noted that funding has come in recently and has been freed up for Conservation Futures.
- City of Yelm is submitting a proposal to Washington Wildlife and Recreation Program for the first phase of the Prairie Line Trail extension, with the long-term goal of extending it to the river and Roy. It would be the only trail connection between Thurston and Pierce trails.
- Joe requested a letter of support from the NRC for the Busywild purchase. Emily will work with NLT to draft and circulate a letter in the next week.

Nisqually River Education Project – Sheila Wilson

- Student GREEN Congress happened on March 22, and was the biggest ever with 505 students. Sheila and Brandon have started Eye on Nature field trips with partners (BFJNNWR, NRNC). Kids are enthusiastic in spite of the cold and wet. Nearshore field trips start next week, with total of 650 students coming out over 8 days in groups of 100. If you're interested in volunteering, let Sheila know. Classes have also been pulling invasives with Charley on NLT property along Red Salmon Creek.
- Shelia is planning for Summer Teacher Institute, on the third of three years of a NOAA grant on climate resiliency. If your organization has initiatives on sea level rise or climate change that you'd like to share with teachers, let Sheila know they are a great audience for this information. Planning is also underway for 2018's Nisqually Stream Stewards program. The Nisqually Tribe's AmeriCorps crew are the first participants signed up.

Nisqually River Foundation – Justin Hall

Foundation staff took toured Alder Dam and powerhouse with TPU this month. We can work on setting up another one at some point if there is interest from CAC and NRC members. Justin is working on NEP grant reports on ecosystem services and Community Forest projects. He is also continuing to work with Wilcox Farms about restoration and setting back the dikes on their property. Jim Wilcox was interviewed on OPB this week talking about the project. The Foundation is finalizing details of the Evans Event to honor Jim Wilcox at the farm this summer.

Community Forest – Justin Hall

Community Forest is planning its first harvest this summer with Northwest Natural Resource Group. The adjacent NLT lands have already been harvested in a similar way, which is a great example of the before and after – healthier forests after harvesting because of how overstocked they are. Justin and Joe will attend the NW Community Forest Coalition in Astoria next month. There will be a presentation on VELMA and Nisqually. Justin's public policy team for AgForestry is doing a project on community forests.

Salmon Recovery - Chris Ellings

- The Salmon Recovery team has presented a draft of the updated Salmon Habitat Action Plan and ranking strategy to the Nisqually Salmon Habitat Work Group for initial comments. The action plan combines draft steelhead recovery plan elements and updated Chinook habitat models, organized around major initiatives with related projects under them. Some initiatives are huge (like restoring sediment delivery and distribution - billions of dollars and decades-long process). Others are more immediately feasible. Initiatives and projects will be tiered based on their impact on salmon population parameters, using the best science we have. The goal is to keep reporting simple and intuitive via pie charts that show how much progress we've made towards a goal. For example, the plan will eventually establish a goal for what percentage of the Nisqually floodplain should be protected, and the Action Plan report will show via a pie chart how much is currently protected and how much is left to go. This kind of impact statement that literally shows how the needle moves is important for federal funding justifications. The NRC, as the policy body for the Nisqually salmon recovery effort, has a major role to play in developing this plan. Chris hopes to hold a workshop with the NRC and CAC to discuss feasibility and set target goals for restoration initiatives. This then will be our new action plan that will guide our work for the foreseeable future.
- Ashley and Chris have secured funding to evaluate the status of riparian restoration work from the last 20 years, and will be visiting planting sites to evaluate the status and assess what might need to be revisited. There will be a work plan for the native plant crew eventually.
- Tracking the early marine survival of juvenile steelhead has been going on for several years with Long Live the Kings. Juveniles are tagged with transmitters and receivers are set on pilings in the rivers and throughout the Sound. Adults tagged 2-3 years ago are starting to come back, showing strong, back-from-the-brink numbers. That corresponds with some of the highest early marine survival levels recorded with this technology, and the data helps unravel the story about why. The year these fish left had the largest number of anchovies in the Sound, and observations showed predators chasing anchovies in bays instead of steelhead, suggesting that as predators moved off the main steelhead migration route and resulted in this year's larger returns. The current receivers will need to be replaced after this year, and Chris would really like to see that happen so we can continue collecting this essential monitoring data. Chris also noted that the reason Nisqually steelhead survived the really low years in the 1990s and 2000s is because of all the work we've done in the watershed to restore habitat that enabled them to hold on and recover now. Expect to see around 2,000

steelhead in the watershed – survey crews found 10 redds in Yelm Creek alone, which is not even primary steelhead habitat.

- Molly asked if the habitat action plan initiatives would involve measures like encouraging local governments to ban plastics, something she is working on in Yelm. Chris suggested that would fit in well with the NWSP planning work overall, and David noted that water quality (plastics, fire retardant) could be a limiting factor for steelhead recovery.
- Gary asked if the Salmon Recovery folks are communicating with county public works on culvert replacement projects. Chris said they have alerted SPSSEG and other project sponsors to the resource. David noted that it's a key part of habitat protection. The Tribes' case against Washington in culvert removal was heard in the Supreme Court on Wednesday. The transcript and tape are interesting reading and available online:

https://www.supremecourt.gov/oral_arguments/argument_transcripts/2017/17-269_075q.pdf.

3. Forest Fertilization: Rationale, Methods and Water Quality Response

Bob Bilby, Senior Scientist, Weyerhaeuser Co.

Presentation Link: <u>https://www.slideshare.net/secret/83re1sF6T8jrci</u> Bob received his Ph.D in Ecology from Cornell University and has been a scientist at

Bob received his Ph.D in Ecology from Cornell University and has been a scientist at Weyerhaueser since 1980. He has published extensive research on stream ecology, forestry, and impacts of habitat on salmon populations. His presentation today discusses why and how forest land is fertilized, the science on the water quality response to fertilization, and a comprehensive look at the nutrient situation in Puget Sound and the options for controlling them.

Forest fertilization became a concern in the 1970s after the passage of the Clean Water Act. Numerous studies were established in WA, OR, and BC through 1990s, summarized in a conference convened at the UW in 1992, which produced a book that remains the scientific standard. There has been less research on fertilization in the last 20 years, with the notable exception of Hood Canal.

Nitrogen cycling in forests begins with nitrogen entering the forest system. There are three major input sources: precipitation/atmospheric deposition (a small amount); nitrogen fixation by microbes which alter atmospheric nitrogen into forms available to plants (the most significant source); and fertilization. Once in the system, nitrogen cycles between soil, forest floor, and vegetation by various processes (uptake from the soil by vegetation; translocation, when trees remove nitrogen from dying needles and allocate it to growing wood; litterfall; and mineralization). Some losses occur from the system, which are the concerns for water quality: nitrogen may leach into groundwater, or be released back into the atmosphere by microorganisms that turn nitrate back into nitrogen gas (denitrification).

Why fertilize? Fertilizing grows more wood and helps maintain site productivity by replacing the nitrogen lost from the system when wood is harvested (mature wood has low nitrogen concentrations, but the amount removed in logging adds up.) Initially, fertilizer increases needle density, giving trees more capacity to take in CO2 and increase wood production.

Fertilizer is applied via helicopter as urea prills (small dried pellets, half carbon and half nitrogen by weight). It's only applied to nitrogen-deficient stands - many stands aren't fertilized because they likely won't respond. Weyerhaeuser did a lot of research into what sites are likely to respond, leading to a substantial reduction in fertilizing. Fertilizer is applied in the wet season (November-April), otherwise it just evaporates. The prill dissolves on wet ground and is quickly turned into ammonia by microbes, then into nitrite and nitrate (the forms biologically available to plants.)

All surface water is buffered, meaning the helicopter can't come closer than 45-50m to stream channels, per science-based DNR guidance. An extensive study in the 1990s to determined that urea, ammonia, and nitrate concentrations in waterways were effectively controlled with buffers. The helicopter flight paths are controlled by LIDAR and GPS input that adjust buffers based on current wind conditions.

A UW study done at Hood Canal 8-10 years ago applied fertilizer at a high rate (224kg/ha) and studied how much nitrogen was retained in vegetation and surface soils and how much leached below 30cm (the depth of most roots for Douglas fir and other species). It found that almost no leaching occurred during the summer until soils were rewetted in the fall, following the same pattern as the unfertilized control areas. Only 2% of the applied nitrogen moved deep enough to get below roots and into streams

There have been numerous studies on stream response to nitrogen fertilizer application. Immediately after application, streams show a spike lasting about a week, then an ammonia spike about a week later. Increase in nitrates usually shows up 3 weeks to 1 month after application and can last up to a year at small but detectable levels. Stream inputs come from surface washing of nitrogen, and some that gets into deeper groundwater layers. Gary asked if this changes on steeper ground with less soil depth; Bob replied that it's fairly consistent, as are root depths.

Most studies show that the rates of fertilizer nitrogen lost to stream runoff is fairly low – 1-2% or less. The exceptions come from studies in BC where fertilizer was applied on top of snowpack, which migrated directly into the stream. That's no longer done. Experiments across the country on nitrogen dynamics in streams (using heavy N isotopes to allow identification) tracked how much got into the biosphere in various settings and found a gradual decline in concentration in water as it goes downstream. Uptake gives us the opportunity to manage excess nutrients in watersheds.

In the South Sound Deschutes River, studies show that forests are stingy with nitrogen – concentrations are low below forest lands. Other landscapes are less so and more runoff shows up downstream from other nitrogen sources. Study of Willamette basin showed streams had higher nitrate concentrations in urban and agricultural (5x higher than forest). Uptake of nitrogen was also lower in forest than in urban and rural landscapes. Part of that reason is corn, pasture, lawn, other crops are usually fertilized annually, while forests are fertilized on average 3 times in a 45 year rotation. Forest applications are less concentrated as well.

PNW stream nutrient dynamics come from human sources (septic, sewage, industrial releases, fertilizer) and natural sources (precipitation, nitrogen fixation [most significant source in most of PNW] and salmon [most significant for some streams, including Griffin Creek and Kennedy Creek]). The biggest source of nitrogen in most streams is from nitrogen fixation from red alder. Studies in Hood Canal and other areas show that proportion of red alder was the main driver of nitrogen concentration in a watershed. A dense stand can produce 100-200kg N/ha/year. The vast majority of nitrogen in Hood Canal is from ocean, not watershed. Of the non-marine sources, 50% is from red alder, even in Lynch Cove where there is a much higher impact from human activities. Chum salmon spawning and fertilizer application times line up with the spikes in nitrogen, accounted for in the "background" level of nitrogen.

This doesn't mean that red alder or salmon spawning is bad. Nutrient management is very complicated because so many sources contribute. Productivity in aquatic habitats depends on appropriate availability of nutrients – some reaches have not enough nutrients, some have too much. Lack of nutrients is a significant factor in restoration - salmon tossing is a nutrient program (salmon carcasses are 3% nitrogen). There are various measures we can use to reduce excess nutrients. Buffers help reduce fertilizer runoff in agricultural use as well as in forestry. In addition, once nitrogen gets into stream channels, it's possible to create conditions that promote vegetation taking it up and releasing it to the atmosphere. Nitrogen spiraling length is how far a molecule travels downstream before removed from the stream. Daytime uptake at agricultural sites open to the sun can be very high (less at night, because of algae photosynthesis). Urban streams show almost all nitrogen taken up immediately, in locations with slow water flow, very dense plant production (urban wetlands, floodplain ponds, flow below stream surface). These habitats are very important for supporting coho and Chinook. Habitats in the Puget lowlands are the most impacted by human activity - this data on denitrification in urban wetlands is an opportunity to incorporate into habitat restoration plans.

Questions

- Fred stated his concerns about the effectiveness of buffering in windy and steep terrain, and asked if 50m was enough to avoid streams with maneuverability and weather factors.
 - Flight paths are hard-wired into the helicopters used and account for wind conditions as needed in the buffering. The effective buffering distance has been well-studied. Bob also noted that because fertilizer is only applied to nitrogen-deficient stands, the streams in those areas are also generally nitrogen deficient (some of the lowest concentrations of nitrogen ever). High nitrogen is an issue in most watersheds, but in the lowlands, not the headwaters. The challenge is how to get nutrients where they're needed and not concentrated where they aren't.
- Amber asked if all streams are buffered?
 - They are now, starting in the late 1980s. Smaller streams may not have been before then.
- Sheila asked how much nitrogen input comes through precipitation?
 - Concentration tends to be quite low micrograms per liter. But that is counterbalanced by the fact that we get lots of precipitation here, which can make it an especially important factor in high alpine systems. It was a bigger issue in streams in the Northeast, around acid rain era with coal combustion.

- Fred asked why fertilize instead of increasing rotation? Natural forests grow huge trees without application of nitrogen.
 - Would need a forestry economics expert to come and address that. It's a major investment to get a stand established, and the rotation is based on the window needed to recoup that investment.
- Gary asked if there was a baseline for areas above human occupation and activity. Nitrogen testing stations are lower down the rivers, is there data about the "natural" state higher upstream?
 - It's hard to establish a natural baseline with nitrogen because there is so much natural variability that any baseline definition has to be site-specific. In Deschutes, above the Falls, the only information is from studies Bob did back in the 1980s showing that the entire upper watershed is very nitrogen deficient. An effort in the 1970s to establish baselines around the region showed that about half of water samples were nitrogen- or phosphorus-limited, but again the natural variation makes that difficult. It's also not possible to isolate natural vs. human sources of nitrogen based on isotopes, because fertilizer is usually the same isotope present from natural sources (generated by alder etc.) Creating fertilizer with a different isotope would be prohibitively expensive. Heavier forms of nitrogen usually come from marine sources (salmon).
- Sheila noted that South Sound Green has 26 years' worth of water quality data collected by students in the Deschutes basin. She can share with Gary and others interested. Most of the nitrogen levels shown were below 1mg/L, Ecology's acceptable level.

4. Student GREEN Congress

Sheila Wilson, NREP Program Director Dixie Reimer, Instructional Science Specialist, North Thurston Public Schools Rick Geyen, Science Teacher, Nisqually Middle School

March 22nd was the 26th Annual Student GREEN Congress, a gathering of students from the NREP and South Sound Green who meet at Evergreen each spring to share the results of their water quality (WQ) monitoring tests in October and February. Students emcee the event (Tia was one of this year's emcees). Representative Doglio gave the welcome remarks and the keynote presenter was Jeff Hogan from Killer Whale Tales. Students hold State of the River sessions to share their WQ data and then do workshops in the room with various experts – dissecting salmon, restoring cedar forests, and many more activities. This year was the largest Congress ever, with 505 students participating, and 24 State of the Rivers sessions.

Dixie shared that she has been doing WQ testing and Congress since it started. It is such a powerful learning experience for these kids to prepare and present their data to mixed age groups (4th and 5th graders through high schoolers). For young kids to have that forum and presentation experience is very powerful. We've also collected 26 years of data on local streams, which allows kids to look at that trend data over time. Sheila added that they've heard students say it was their best day of school in their entire life. It's a great opportunity for natural resource professionals to interact with students and get career exposure. The current AmeriCorps volunteer with the Chehalis Basin Education Project is getting a master's in Environmental Science because of her experience doing water quality testing as a student in Yelm. Students also come away making recommendations

that policy leaders can recognize – controlling pollution, cleaning up animal waste, realworld solutions.

Nisqually Middle School Presentation

S'mya Jourdan, Gabe Meier, Brandon Norling, and Tia Wieclaw, Nisqually Middle School students

Presentation link: <u>https://docs.google.com/presentation/d/1e1156vN59B7u73HQX</u> qYeWeZzoCYFaEhz4k66DZYZIhk/edit#slide=id.g3818bf1cb2_11_0

S'mya, Gave, Brandon, and Tia presented the findings from their class's water quality testing at Riverbend Campground in the Nisqually Watershed on 10/19/17 and 2/8/18. Testing highlights included optimal results for turbidity and fecal coliform bacteria in the fall. There results for dissolved oxygen and turbidity in the spring. Hotspots they noted included low dissolved oxygen in the fall, maybe because the weather was warmer and warmer water holds less oxygen. The water was 5 degrees colder in the winter. Fecal coliform was higher in the winter, which was a concern. More dog waste could have gotten into the stream. They performed three replicates of each test, which suggests their data is reliable, and did not see any major errors in how the tests were done. Based on their findings and water quality studies, the students recommended action ideas including creating rain gardens and pervious roads and parking lots to filter polluted water.

Questions

- How does the testing itself work? In the fall before testing, Sheila and Brandon come to each school and train the students on the tests. They then practice their tests in teams, and the same teams do that test in the field (this group did the dissolved oxygen test). Same people do the tests in the fall and the winter.
- Could there be farmland or other kinds of waste causing the FC result? Yes, it could be waste from other kinds of animals, dogs are an example.
- Surprising that turbidity went down in the winter wouldn't it be the opposite with more runoff? Sheila said usually, but there was more rain in the week before October testing than in February.
- Is there a compilation of the data available? Brandon is working on compiling all of the data in graph form, integrated with a map of the watershed! At Congress, we have graphs from the last 3 years of data for students to look at before they present. There were nitrate issues in every stream tested in the Deschutes.
- What's a personal anecdote from your field days? Tia forgot it was testing day in the fall and wore shoes that weren't great for being outside, especially with dead fish everywhere. S'mya's friend stepped on a weak part of the gravel bank and fell into the creek!

David thanked the students for presenting. The River Council is working on protecting the Nisqually watershed and salmon for you – we hope you will carry on the work.

5. Blanket Presentation to JW Foster

The Council recognized JW for his service with the NRC. He has provided leadership and humor, as a council member and with the Land Trust board, and with others in the Nisqually. We look forward to continuing to see him around events. Many thanks, JW!

6. For the Good of the Order

Daniel hopes to be attending meetings regularly as part of the NRNC's new strategic plan. He was approached recently by disabled veterans who hope to restore the pier at Luhr's Landing as an accessible fishing point. The pier was destroyed about 6 years ago but was one of the only accessible fishing piers in the region. Daniel would like the NRC to write a letter of support as he looks into funding sources.

Joe updated the group on the lawsuit regarding recreational immunity. The State Supreme Court upheld the immunity statute this week, which is good news for parks – can continue to have trails without being liable for injury on them. The Land Trust would have been looking at a major public access dilemma – many properties are open to the public open at their own risk, which would have had to change. NLT and similar groups are often required to provide public access by funding sources.

JW thanked Jim and Etsuko for their gift to his wife Nicki and their family, who have all also worked hard on many volunteer events over the years.

Yelm's Arbor Day celebration will be on April 27 at 11:00am at Yelm City Park. There will be an arts walk, entertainment, and free trees for everyone.

Dan announced Puget Sound Day on the Hill, May 23 – going to DC to advocate for priorities. Participation is open to anyone and PSP is hosting an organizing session next week. David will be going back with some folks from NIT Tribal Council.

7. The meeting was adjourned 11:51.