



Meeting Minutes
Nisqually River Council
November 21, 2014
Nisqually National Wildlife Refuge
Information: 360.438.8715

Attendees:

Council Members

Bob Burkle – WA Dept. of Fish & Wildlife
Amy Cruver – Pierce County
JW Foster – City of Yelm
Edna Fund – Lewis County

Stephanie Suter – Puget Sound Partnership
Donovan Gray – WA Department of Ecology
Rene' Skaggs – Pierce Conservation District
*** CAC Representatives (2)**

Citizens Advisory Committee Members

Phyllis Farrell
Fred Michelson*
Marjorie Smith
Robert Smith*

Jean Shaffer
David Thorp
Ed Kenney
Debbie Andersen

Guests

Danielle Butstick – WA Dept of Ecology
Chris Schutz – Pierce County
Lois Ward – Thurston County citizen
Chris Ellings – Nisqually Indian Tribe
Ashley Von Essen – Nisqually Indian Tribe
Martin McCallum – Stream Steward Volunteer

Becky Kowalski – Stream Steward Volunteer
Ryan Sullivan – Nisqually Land Trust
Don Perry – Nisqually Indian Tribe
Charissa Waters – Thurston County
Cindy Wilson – Thurston County

Staff & Associated Nonprofits

Morgan Greene – Nisqually River Council
Justin Hall – Nisqually River Foundation
Sheila Wilson – Nisqually River Ed. Project

Tyler Willey – Nisqually River Ed. Project
Joe Kane – Nisqually Land Trust
Sarah Davis – Nisqually River Ed. Project

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

Call to Order – Fred Michelson called the meeting to order at 9:05am.

Approval of Meeting Minutes and Agenda – There was a motion to approve October's meeting minutes as presented. They were approved, as was the agenda for today.

2. Reports

Advisory Committee Reports

- *Citizens Advisory Committee* – The CAC met this past Wednesday and was thrilled to approve Grace Ann Byrd's membership application. For the last several months, the CAC has been working to increase its membership and tribal influence. Since Grace Ann is a Nisqually tribal member, the CAC is especially pleased to welcome her to the ranks. Grace Ann is passionate about preventing oil and coal trains from moving through the watershed. She is also a Stream Steward and WSU Master Gardner. The NRC approved a motion to accept her application. Welcome, Grace Ann!
- *Chair Report* – David was unable to attend today's meeting. Fred chaired on his behalf.
- *Staff Report* – Morgan has been busy assisting Sheila in tree planting activities and applying for Ecology's 319 grant. She also completed the climate adaptation planning process and turned in her final draft last

week! She will be helping Justin with next years budget in the coming week. Additionally, Morgan has been researching grants for climate adaptation implementation.

Allied Programs

- *Nisqually Land Trust* – The NLT is pushing hard for the first acquisition of the Nisqually Community Forest, which must be in place by the end of the year. They have presented on the Community Forest to the CAC of the Pierce County Futures. They are also presenting to the Community Development Committee. It's a small piece of the overall pie, but is critical because the funds will represent the local match.

In other news, Nicole Hill will be leaving the NLT and taking a job with Pierce County. She will be missed locally, but will continue her excellent work in Pierce County! On a more positive note, there is a new NLT board member—Bryan Sullivan! Bryan has been involved with watershed activities for over 14 years, when he attended his first planting party. Additionally, NLT has sent out its annual appeal. Joe also spoke to the Eatonville School District about the Burwash Farm, conservation easements and the community forest.

- *Nisqually River Education Project* – Sheila wrapped up this year's planting season with a total of 19 school groups, 814 students and 139 adult volunteers. They put 3,550 trees in the ground! They only had one school group from Yelm, and no involvement from Eatonville Middle School either. However, a school group from Bethel came out, and filmed a wonderful video (<https://www.youtube.com/watch?v=qNys5Ok14Vk&feature=youtu.be>). The video is available on the NRC website and Facebook pages. Additionally, the NRF-ers worked to apply for Ecology's 319 Grant for Water Quality Monitoring funds. Tyler is also working to plan action projects for the winter and spring. Salmon tossing trips will be in January, and Sheila is now researching grants.
- *Nisqually River Foundation* – Over the last month, Justin and Morgan participated in a climate change conference at the NNWR that dealt with the topic of sea level rise. The NRF-ers also attended the South Sound Science Symposium; both events were great! Justin also helped with tree planting and the 319 grant application. The AHSS met last week, and learned about the shellfish industry and the impacts of ocean acidification on their business. Justin and Morgan will be working on next year's budget this coming week; ideally, a budget will be available for the December meeting.
- *Nisqually Stream Stewards* – The Stream Stewards helped to install plants in Ohop Valley on November 1st. Additionally, on Saturday December 6th from 9-12, they will have their second salmon watcher meeting at the Tribe's Natural Resources Building. All are welcome to attend, but please RSVP to Don Perry. For background, Salmon Watchers are trained citizens who travel along rivers and help scientists identify species and locations of spawning salmon. Watchers are required to visit sites 2x per week for 15 minutes to record what they do or do not see.

The following Saturday, NSS will be meeting at Smallwood Park in Eatonville from 10am-1pm to toss salmon. Also, the salmon recovery newsletter is at the printer as we speak, and will be available for the next meeting. Don also wanted to share information on the new Eatonville Trail System that starts by Smallwood Park; the bridge over the Mashel may be a new salmon tossing site.

Don also spoke about the 4th annual Nisqually Salmon Camp. The July event was a collaboration between the Nisqually Tribe's Natural Resources Department and the Nisqually Summer Youth Program. Designed to target high school students, Salmon Camp is 3-5 days of training and learning experiences with natural resources professionals. This year, about 12 students attended the course. The Salmon Camp program was created to address the underrepresentation in Science, Technology, Engineering, and Math (STEM) subjects. Through hands on activities, students are able to better learn about the world of STEM careers while earning college credits. During this year's program, students went beach seining, visited the shellfish farm, collected plankton samples and watched professionals dive for marine species. The students also learned to read a topographic map, went nature mapping, examined fish anatomy, collected benthic macroinvertebrates, learned about radio telemetry, and "built" a watershed.

As for next steps, Don received positive feedback from this year's participants and is eager to continue the program. He's also trying to recruit more of the students into the Stream Stewards program, and would like to track the course's impact over time. His presentation is here:

<http://www.slideshare.net/Nisqually/nisqually-salmon-camp>.

- *Salmon Recovery Update* – Ashley reported that the 2nd annual Eatonville Salmon Fest was a success: an estimated 300 people attended! On another note, Ashley is a part of the Washington Salmon Coalition, a group that meets 4 times a year. The next meeting will be on December 2nd at the Refuge, so it will be a great chance to show off the restoration project. The SRF Board meets the next day, too, and will make the final decision on the funding for next year.

Chris reported that Puget Sound had a strange Chinook season this year: adult survival was low. The Nisqually managed to get enough fish in the hatcheries, but had a very low number of fish spawning in the wild. For context, the Nisqually Tribe tries to control the number of hatchery fish spawning in the wild, relying on the wild fish to spawn. Thus, the Tribe uses hatchery spawners as a fall back when the number of wild spawners is too low. This year, however, there were hardly enough fish—wild or hatchery—to spawn at all. Chris will be able to share numbers later. There were, however, numerous Coho salmon. There are a number of potential reasons the Chinook year was so poor. There was an unprecedented amount of warm water off the coast of British Columbia, which likely played a large role. Currently, this warm water mass stretches from California to Canada and may have large ramifications into next year. It's important to remember that salmon have an amazing coupling between ocean conditions and life stages; when those conditions aren't met, fisheries can be wiped out quickly. This year's lack of fish has been another setback in increasing genetic diversity in the wild; previous setbacks include successfully operating the weir.

In other news, the Tribe installed the fish counter in the Centralia Dam Fish Ladder last week. This counter also has a camera, so scientists are now able to count and identify fish at the same time. Water quality isn't the best right now, but the videos are still workable. Additionally, the infrared imagery produces high quality, detailed images. Chris would like to show some of the footage in December. The addition of this camera is particularly exciting in light of the upcoming Steelhead season. There are likely to be some challenges: certain fish may jump over the dam, but the percentages that do that are unknown, which may reduce the accuracy of the counter. To mitigate, the Tribe will likely have to complete tagging studies to establish margin of error.

Additionally, the recently completed Steelhead research has been useful in understanding impacts on fish survival through Puget Sound. This included a transplant survey study using Nisqually and Green River fish: Nisqually fish were released in the Green River and vice versa. The fish were equipped with acoustic tags, and receivers were spread through the Sound. This allowed the Tribe to track the fish's migration progress. The study was completed to rule out that marine survival is a "stock condition" – this means that survival is based on the river a fish originates from. The transplant survey demonstrated that death rates are largely similar throughout Puget Sound, regardless of stock. This means that all the fish leaving Green River have a much larger survival rate (about 10%), no matter their origin, than the fish from the Nisqually River (about 4%). Survival, therefore, depends on how long a fish must swim through Puget Sound. The Tribe is hoping to get more funding next year to complete another study that narrows down the influences in Puget Sound that impact survival.

3. **Nisqually Geographic Response Plan – Danielle Butsick, Resources at Risk Planner, WA Dept of Ecology**

Danielle works for the Department of Ecology to write oil spill plans, formally known as Geographic Response Plans (GRP). The GRPs are designed to protect resources at risk. While most GRPs focus on marine resources, Danielle has been funded specifically to address the inland risks posed by oil transported by trains. She is in charge of the Nisqually GRP update, and would like NRC input in overcoming several challenges.

For background, GRPs are published as annexes to the Northwest Area Contingency Plan (NWACP), which is a collective of information on resources at risk and oil spill response strategies for Washington, Idaho and Oregon. The GRPs focus on smaller areas and are managed by the NW Area Committee and the Region 10 Response Team, both federally designated groups. The response strategies identified are for floating oil only, and thus don't address

ground water or land spill responses. Additionally, the GRPs are intended to reduce the decision-making time once an oil spill occurs, but do not include every action necessary for clean up. It also outlines procedures for coordination between jurisdictions; in the event of a response, there is always a federal, state and local coordinator on scene. A GRP includes information like site descriptions; response options and considerations; response strategies & priorities; shoreline information; and resources at risk. The latter includes habitat types and seasonality of species present. In this update, they will also be discussing social and economic resources at risk, a consideration new to the GRP planning process.

Chapter 4 of the Nisqually GRP includes area and sector maps, which show specific boating locations. In this update, there will be a third map, which expands the area to La Grand Dam. New to this update, there will also be “two-pagers,” or reference sheets that first responders can take to the site. Responders will also have access to priority tables and strategy matrices. The priority tables have information on potential spill origin sites identified in the area, like highway or railroad crossings and boating sites.

Danielle is currently performing site visits to each of the areas identified in the current plans. She is coordinating with the EPA and Coast Guard throughout the updating process. She is also hosting public workshops to solicit comments and site information; a public meeting on September 15th dealt with the Nisqually GRP. During an update, Tribes are included, especially in establishing response strategies that are sensitive to cultural sites. Finally, any other interested parties are included, like BNSF or environmental groups. A number of state agencies provide GIS data and subject matter expertise.

When developing new strategies, Ecology considers site-specific details, like regional significance, likelihood of spills, mitigation strategies and safety. They also consider any environmental limitations, such as water currents, type of material spilled, tides, river speed and debris. In the Nisqually, for instance, large woody debris piles could pose challenges in cleaning oil spills.

Although the public comment period ended in October, Danielle is still looking for input from the NRC. She has visited approximately 40% of the sites, and will complete them all in December. The next steps are to input data, and draft and review the GRP chapters. By April, it will be available for public review and comment. The GRP will be finalized and published—including response to public comments—by June 30. She would particularly like input in overcoming some of the challenges she has had, including access to the river, which is limited by JBLM, private property or no known road access. Other sites are accessible by boat only, which can be a challenge, too. Lastly, Danielle has struggled to find the best site to collect oil from the water. To help provide any information regarding these issues or other feedback, please contact Danielle at dabu461@ecy.wa.gov, or 360-407-7281. Danielle’s presentation is also available on the NRC SlideShare: <http://www.slideshare.net/Nisqually/nisqually-geographic-response-plan>.

4. Nisqually Climate Adaptation – Morgan Greene, Nisqually River Council Program Coordinator

Morgan took this opportunity to update the NRC on the climate adaptation planning process she’s been working on since February. She is pleased to announce that her final draft is completed! For background, NRF was accepted to be a part of the Model Forest Policy Program’s Climate Solutions University (CSU) this year, which is a program that helps communities develop adaptation plans. The goal is make the impacts of climate change less severe on forest and water resources and local economies. Morgan shared a special thanks to Jean Shaffer, Fred Michelson, Phyllis Farrell, Roger Andrasik and Nate Waldren for all their help!

To start, the amount of protected land and restoration sites already makes the watershed more resilient to begin with. According to the Department of Ecology, there are 239,000 acres of forests, not including another 59,000 acres of JBLM and 39,900 acres of “parks.” These forests sequester carbon and regulate local climate, among other things. Also, with 80% of the main-stem protected, the local water quality is high, and the watershed is more resilient to flooding. According to Earth Economics, there are between \$287 million to \$4.1 billion in ecosystem services each year; despite the large variance in numbers, it’s clear that the watershed is important locally and regionally. However, there are challenges too. There are over 80,000 residents, along with 43,000 water users in Olympia and 41,000 homes powered by TPU. Scientists manage for threatened and endangered species, and an additional 20,000 people are expected by 2020, which means our resources will be stretched thin.

Some communities within the Nisqually Watershed may be more impacted by climate change than others. First, the Nisqually Tribe relies on natural resources for sustenance, cultural resources and a part of their economy. Secondly, the timber industry plays a large role locally: 11% of Lewis County private employment is in that field, compared to 0.6% nationally. Lastly, homeowners who live in the wildland urban interface or floodplains may be more susceptible to increases in flooding or fires than others.

The planning team then considered forest resources. Although there are vast forests locally, the trees are stressed by land use conversion, expanded development and high impact forest management techniques. This leads to a loss of canopy, decreased carbon sequestration and more. In the face of climate change, warmer air temperatures and changing precipitation patterns are causing longer, warmer dry seasons and wetter winters. This impact is already being felt, and means that local forests are experiencing increased drought stress and an increase in natural disturbances especially fire, insect outbreaks and disease outbreaks. Species are also shifting within their habitat ranges; the National Climate Assessment predicts an 80% loss of subalpine plant communities by 2080.

When considering water resources, it's important to keep in mind the high quality already due to restoration efforts underway. We are also fortunate to have both surface and aquifer water, which has historically reduced conflicts. However, local water resources must provide for drinking water, agricultural uses, hydroelectricity, salmon habitat and more. Increased populations will pose more challenges to that availability. On top of those existing issues, climate change is impacting local resources. First, our hydrology is shifting to reflect increased winter rains, earlier spring runoff and drier summers. Second, there is projected to be increased heavy precipitation events leading to more flooding. This issue is not new: a recent flood at Mount Rainier caused over \$30 million in damage and closed the park for 6 months. Third, water temperatures are on the rise, which may be detrimental to salmon. Marine ecosystems are also changing: sea level rise may convert habitat types in the estuary and ocean acidification is detrimental to shellfish species.

In light of these challenges, the planning team developed 4 goals. The first three work to increase resiliency within forest, freshwater and delta ecosystems while providing all the social, economic and cultural benefits that we rely upon. The last goal is to provide sustainable funding and strong partnerships so that implementation of the plan is a success. To achieve these goals, the committee focused on 5 mechanisms for adaptation: planning, policy, monitoring, on-the-ground actions and education and outreach. Example actions include updating the NWSP to reflect climate adaptation; influencing policy; share watershed-wide monitoring efforts; restoring tree canopy; and educating citizen scientists about climate change. Additionally, by increasing outreach in Olympia and Tacoma, it may be possible to generate support for healthy headwaters and a payment for ecosystem services program.

As for next steps, there is an RFP expected to be released in December through the NPLCC that Morgan is planning to apply for. Morgan would also like NRC input on the action plan and finalizing partner engagement. Current education and outreach activities should be updated to include climate change. Lastly, updating the NWSP to include adaptation language would clarify our direction. To provide your input, please contact Morgan at morgan@nisquallyriver.org or 360-438-8715. Her adaptation plan will be available online, as is her presentation (<http://www.slideshare.net/Nisqually/forest-water-climate-adaptation>)

5. NWSP Objective Discussion: Sustainable Resource Use – Morgan Greene

This month's NWSP indicator is Sustainable Resource Use, which works to ensure all resource extraction is conducted in a manner consistent with the long-term viability of watershed ecosystems.

Indicators:

- 1) *Forests are harvested in a sustainable manner. Water usage protects in-stream flows, groundwater recharge areas, and surface filtration systems.* There are regulations in place for all state, federal, and private timber harvesting activities. However, the majority of timber is harvested by means of a clear cut, so in general, forests are not harvested sustainably. There are some landowners who are FSC certified, including JBLM. Additionally, in-stream flows have been established for most of the major tributaries in the watershed, which protects habitat and minimizes water conflict.
- 2) *Sustainable agricultural practices protect soils, water quality and sensitive habitats.* There are guidelines established for sustainable agricultural practices, including fencing riparian areas and minimizing tilling. However, information is lacking on the number of local landowners who practice these methods. There are

farms locally that work with Conservation Districts, and who are Salmon Safe and/or Nisqually Sustainable certified. Examples include Wilcox Farms, Yelm Earthworms and Left Foot Farms.

- 3) *Mineral extraction and associated industries are conducted in a manner that protects water quality and quantity, and air quality, and keeps the ecosystem intact.* There are sand and gravel pits throughout the watershed, but Morgan was unable to find much information on practices. WA DNR regulates extraction in part, though it was difficult to find information regarding sustainable practices or ways in which the industry protects water and air.
- 4) *Animal densities are within the carrying capacity of the land.* Several months ago, Morgan reported on the estimated animal populations in the watershed. Abundant information is available for game species, all of which seem to be doing relatively well. There are management plans available for local elk and game herds, the populations of which appear to be stable. There are, however, a number of rare, threatened or endangered local plant and animal species; clearly, those populations could be increased greatly. In general, however, it appears this indicator is being met.

Input:

- 1) Fred believes forests, in general, are not managed sustainably. It is key to work with forest owners throughout the watershed to increase sustainable management. Additionally, it's important to remember that development rights on lands above the Nisqually National Wildlife Refuge were purchased years ago by Thurston County.

6. For the Good of the Order

WDFW's habitat program has new leadership. Jeff Davis was promoted into the Assistant Head of the Habitat Program; because he started as a field technician, he has incredible job experience! Margin Carlson moved into Jeff's previous position.

Happy Thanksgiving!

Adjourn – Meeting was adjourned at 12:00pm.

*Next Meeting: Friday, December 19, 2014, 9:30am – 12:30pm
NW Trek*