



**Meeting Minutes**  
**Nisqually River Council Meeting**  
**November 15, 2019**  
**UW Pack Forest**  
Information: 360.438.8715

*Attendees:*

**NRC Members:**

Amber Martens - JBLM  
Andrew Reed - DNR  
Rene Skaggs – Pierce Conservation District

Kelly Still - WDFW  
David Troutt, chair – Nisqually Indian Tribe

**CAC Members:**

Phyllis Farrell  
Ed Kenney  
Fred Michelson

Karelina Resnick  
Bob Smith  
Marjorie Smith

**Guests:**

Roger Andrascik – NLT/NSS  
Jeremy Badoldman – Nisqually Indian Tribe  
Jeff Barney – Pierce County  
Brad Beach – Nisqually Indian Tribe  
Stacey Dixon – UW Pack Forest  
Cathy Hamilton-Wissemer – JBLM  
Paula Holroyde – Thurston LWV  
Joe Kane – Nisqually Land Trust

Joe Kalama – Nisqually Indian Tribe  
Mary Jo Kenney  
Becky Kowalski - JBLM  
Jim Reistroffer – NLT/NSS  
Etsuko Reistroffer – NLT/NSS  
Jeff Swotek – NRCS  
Ashley Von Essen – Nisqually Indian Tribe

**Staff:**

Brandon Bywater – NRF  
Justin Hall – NRF  
Emily McCartan – NRF

Maya Nabipoor – NRF  
Shelia Wilson – NRF

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

David called the meeting to order at 9:34am. Minutes from the previous meeting were approved, as was the agenda for the day.

**2. Committee Reports and Updates**

**Advisory Committee Reports:**

*Citizens Advisory Committee – Phyllis Farrell*

The CAC met on Tuesday, November 11. Martin McCallum attended to provide information on the Chehalis Alliance, which he has been attending as an observer. The Alliance includes a number of environmental organizations opposed to the proposal to dam the upper Chehalis River and seeking alternative strategies for flood control. Howard updated on the Thurston County Flood Hazard Mitigation annual meeting and his suggestions. The revised flood designation for the lower Nisqually Valley lists the entire area as floodplain. Howard noted that he appreciated the letter sent by the NRC regarding Recycled Asphalt, encouraging

further study and best management practices before deciding whether to allow RAP in the subarea. The CAC is monitoring the follow-up to the recent court decision ruling on aquaculture permitting. Ed is leading a volunteer group to pilot manual weed control on a 3-acre Nisqually Land Trust property to avoid use of Roundup (glyphosate). Ed reported that Fire Mountain Farms has submitted a petition to Ecology to delist biosolids mixed with industrial waste as hazardous waste material, which would allow it to be landfilled in Lewis County. Public comment on this proposed delisting is open until December 12. There is likely to be legislation proposed this session about how to handle biosolids better. It is a worldwide issue although solutions are expensive. Several CAC members attended a meeting this week on the Nisqually State Park plans, which include proposed campgrounds, resident caretaker, trails, and water access options. WDFW will be helping survey the Park area for marbled murrelets for potential habitat concerns.

*Chair Report – David Troutt*

David is working with a group led by Jay Manning at Puget Sound Partnership to develop a legislative agenda for environmental conservation. Priorities include the need for \$1 billion in annual funding for salmon recovery from state and federal sources. Current funding processes are largely competitive, which means plans aren't fully implemented and there is limited certainty for long-term recovery efforts. David has met with local elected officials to discuss the idea of piloting full implementation of the adopted plans (salmon recovery and water management + streamflow restoration) in the Nisqually. David presented on Nisqually habitat projects at the Tribal Habitat Conference. Nisqually is an example of how groups can work together, and other Tribes and watersheds have adopted similar models and made great progress in implementing projects with partners in last 10 years.

David presented yesterday on the I-5 project to elected officials at South Sound Military Community Partnership, sharing results of long-term studies with USGS. A flood event during a king tide in the Nisqually Valley that impacts the freeway will happen eventually, especially with increasingly frequent storm/flood activity driven by climate change. Current configuration of I-5 crossing the delta also impinges ecological functions and causes hydrologic issues, threatening private property and habitat restoration upstream and downstream. USGS is hosting a workshop next month with affected parties and agencies to talk about the modeling exercises they can do. There was some support for the idea of a bridge across the delta. Passage of I-976 may impact transportation funding.

*Staff Report – Emily McCartan*

The WRIA 11 Planning Unit will meet next week to discuss the next grant round for streamflow restoration funding, which opens in February. Anchor QEA has been hired as a consultant to assist in developing grant proposals.

State Parks held a public meeting this week to present their preferred alternative for the first phases of development (campsites, overlook trails, and managed water access) at Nisqually State Park. Slides and meeting materials are available on their website for public review and comment (<https://parks.state.wa.us/1154/Nisqually-State-Park-Predesign>). They are requesting public comments by November 30 but will continue accepting after that.

NWSP Planning will continue with a staff retreat next month and options for NRC members to review in the new year. Next year's NRC meeting schedule will be distributed next meeting.

*Thurston County Subarea Plan Update – Maya Teeple (absent) via Emily McCartan*  
County staff are conducting internal follow-up research on recycled asphalt policy (including review of aquifer conditions, other county plans, code language, Best Management Practices). Expected to begin public review in early 2020, starting with a discussion of work completed to date, followed by further research or development of policy options as needed. No new updates on the Nisqually Subarea Plan. The Board of County Commissioners adopted the Comprehensive Plan on Tuesday, 11/12. Several continuing items are not part of that adoption, including mineral lands and health, and will resume public review in 2020. Maya is the point of contact for any comments or questions.

**Allied Program Reports:**

*Nisqually Land Trust – Joe Kane*

Joe and Roger attended the State Parks meeting. NLT is concerned about proposed mountain bike trail routes, which could increase off-trail riding into the Ohop restoration area. NLT also has concerns about horseback riding in the creek in sensitive salmon spawning areas. Trails proposed on the website are still conceptual and open for discussion. The NLT Board has sent a letter and plans to stay engaged.

Tree planting season is continuing, working with volunteers and NREP students. NLT is supporting a Girl Scout Silver Award Project to restore a property in McKenna, on the Nisqually shoreline where an ATV track used to be. Four local Girl Scouts have raised funds, bought 500 plants, and selected species to plant, working with NLT staff.

NLT participated in a legislative tour with the Pierce Farm Forestry Association and Mt Tahoma Trails. Work plans for next year include significant transactions underway for shoreline projects and upcoming salmon recovery project opportunities. Happy to have half of Conservation Futures funds available for conservation purchases from Thurston County. NLT's year-end appeal is ongoing now.

*Nisqually River Education Project – Sheila Wilson*

NREP conducted four weeks of student plantings in partnership with Tribe and Land Trust. Students planted 2,400 trees, with volunteer help. Special acknowledgement to Jim Reistroffer, who was at every planting this fall! McLane Creek Chum Run field trips with Thurston County and Wa He Lut students are scheduled for later this month. The No Child Left Inside Grant is continuing, with strong relationships established with Wa He Lut teachers, and working to engage the Nisqually Youth Center. NREP is re-applying for grants from NOAA (BWET and ELP) and EPA (Environmental Education).

*Nisqually River Foundation and Community Forest – Justin Hall*

Justin is working on end-of-year budget and housekeeping, including upcoming grant applications for the Foundation. The NRF's office has moved to 620 Old Pacific Highway (with Nisqually Tribe Natural Resources).

The Nisqually Tribal Council has approved a \$14 million low-interest loan through the Clean Water Revolving Fund, which the Community Forest helped apply for several years ago. This makes close to \$18 million available for Community Forest acquisitions and they are now working on identifying properties. Harvesting on current properties is winding down for the year, including harvesting some trees with root wads for ELJ construction. NLT will officially transfer the deeds to the current three sections to the Community Forest in January.

*Salmon Recovery Program – Ashley Von Essen*

2019 grant round funding decisions will be announced in December. Four of Nisqually's five projects were fully funded. Fifth project (knotweed) had been a concern because salmon recovery funds are not intended to support long-term maintenance programs. Alternative funding source will be critical to maintaining the major progress on knotweed eradication in the upper watershed, because it is easy to backslide. Hoping to partner with Pierce Conservation District on a long-term solution. Letters of intent are due 12/2 for 2020 SRFB and PSAR grant round. Ashley is coordinating major planting projects with the Nisqually Tribe's planting crew, including 5,000 plants at Middle Ohop this year, 8,200 plants at Spooner property, and understory planting for TPU (total: 15,000 plants over the season). Source from local nurseries as much as possible – mostly bareroot and live stake material. 150,000 plants in the lower Ohop Valley in total. Ashley will present a comprehensive update at a future NRC meeting.

### **3. Water Quality Monitoring**

*Brandon Bywater, NREP Water Quality Monitoring Program Coordinator*

Brandon has been the Water Quality Monitoring Program Coordinator with NREP since 2018. The Water Quality program is historically the core program of the NREP. All NREP student activities revolve around salmon health, starting with testing stream water. It teaches global concepts (pollution, endangered species), technical skills, and makes it relevant and local for students by testing a local stream in the Nisqually Watershed. The process promotes stewardship and exposes students to careers in science. Some test water and plant trees for multiple years.

On Water Quality Testing Days (one in October, one in February), students visit sites on the Nisqually and tributaries and perform the same tests on water at various locations. Students run 6 tests themselves onsite, and collect samples for Total Solids (processed by the Yelm Wastewater) and Fecal Coliform (processed by NRF). Last year, Brandon updated the teacher guide Water Quality Monitoring Manual, and NRF received funding to create complete testing kits for every participating teacher, with two sets of each test to more students can get hands-on experience. This summer NREP recorded a new orientation video for teachers and volunteers this summer. It can be overwhelming for teachers to do this much hands-on science on a field trip, and the video and manual are helpful resources.

Brandon worked with the Nisqually Tribe's GIS staff to map 29 years of water quality data collected by students. Over 170 graphs of student data are uploaded to an online map showing all the sites, which helps kids see that they're contributing to a larger body of science and understand the trends for their stream. Brandon is also developing an NREP Storymap that will have an introduction to all the schools, watershed locations, WQM sites, sites and types of field trips. It will be available on the NREP website when complete.

- March 2019 Crosscut article about WQM: <https://crosscut.com/2019/03/can-kid-scientists-fix-washingtons-salmon-streams>
- Video and Teacher Manual: <http://nrep.nisquallyriver.org/for-teachers/water-quality-monitoring-teacher/>
- WQM Map: <http://nit.maps.arcgis.com/apps/webappviewer/index.html?id=62a88de955b74283956f6839f9c85aeb>

### *Evolution in the program*

2017 – teachers/students

2018 - teachers/students

Reasons for lower participation include: transportation, school testing taking priority over field trips, Yelm District decision to make it an all-or-nothing participation rule (all 5<sup>th</sup> graders required to have the same experience). There have also been some successes this year: 3 new Yelm teachers are pursuing participation as an afterschool club, with an additional 6-7 teachers hoping to come on board after the new year. The US Department of Education’s Green Ribbon Schools recognized Eatonville and Weyerhaeuser Elementary Schools for their STEM programs, which include WQM participation. NREP is seeking the reaffirmation of support from the NRC – it matters to teachers, students, and schools. Brandon will share the list of current monitoring sites and would love suggestions about other sites to monitor or areas of high priority for agency partners.

### *Discussion*

- Share legacy data with teachers and principals – show them that the program needs to continue to keep collecting the data.
- Joe Kalama would be willing to talk to school groups as a Nisqually elder about the importance of this work. This helps the younger generation understand the importance of water for all people, and it is important that we think of the future.
- Teachers need policy support from principals and school boards that environmental education should be a priority.
- Puget Sound fish are different than coastal fish, and the water quality of the rivers affects the quality of Puget Sound. This is an important way for students to connect with broader issues.

## **4. Tree Planting**

*Maya Nabipoor, NREP Washington Service Corps member*

After Water Quality Monitoring in the fall, many NREP classes also participate in tree planting field trips (in collaboration with the Nisqually Land Trust and Nisqually Tribe’s planting crew). Maya visits each classroom for pre-trip presentations before each field trip: preparing students with information about the watershed and how their work is going to help it. Tree planting trips start with defining native plants and non-native plants (those intentionally or accidentally introduced by humans). Not, as students sometimes guess, created by chemical accidents. Invasive species are non-native plant species that outcompetes native species. Presentations cover the basics of plant identification, focusing on species they will be planting at the site. Students learn five ways that tree planting helps salmon:

- Prevent erosion, reduces turbidity

- Provide habitat for food for juvenile salmon (insects)
- Large woody debris (habitat)
- Shade (keeps water cooler)
- Photosynthesis (provides oxygen)

Maya reviews this information with students once they are at the planting site to remind them why we're planting trees and the best techniques for planting. Kids remember the concepts well by the time they get to the field trip, and it motivates them to come.

#### *Discussion*

- Do you share before and after photos of a site like Ohop, that has been replanted and established in different stages? - We do encourage them to come back in 10 years and see the sites.
- Suggest getting photos and data from Salmon Recovery about fish returning to planted streams, so they can see the impact.
- It would be nice to have a website sharing all data from all the organizations in the Nisqually.
- Community support is important: motivating if kids who have done the program come back to tell younger kids about it. Volunteers who help with planting noted that it's great to see support from family members who come along to help with the field trips.
- Nisqually tribal teaching focuses on how children understand their connection to a tree and how it affects part of their life. Joe teaches that the trees are the standing people. Makes them think about how a tree helps them personally.
- Thank you to the support of the Land Trust, Tribe's crew, and WDFW's ALEA grant for funding support for tree planting field trips.

## **5. Current Forestry Research at Pack Forest**

*Stacey Dixon, Forest Manager*

Stacey became the Forest Manager at Pack Forest this summer after completing her master's degree. Pack Forest includes 4,270 acres, both conservation areas and working forest. Harvest of 40 acres each year funds the operating budget and education programs of Pack Forest, including Mount Rainier Institute (reaching 1,500 student each year). Other revenue comes from grants and contracts, as well as harvesting permits for salal pickers, firewood harvester (and maybe maple syrup coming soon).

Current research at Center for Sustainable Forestry Research focuses on forest practices that can help landowners make management decisions for forestland. Topics include:

- Alternative lower intensity harvest systems:
  - Forest Stewardship Council certification (forest products that meet sustainable criteria). Research example sites at Pack Forest assess regeneration and impacts of harvesting at certifiable levels.
  - Small Group Selection – Harvesting continuously in small increments, maintaining continuous forest cover and drawing in incremental revenue, allowing to shift species composition. More common management strategy in Europe, where more land is multi-use.
  - Expanding Gap – harvest in 10-year increments, expanding out from original harvest, incorporating existing ecological conditions at a site (wind direction, etc).

- Mixed Species Trials: PNW timberlands are often primarily Douglas fir monostands. Test trials with four species (western red cedar, Douglas fir, red alder, and hemlock) planted in different mixes and spacing to see how interactions and growth may be affected.
- Fencing Studies: Western red cedar is valuable, but difficult to plant because of ungulate browsing. Testing four blocks (weeded, fenced, fenced and weeded, neither). Fencing does seem to improve regeneration and keeps wildlife out effectively. Growth seems to suggest it can recover the cost of installing fencing (which can also be reused elsewhere once seedlings are tall enough).
- Bigleaf Maple Sugaring: the Center received a grant to test the viability of sugaring bigleaf maples (as Eastern sugar maples are being pushed out of their range due to climate change). It takes twice as much sap from a bigleaf maple to produce syrup (60 gallons for 1 gallon of syrup, and it is likely to be collectable only during a few months following cold weather. They are identifying maple stands and plan to tap and install a gravity-fed tubing system to collect sap, which will be distilled on site. There are many unanswered questions about feasibility.
- International Forestry projects: the Center also supports international research and PhD students working on topics including drought, climate change, sustainability, agroforestry, and biomass.

#### *Discussion*

- Does Pack Forest fertilize? – Historically, used biosolids among other fertilizers. Currently shifting to pig's blood rather than chemical herbicide or fertilizer.
- How to address laminated root rot? – Some work experimenting with stumping, planting western white pine.
- Where do you mill trees harvested at 80-90 years? – Can be difficult because it requires specially equipped mills. Canyon Lumber in Everett, Columbia Vista, and some others can handle oversize logs.
- The Nisqually Tribe traditionally harvests 150-200 year-old trees for canoes, and use the whole tree. Cedars are sacred trees and Joe Kalama is very interested in hearing more about research on their growth. Pack Forest rarely harvests cedars.
- Pack Forest harvests 10% of one 40-acre stand per year as a revenue source, which allows the whole stand to turn over every 100 years. Harvest mixed age and species, taking middle-diameter trees and keeping older and younger standing.

#### **6. For the Good of the Order**

Pierce Conservation District and WDFW are hosting a beaver workshop for landowners on December 6.

The meeting was adjourned at 12:07pm.

*Next meeting: December 20, 2020  
Yelm Community Center*