



Meeting Minutes
Nisqually River Council Meeting
July 19, 2019
BFJNNWR
Information: 360.438.8715

Attendees:

NRC Members:

Abby Gribi – Town of Eatonville
Dan Calvert – Puget Sound Partnership
Gary Edwards – Thurston County BOCC

Glynnis Nakai – BFJNNWR
Kelly Still – WDFW
David Troutt, chair – Nisqually Indian Tribe

CAC Members:

Phyllis Farrell
Howard Glastetter
Fred Michelson

Robert Smith
Marjorie Smith

Guests:

Brad Beach – Nisqually Indian Tribe
Madeline Bishop – Olympia Indivisible
Lisa Breckenridge – Nisqually Indian Tribe
Joe Cushman – Nisqually Indian Tribe
Keegan Curry – Sustainability in Prisons
Cathy Hamilton-Wissmer – JBLM
David Hillman
Paula Holroyde – League of Women Voters
Daniel Hull – Nisqually Reach Nature Ctr

Becky Kowalski – JBLM
Curtis McFeron – NOAA
Etsuko Reistroffer – NLT/NSS
Jim Reistroffer – NLT/NSS
Noel Stanwick – WDFW
Maya Teeple – Thurston County
Ashley Von Essen – Nisqually Indian Tribe
Tony Wilson – Olympia Indivisible

Staff:

Brandon Bywater – NRF
Emily McCartan – NRF
Joe Kane – NLT

Sheila Wilson – NRF
Justin Hall – NRF

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

David called the meeting to order at 9:04 am. He recognized those taking part in Canoe Journey, hosted this year by the Lummi Nation, expecting 10,000 people and over 100 canoes. The minutes from the last meeting were approved, as was the agenda for the day.

2. Committee Reports and Updates

Advisory Committee Reports:

Citizens Advisory Committee – Phyllis Farrell

CAC met this week and discussed biosolids, Thurston County Planning updates, and plastics pollution. The CAC would like to request a presentation to learn more about thermal decomposition techniques for processing biosolids safely. The problem goes beyond our watershed, and members would like to learn about positive solutions. Ecology is working on

updating Fire Mountain Farm's general permit for biosolid applications this summer, so it would be a timely discussion to include them on.

Chair Report – David Troutt

David presented a Continuing Legal Education session to several hundred attorneys on salmon recovery issues. Glynnis reported on Margaret Everson's (UFWWS Acting Director) visit to the Refuge on July 9, which David attended along with other partners, JBLM, and regional USFWS leadership. Community collaboration efforts were a highlight, including the partnership between the Refuge and the Tribe to cooperatively manage the Tribe's inholdings. She was very supportive of the work happening here and discussed wetland restorations and I-5 issues.

Staff Report – Emily McCartan

The NRC Retreat will be next month (Aug. 16) with a field tour of Anderson Island Parks (shoreslines and creeks), followed by a meeting to talk about the priorities and projects for the River Council. The final Nisqually Watershed Stewardship Plan Report will be available for review. Lunch will be provided, as well as ferry/van transportation for those touring the parks. RSVP link will be circulated soon.

Allied Program Reports:

Nisqually Land Trust – Joe Kane

NLT's Yelm equipment shed was broken into and everything was stolen – brushcutters, chainsaws, etc. Accepting donations of equipment. Sheriff's department is unlikely to be able to arrest anybody without proof they stole it. The annual float trip is coming up next Saturday and Sunday – spots still available for purchase online. NLT has received \$1.2 million in federal funding for the Soundview Camp project on Drayton Passage, to purchase a conservation easement that would keep the camp in business and prevent development. It is ranked #1 for match funding from Pierce Conservation Futures. The existing pier would remain, but not be expanded. The Land Trust has closed on one property this year and is expecting to close on four more in the next 30 days.

NREP – Sheila Wilson

42 teachers participated in Summer Institute for Teachers, focused on climate change and endangered species with lots of field time. NREP met with the Yelm Schools curriculum director, who was supportive of reaching out to middle and high school teachers and elementary club leaders to reengage in Water Quality Monitoring. NREP received a State Parks No Child Left Inside Grant, with the Tribe and other partners, to provide outdoor experiences for Tribal youth. 18 people are participating in this year's Stream Stewards program.

Nisqually River Foundation/Community Forest – Justin Hall

The Daniel J. Evans Nisqually Stewardship Award Event will be September 4, honoring Jim Wilcox at Wilcox Farms. The event is a fundraiser for the Foundation – tickets available at <http://nisquallyriver.org/evansaward/> (complimentary tickets are available for River Council representatives).

Community Forest is back into harvest operations. Working to get \$3.8 million streamflow restoration funding under contract. Working with Tribe on Clean Water Revolving Fund loan – property would be owned by Tribe and managed by Community Forest.

3. Thurston County Recycled Asphalt Study – *Maya Teeple, Thurston County*

Thurston County received an application to bring recycled asphalt into the Nisqually Valley in 2017. The County hired Herrera Environmental Consultants to review water quality studies on the impacts of leachate from recycled asphalt. This is the summary presentation of the consultant’s findings given on June 20 to a public information meeting. The paper looked at contaminants and leachate studies, not at best management practices (BMPs), fate and transport, or specific conditions in the Nisqually sub-area. Discussion is ongoing about whether on-the-ground field studies here are needed.

Consultant identified 101 RAP reports from county records and scientific literature, which were screened down to the most relevant, recent, and peer-reviewed material (8 papers total, from US and European sources). Findings are summarized relative to water quality standards in the area. Used groundwater standards because they are generally more stringent than surfacewater and are ECY’s basis for issuing general permits. Herrera then compared those findings to Washington water quality and conditions – rainfall, pH, etc. Studies tested wide range of materials and protocols. Europe included coal tar in RAP until late 1970s, while US phased it out in the 1940s, so they have different organic compound concentrations. Contaminants vary but leachate behavior is similar. It’s important to note that detection limits are subject to the limits of technology and methodology– Below Detection Limit (BDL) does not mean “zero”.

Studies included two types of lab studies, batch studies and column studies. Batch studies measure contaminants that leach from asphalt submerged in beakers. Studies variously looked for organic compounds and metals. Some metals were detected above WA groundwater standards in acidic waters, and most studies found organic compounds. Column studies flush water through asphalt columns. There was one field study, which looked at two sources of RAP from different parts of a road, compared to lab column study. Lab-based studies detected fewer organics and lower concentrations than found in field study, and that paper concluded more field studies were needed. Field study was conducted in Sweden, with coal tar in RAP and very low pH rainfall (4.5), which makes for an aggressive leaching environment. It was the only field study available that addresses the leachate behavior we’re looking for.

Herrera could only make general conclusions. RAP is highly variable, depending on the source material (is it from a gas station, a road, what kind of weathering, etc.) Organic compounds are the major concern for Thurston County, because they leach more frequently than metals. 4 PAH organic compounds were consistently detected above WA groundwater standards in both batch and field studies. It is likely that environmental impact would be negligible with dilution, but more study is needed. The County is not rushing this along, and expects to do more research before policy change goes forward for consideration. There would be two public hearings with planning commission and BOCC, starting spring 2020 at the earliest (if there are no field studies). Maya collects comments via email any time.

Questions:

What's the next step? – Nisqually Subarea Plan currently prohibits use of RAP due to water quality concerns. Those concerns are still there. Commissioners would need to decide if the next step is an on-the-ground study. Next steps for staff are to look at best management practices (BMPs) that could limit contamination, and research aquifer conditions in Nisqually vs. rest of the county. That research will take at least 6 months, then present to Board to ask if they want to do on-site studies.

Who would pay for further study? – Any onsite study would be funded by Lakeside, the applicant. SEPA will be conducted as part of this policy review. It is also conducted at the permitting stage when an individual operation applies for a permit. An Environmental Impact Study could happen at permitting, much later, if the RAP policy is changed.

How can you develop BMPs when there is so much unknown? – One potential BMP would be ways to block rain from hitting the RAP pile, potentially.

What are the flood risks? The Thurston County Code Critical Area Ordinance limits where activities typically don't allow mining in floodplains, but this is a special area. It would be a code discussion at permitting stage, based off of aquifer area and floodzone.

How does this relate to Holroyd proposal to go deep into the aquifer for gravel mining? – Maya is aware of proposal, not sure what status is. The issues are not being considered together (RAP is a policy change, while mining would go through hearing examiner as permit issue, a different process.) Those impacts would be considered at site-level, if/when Lakeside applies for RAP permit after the hypothetical policy change. David noted that the potential of exposing the aquifer should be considered with the potential for these toxics leaching, especially with downstream tribal withdrawals.

How does protecting the rural character of the Nisqually sub-area fit in with this proposal, which is at odds with those policies? – Not part of the scope for the study for Herrera, but it is a consideration for county staff in framing potential policy changes.

Could field studies or BMP evaluations be done locally at sites where RAP is permitted in Thurston County now? – That could be part of the discussion.

Does the 2004 court case that specifically precludes asphalt recycling on that site still have bearing? – Staff would consider that in developing options moving forward.

At the CAC's request, the NRC agreed to send the County a letter recommending additional fieldwork and BMP studies (refer to 2017 letter).

- 4. 2019 Salmon Habitat Ranked Project List** – *Ashley Von Essen, Lead Entity Coordinator*
Lead Entity staff made site visits with the SRFB review panel in late May. Habitat Work Group ranked projects last week based on readiness, location, and how much benefit the project would leverage. It is a “small” funding year (estimated SRFB allocation of \$400,000). 5 pre-applications submitted for a total request of \$520,500, with matching funds of \$1,234,081. Incredible level of match, shows how hard project sponsors are working.

Project grand total: \$1,758,601.

- 1) Lackamas Flats Protection, 12 acres– NLT, \$50,000 requested (rest of total \$400,000 cost from Streamflow restoration)
- 2) Middle Ohop Protection Phase 4, 33.6 acres – NLT, \$81,390 requested
- 3) Peissner Road at Elbow Lake Creek Fish Passage – Thurston County Public Works, \$80,000 requested (total approx. \$700,000) for feasibility study and design work to replace existing partial fish barrier
- 4) Horn Creek Fish Passage Design – SPSSEG, \$247,000 requested to correct 2 partial barriers on Lower Horn Creek. Partially funded (\$188,610) from SRFB allocation, but looking for sources to fund the rest. Steelhead, coho, and chum spawn in Horn Creek.
- 5) Nisqually Knotweed Eradication – Pierce Conservation District, \$62,110. Funding from SRFB for 10 years, which is longer than they typically want to fund projects. SRFB is not best designed for ongoing needs like this, but we still need to fund knotweed control, which takes multiple years and can spread and recolonize very quickly. David requested that the NRC work with the Tribe, TPU, PCD, and other partners to keep the effort going.

Ashley requested that the NRC approve this project list. Final applications are due on August 9, final ranked list on November 6. Funds awarded in December. It was moved and seconded to accept the list. The list was approved unanimously.

5. Nisqually Reach Nature Center and Nisqually Reach Aquatic Reserve – *Daniel Hull*

The Nisqually Reach Aquatic Reserve is proposing an expansion. The original reserve covered 15,000 acres. Building on momentum from estuary restoration to preserve marine habitat. Managed through DNR with citizen stewardship committees that provide guidance and scientific monitoring (pigeon guillemots and forage fish at Nisqually, along with ROV studies). No permits can be issued within Aquatic Reserve boundaries without a statement that activities will not harm habitat – more stringent than outside a reserve. No new leases have been issued within the reserve since 2011. Can still fish, dig clams recreationally on state-owned property. Reserve rules don't apply to private property.

As DNR has undertaken major shoreline restoration work on McNeil Island, there is an opportunity to expand the aquatic reserve (currently covering just the south shore of McNeil) to surround McNeil Island and reach around Key Peninsula (Soundview Camp is included in expansion area). Daniel is asking for support the NRC in pursuing this expansion. Hope it will be an anchor for future grant funding for research, education projects. The expansion request is currently in review at DNR. The Commissioner can make changes or approve it as is. The Tribe has received monitoring funding from DNR for lands within the reserve, so they would like to see it expanded. The Land Trust has also found that having the aquatic reserve is a helpful tool for in conservation messaging – helps people understand what we're trying to do.

Questions:

Do you do restoration work to restore native species? – NRNC does education and research programs, not directly restoration (partner with NLT, SPSSEG, DNR, others with more expertise).

What are possible objections to expanding? – Shellfish farming is the main point of contention. Have reached out to communicate with those businesses about practices that don't damage habitat. Dredge disposal site in the aquatic reserve, supported by science saying that particular site is one of the best for tide and current stability.

What are the impacts of the dredge disposal site? – It is between Ketron and Anderson Island in an area with low dispersal. It was grandfathered into last aquatic reserve plan because it was already there. Last to use it was Port of Olympia, lot of testing done on it due to concerns from Tribe and community members. The Tribe feels confident that it is as safe as possible. ROV sites have provided some good science on the site.

By consensus, the NRC approved sending a letter of support to DNR for expanding the Aquatic Reserve.

6. Sustainability in Prisons Project – Keegan Curry

Keegan is a recent graduate of the Master of Environmental Studies program at Evergreen. He is the coordinator for Taylor's Checkerspot Rearing Program at Mission Creek Corrections Center for Women through the Sustainability in Prisons Project (SPP).

Background on mass incarceration and need for SPP:

The US incarcerates more people per capita than anywhere else in the world. This program can't solve the bigger problem of how to reform our justice system. However, people who are currently incarcerated need opportunities to learn, be inspired, connect to the outside world, and prepare them for life upon release (96% of people will be released). Both correctional staff and incarcerated people are eager to participate in helping with environmental problems. SPP was co-founded by Cedar Creek Corrections Center superintendent and an Evergreen professor in 2003. Model has expanded to all 12 WA prisons, with more than 191 programs, 150+ partners, and 3,000 participants in sustainability jobs. Collaboration and partnership is the central emphasis. Has expanded to prisons around the world – SPP network with resources for using the model. Programs are owned by SPP partnership with varying levels of support from Evergreen, DOC, and partners (education, conservation, community service experts) bring funding, resources, expertise, research power. TESC employs grad students to do direct service in prisons administering programs.

SPP Program Areas:

- Environmental Education (TESC lead) – workshop series (always looking for guest lecturers!)
- Restorative nature – gardens and greening inside prisons
- Sustainable operations (DOC lead) - reducing energy use, waste, recycling, composting, sustainable practices lab (garment factory turned into repair center)
- Community contributions (DOC lead)
- Ecological Conservation (TESC lead)

- Programs focused on species – prairie plant nurseries, endangered butterfly, turtles, treating turtles for shell rot disease and release, beekeeping (explosion in last few years, all prisons have a bee program – certification for incarcerated and staff participants), rearing pathogen free domestic sheep to reduce spread of disease in bighorns, growing rearing mats for spotted frog habitat.
- Watching gamecams, tracking predation
- Taylor’s Checkerspot Butterfly Captive Rearing Program

Taylor’s Checkerspot Rearing Program

Program works with Oregon Zoo, USFWS, WDFW. Keegan coordinates training for technicians on rearing protocols developed by Oregon Zoo and coordinates with biologists on prairies, collecting data etc. Doubled capacity at Mission Creek with federal grant two years ago. Opening second facility in Oregon. The program can be a “prison to college” pathway. Carelina was a tech while incarcerated at Mission Creek, released, attended Evergreen, and is working in ombudsman’s office today. Haven’t studied outcomes for participants as much as we’d like, but many people who release like to stay in touch and are doing well.

Participants work mostly inside the prisons. With more staff, it would be great to have a transition program for people to release and work on onsite restoration projects. There is an intensive application process for incarcerated people to join these programs, but it varies a lot by facility. Mission Creek is a minimum security facility for women at a lower custody level, less than 5 years from release. Participants go through a professional process of submitting resumes and interviews. Other places people are assigned. No community work crews through SPP (sometimes do a tour of the prairie site), but biologists mostly meet with and train participants inside the facility.

Taylor’s Checkerspot Current Research:

Keegan’s thesis studied patterns of oviposition in the endangered Taylor’s Checkerspot butterfly. Bay checkerspot, related species, is one of most well-studied insects in America thanks to Stanford program, but less is known about Taylor’s. Captive Rearing facility provides good opportunity to collect data on Taylor’s checkerspot.

Prairie habitat was originally maintained by indigenous peoples by burning and prescribed wildlife. Most of that land has been consumed by development in last 100 years. Sedentary butterfly that doesn’t migrate or disperse far, so the populations are isolated and many have been extirpated. Oregon Zoo began releasing (mostly) caterpillars to reestablish populations 10 years ago and was successful. One population on JBLM has been established, a second nearby nearly established. There was an extant, non-extirpated population in the Artillery Impact Area which was the source population. Army activities do have an impact – but burning from artillery training does maintain the prairie habitat they prefer and limits invasive species.

Captive rearing starts with collection of adults. Eggs are collected, reared through larval stage mostly on English plantain (non-native but adapted to it as host plant, which has chemical signature that makes them taste bad to predators), sleep through the winter (diapause). Mostly released in the spring as post-diapause larvae. Males emerge first and

establish themselves before females. Studying number of eggs they lay and how quickly they lay them gives a lot of information about population dynamics and how well they can establish.

This research and data collection was done by incarcerated lab technicians. There is room to do this with other species. SPP is trying to give college or internship credit for participants: reading, seminars, professional writing are part of the program.

For more information:

- PBS video (2016) <https://www.pbs.org/newshour/show/do-call-it-a-comeback-how-the-checkerspot-butterfly-found-salvation-in-a-womens-prison>
- To collaborate with SPP: Kelli Bush or Josh Trivett: <http://sustainabilityinprisons.org/contact-us/>
- If you would like to learn more about being a guest lecturer in prison, see the Environmental Engagement Workshop Series: <http://sustainabilityinprisons.org/spp-programs-in-wa/what-we-do/education/prison-workshops/>

Etsuko has volunteered with SPP on site visits with incarcerated technicians with South Sound Prairies. They were very kind and friendly. Worked with nursery on plant cultivation and Doug fir removal. Great experience to work alongside and chat with them.

7. For the Good of the Order

Etsuko is leading a nature walk in Mount Rainier Gateway tomorrow – view from Mount Rainier to Ashford to Alder Lake. Sign up through Nisqually Land Trust. 9:30 start.

30th Annual Nisqually Watershed Festival is Septebmer 28. Puddles the Blue Goose, the Refuge System's mascot, will be here! Volunteers needed. 2 hours of service gets a free salmon barbecue lunch voucher.

NRNC Feast at the Reach is September 7.

The meeting was adjourned at 11:58pm.

*Next meeting:
NRC Annual Retreat
August 16, 2019
Anderson Island*