



**Meeting Minutes
Nisqually River Council Meeting
October 16, 2020
Online Meeting**

Attendees:

Council Members:

Anne Baxter – Dept. of Ecology
Amy Cruver – Pierce County Council
Stacey Dixon – UW Pack Forest
Terry Kaminski – City of Yelm

Becky Kowalski – JBLM
Rene Skaggs – Pierce CD
David Troutt, chair – Nisqually Indian Tribe

CAC Members:

Phyllis Farrell
Howard Glastetter
Ed Kenney

Karelina Resnick
Lois Ward

Guests:

Roger Andrascik – NLT/NSS
Jeff Barney – Pierce County
Syler Behrens
Michele Buckley – NLT Board
Robin Hale – WDFW
Cathy Hamilton-Wissmer – JBLM
Daniel Hull – NRNC
Rebecca Lee – Pierce County

Kathy Mix – NLT Board
Allison Osterberg – TRPC
Kenneth Pierce – WDFW
Eric Rosane – Nisqually Valley News
Shannon Shula – Thurston County
Marianne Tompkins – TCCRL
Ashley Von Essen – Nisqually Indian Tribe
Jeff Zahir

Staff:

Jeanette Dorner – NLT
Julia Fregonara – NRF
Justin Hall – NRF
Joe Kane – NLT

Emily McCartan - NRF
Maya Nabipoor – NRF
Sheila Wilson – NRF

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

David called the meeting to order at 9:02am. The NRC presented Joe Kane with a Pendleton blanket in honor of his upcoming retirement after 15 years as the executive director of the Nisqually Land Trust. Councilmembers recognized the enormous impact Joe's leadership and vision has had on conservation in the Nisqually watershed.

The minutes from the September 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 and, after some technical difficulties, discussed Alder Dam, Thurston County mineral lands expansion, Climate mitigation planning, and members' environmental concerns regarding the proposed change to RAP policy in the Nisqually subarea. The NRC expects to be involved in the next steps of RAP policy change, particularly in an ongoing oversight and monitoring role, if the Board of County Commissioners approves allowing RAP.

Chair Report – David Troutt

David is part of a legislative effort to modify the Growth Management Act to address environmental protections that go beyond mitigation and encourage or require local planning to improve the environmental baseline. He is also continuing to work with the South Sound Military-Community Partnership and other stakeholders on the I-5 project, which will be a significant budget ask with impacts beyond a normal transportation project, affecting national security, treaty rights, and local economies. Both federal and state investment up to \$4 billion will be required eventually, but the size of the state transportation budget request for this year is still being developed. The Nisqually Tribe is continuing to move forward with the YMCA camp project at Mineral Lake. The Tribe has also signed a Clean Water Revolving Fund loan with the Department of Ecology to fund major purchases through the Tribe to be added to the Community Forest.

Staff Report – Emily McCartan

The Nisqually watershed received 5 grants totaling just under \$1.2 million for Streamflow Restoration projects from the Department of Ecology. Project planning and implementation actions continue to be developed. Emily has circulated a survey to provide public input on the Yelm Prairie Line Trail development project and encouraged NRC participants to share and respond. The Nisqually River Foundation is preparing to participate in the Give Local campaign for the first time this year. Give Local is a coordinated fundraiser for local nonprofits, organized by the Community Foundation of South Puget Sound. The NRF hopes to raise funds to support NREP and outreach programs through COVID and beyond, as well as to expand awareness of the Nisqually Watershed's conservation and stewardship efforts.

Thurston County Subarea Plan – Shannon Shula

The Subarea Plan remains on hold until 2021. On RAP, the Planning Commission has recommended Option 3 (allow RAP, with BMPs required), which is being provided to County Commissioners. The SEPA comment period is open until October 23, after which there will be a briefing to the BOCC and then a hearing.

Allied Programs:

Nisqually Land Trust – Joe Kane and Jeanette Dorner

Joe will continue working on some special projects with the NLT for the next six months, while Jeanette takes over as executive director. The virtual annual meeting and auction was very successful, thanks to great work from staff Nikki Dizon and Fletcher Ward, emcee JW Foster, and great community participation. Michele Buckley has joined the NLT board.

Nisqually River Education Project – Julia Fregonara

400 Water Quality Monitoring kits are being assembled and distributed for students to do pH and nitrate testing and other hands-on experiments at home. Julia and Maya are collecting the actual water quality data from about 15 sites, and gathering the final videos and 360 images for the online portal. 23 teachers are enrolled in an online training about the water quality monitoring program. NREP and South Sound GREEN are also launching an interactive field journal about chum spawning in McLane Creek. NREP is continuing to work with Mount Rainier Institute to develop community/adult programs that can start this fall with COVID measures in place, such as a wreath-making and ethnobotany workshop. Modifications were approved for the No Child Left Inside grant to accommodate COVID by creating videos and other resources, and planning for the next NCLI grant round is underway. Tree planting starts next week, and volunteers are needed to make up for the school plantings that won't happen this year. Sign up via the NLT website.

Nisqually River Foundation and Nisqually Community Forest – Justin Hall

The Virtual Nisqually Watershed Festival premiered on YouTube on September 26, with almost 5 hours of video content provided by watershed partners. It's been viewed now 479 times and will remain online: https://www.youtube.com/watch?v=IG_oSgQkmEI. Justin is working on budgets and grantwriting, and on the GiveLocal campaign.

The Community Forest is continuing to harvest as weather permits. On October 29, NLT is hosting a webinar to talk about the Community Forest with a panel discussion moderated by Justin and featuring Joe and Kirk Hansen.

Salmon Recovery – Ashley Von Essen

The Nisqually Tribe's crew and partners are getting ready for tree planting in numerous locations. Nisqually had three SRFB projects funded in the 2020 grant round. Request for proposals for 2021 will be out soon. The upcoming round will be a "small" round (no PSAR), and funding availability will be dependent on the state budget discussion. The Virtual Watershed Festival was a very joyful thing to do in a difficult year – thanks to everyone who watched and participated.

3. Land Cover Changes in the Nisqually Watershed

Robin Hale, High Resolution Change Detection Cartographer (WDFW)

WDFW's High Resolution Change Detection Project (HRCDD) looks at landscape changes at a small scale to help understand big trends. The data began with 2006 imagery released by USDA's National Agriculture Imagery Program (NAIP), which the Salmon Recovery Funding Board wanted to use to assess riparian habitat. Project data looks at GIS datasets for land cover changes between 2006-2017, with tree canopy and visible surface water data added for 2017. Data resolution is at 1-meter resolution, a huge improvement from old data at 30-meter resolution which allows assessment of small areas to determine what is grass, trees, river, sandbanks, development, etc. "Change" includes tree canopy loss and impervious and semi-pervious surfaces (development) on 2-year timeframes, focusing on easily detectable, semi-permanent changes. GIS "polygons" are outlines of change areas generated first by computer analysis, then verified by cartographer. The analysis assigns initial land cover and determines percentage of change in the area (eg 25% canopy loss, 25% new

impervious surface for a total change of 50%). Assessment also includes cause of the change, i.e. development, timber harvest, etc. “Land Cover” is a point-in-time snapshot, looking at canopy and visible surface water. At 1-meter resolution, can see individual trees. Existing data sets only chart stream center lines, but HRCD shows the polygon of actual water coverage (allowing analysis of channel breadth or movement).

Between 2006-2017, the Puget Sound area saw 251,400 individual changes and 367,070 acres of change. 266,002 acres of change were from forestry, with 28,000 acres of change were from development. Individual tree removal (single trees or lots) account for about 50% of the total number of changes.

Changes in riparian zone (within 100 feet of waterbodies) are particularly important for salmon and wildlife. Tree cover provides shade, filters water, and improves habitat. The Nisqually Watershed experienced 0.3% change in its riparian area from 2006-2017. To analyze changes in riparian zones, the project compares the intersection of canopy and riparian areas as GIS layers and exports data for the area of overlap, including land cover type (forest, mixed natural, mixed built, etc), cause of change, total acres, and tree loss, impervious increase, semi pervious increase as a percent of total acres changed. Parcels are usually under half an acre. Natural causes of change can include stream meandering, flood, forest fire, etc; human induced changes are tree removal or development type things. The upper Nisqually River saw 100 acres of riparian area change due to flooding and channel movement between 2006 and 2009, although because much of the upper Nisqually mainstem is protected forestland, the riparian area remains treed even with these changes.

Changes in the Nisqually Watershed

- Changes in development and tree removal appear in the lower and central watershed. Larger scale forestry-driven changes occur in the upper watershed.
- From 2006 baselines to 2017, 30,000 acres changed in Nisqually (6% of watershed). Without forestry (which is assumed to be replanted), permanent changes are about 5,000 acres. As a proportion of the sub-basins, Ohop and Mashel have experienced highest change from forestry.
- Most development-related changes occurred in mixed natural or mixed-human use areas, not in forested areas. 2,500 acres of non-forestry changes occurred in Prairie Tributaries in Pierce County, mostly from canopy loss. Impervious/semi surface increasing at similar rates in Thompson/Yelm, Prairie, and Lower Nisqually sub-basin.

Restoration activities take longer to appear on landscape imagery. The data collected on two-year intervals show losses immediately, but replanting takes decades to show change. The goal for this project is to allow predictions over time, and help policymakers assess whether policies are effective in reducing changes for critical areas. All the data is available online at <https://hrcd-wdfw.hub.arcgis.com/>.

Discussion:

- The dataset used for HRCD does not include types of trees, but it could be combined with other data to do that analysis.

- Data could also be integrated with VELMA or other modeling tools for streamflow projections related to forestry changes, habitat restoration project planning, and other needs.
- How long does it take for tree planting to show up? Canopy is defined as over 1 story. Plantings show up as shrubs and grow at a slow rate. As tree canopy data is updated less frequently, it should eventually show restoration gains.

4. Thurston Climate Mitigation Plan

Allison Osterberg, Senior Planner, Thurston Regional Planning Council

The Thurston Climate Mitigation Plan is a framework for climate mitigation action created in partnership between Thurston County, Lacey, Olympia, and Tumwater to reduce impacts and contributions to climate change. Climate change poses risks to health, infrastructure, and ecosystems. The plan is intended to set goals, strategies, and actions to reduce greenhouse gas emissions to minimize those risks. Climate change impacts in Thurston County include: shrinking snowpack, rising and changing oceans, warming lakes and streams, intensifying storms, deepening droughts, and expanding wildfires. Planners drew on studies from UW and other sources to assess local impacts to Thurston County communities, including effects of warmer temperatures across seasons causing more rain in the winter and less in the summer. Snowpack is an especially big impact already taking place in the Nisqually watershed, as the major driver of streamflows and drinking water. The plan was developed through an intergovernmental steering committee of elected officials and staff, an expert advisory group, and consultants. Planning process began in spring 2019 with many opportunities for public input and community engagement in summer of 2019. Public comment on the plan is due today, October 16, or as soon as possible. It is aligned with the 12 Priority Goals in Sustainable Thurston plan (2013), including protecting and improving water quality and water supply, and moving toward carbon neutral communities.

Climate resilience has two types of policy drivers:

- *Mitigation* actions to reduce emissions causing climate change (sustainable transportation, clean energy, and energy efficiency)
- *Adaptation* actions to manage the risks of climate change impacts (disaster management, flood protection, infrastructure upgrades)

Both mitigation and adaptation strategies include water conservation, new energy systems, local food, education, complete/integrated communities

- Urban forestry
- Restoration and land conservation, tree protection, riparian buffers for ecosystem services both store carbon and buffer the impacts of warmer climate.

Strategies to reduce greenhouse gas emissions were prioritized by how much they would reduce emissions, how quickly they could be implemented, and co-benefits for other community goals. Thurston County, Olympia, Lacey, and Tumwater have adopted standard emissions targets consistent with agreements for industrialized countries: 45% reduction from 2015 levels by 2030 and 85% by 2050. 2018 emissions in Thurston County totaled 0.2 million metric tons of CO₂ equivalent (MTCO₂e). 57% came from buildings and energy use and 37% from transportation – mostly from driving gas powered cars. Agriculture, wastewater, solid waste, refrigerants, other sources are smaller

sources. Even though the targets call for reducing emissions, they are currently increasing and will continue to increase without change. To achieve the 85% reductions, some state policies, local actions, and carbon sequestration will be needed. Recent state actions include changes to building code with new energy efficiency requirements, Clean Energy Transformation Act requiring utilities to move to 100% clean electricity sources, and promoting electric and efficient vehicles. Local policies include supporting more efficient buildings and addressing transportation. Carbon sequestration is a necessary step: just reducing emissions will not get to the goal, so we will need ecosystem services to store carbon as well.

The Thurston Climate Mitigation Plan calls for the following actions:

- Green the power sources (support state action, increase energy efficiency for homes and businesses, make it easy to install renewable power systems)
- Shift building energy from gas to electrical grid (switch to electric appliances and vehicles, increase electric vehicle charging stations)
- Transportation shift to more electric vehicles, more transit, biking, etc (create denser neighborhoods where people have to drive less, encourage telework and transit options, reduce food and other waste)
- Storing carbon in trees and farms (plant trees, support farmland and regenerative agriculture, preserve and enhance prairies)
- Build local capacity to distribute costs and benefits fairly

Actions particularly relevant for the Nisqually watershed include:

- Regenerative agriculture (Thurston Conservation District leading this work)
- Reforestation/afforestation – HRCDD could provide baseline
- Tree canopy preservation
- Enhance monitoring and evaluation for adaptive management
 - Emissions inventory
 - Performance measures
 - Vulnerable populations
- Coordinate legislative support for climate mitigating state and federal policy

Individuals can support the plan's goals by reducing energy use, embracing non-car travel, reducing waste, supporting an equitable community, and talking to others about climate change. National studies show that people think about it but are anxious about talking about it, and discussing it helps facilitate change.

Next steps: Comments on the draft plan can be sent to Allison (climate@trpc.org) as soon as possible through early next week. Staff will present draft and comments to the steering committee in November, followed by review and approval by the four jurisdictions early next year. NRC letter to jurisdictions would be welcome at that time.

Discussion:

- Suggestion to put a park and ride bus/rail station at the Holroyd pit in the Nisqually Valley to encourage rail travel.

- Restoring housing stock instead of new development would help retain open space and tree canopy? – Plan encourages concentrating development along major transportation corridors, and redeveloping urban areas for more efficient and affordable housing stock with access to services in walking distance. Will still have urban and rural areas, but want to accommodate growth through infill development and renovating existing buildings.
- How will this plan affect permitting? Warehouse construction along I-5 corridor could undermine goals. – Still need to work on how to integrate this plan into decision-making, through permitting etc. Hope to see a standard way to assess the climate impact of proposed new development through permitting, and balance the impacts of different strategies. Increasing density to reduce commutes may mean losing some trees in some areas to allow those job developments that allow less impactful economy/lifestyles.
- Affordability plays a role in housing choices and commute distances. Housing affordability is a huge issue for our community overall that must be addressed along with emissions planning.
- Does greening the grid mean that electric vehicles would be clean? – Yes, if the state moves forward with shifting to renewable electricity sources as scheduled under the Clean Energy Transformation Act.
- Does the model account for eelgrass and Puget Sound carbon sequestration options that would also help with ocean acidification? - the Plan focuses on trees and agricultural practices, but will need lots of carbon sequestration options. Eelgrass restoration for blue carbon is of great interest for Squaxin Island tribe and emerging area for study.
- How can we help ensure that jurisdictions – local and state – are working together toward implementing these strategies, and accounting for them in all plans rather than making plans that leave critical pieces up to other actors? – Need community stakeholder groups to take on the parts of actions that are important to them. Near term and longer term actions will need community input to help jurisdictions decide what to do. Comments on plan have been positive, but also concerned about the budget impacts of the pandemic, which are very significant for both governments and individuals.

5. For the Good of the Order

FERC responded to Howard's complaint regarding the February 2020 flood, finding that TPU had acted in compliance with their license. Howard has sent another letter expressing his view that the license should have a flood control component. He also noted that TPU has frequently been out of compliance with their spring and summer requirements to maintain a reserve for fish-critical streamflows, and has sometimes not been able to meet streamflow requirements. It appears this year that TPU has maintained higher lake levels and been able to meet river flow requirements through most of this summer.

Socially distanced tree planting work party sign-ups are available for October and November!

Next meeting: Friday, November 20, 2020
Online via Zoom