



**Meeting Minutes**  
**Nisqually River Council Meeting**  
**September 17, 2021**  
**Online Meeting**

*Attendees:*

**NRC Members:**

Cathy Hamilton-Wissmer – JBLM  
Darrin Masters - WDFW

Rene Skaggs - Pierce Conservation District

**CAC Members**

Phyllis Farrell  
Howard Glastetter  
Paula Holroyde

Ed Kenney  
Lois Ward

**Guests:**

Jesse Barham – City of Olympia  
Shane Belson - WDFW  
Miles Cruger - College Student  
Dennis Dixon - Pierce County  
Chris Ellings – Nisqually Indian Tribe  
Daniel Hull – NRNC  
Terrance Lee - NRNC

Anne Mills - NRNC  
Linda Murtfeldt -  
Julie Rector – City of Lacey  
Kelly Smith -  
Larry Stickney - Pierce County Council  
Ashley Von Essen – Nisqually Indian Tribe  
George Walter - Nisqually Indian Tribe

**Staff:**

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

Layne Perkins - NRF AmeriCorps  
Nantz McMillen - NRF Americorps  
Sheila Wilson – NRF

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

Justin called the meeting to order at 9:05am. Minutes were approved with changes and the agenda was approved.

**2. 6th Avenue Access Rebuild and Luhr Boat Ramp Update**

*Shane Belson, WDFW*

Shane works for the Lands division of WDFW.

Nisqually Access Area Redevelopment aka 6th Avenue or Handicap Access. The work has been funded by an RCO grant - Project #18-1457, a 2018 submittal to the WWRP State Lands Development fund for \$290,000. The 6th avenue access is right along the Nisqually

River South of Interstate 5. The property was acquired in the late 1960s with RCO funding. Currently there is a vault toilet, parking, and a fishing platform. All the infrastructure dates back to the original project. It's very old and dilapidated, worn out by use and river conditions. The main new project elements include replacing the vault toilet, renovating all pathways for wheelchair accessibility, and improving the parking area. Originally this project was the first of its kind within WDFW and in the State being accessible with ADA criteria. The goal is to return it to that level of access. Along with the general aging of the infrastructure, tree root growth has been damaging. The fishing rails and rod holders will be repaired. There will be lots of pavement to make it more accessible with lots of parking, maximizing the footprint to accommodate vehicles. There will be barrier rock added and fencing. There is no boat launch currently. Some people do launch kayaks, etc. The update will not include adding a launch, although people still can still hand launch. It's really a bank fishing development and will remain so. There will be lots of mitigation planting. Trees scattered in the parking lot area will be removed due to hazards (limb drops, disturbance of asphalt). However more trees will be replanted on the site than removed. The current project status is that the cultural resource consultation has been completed. The pre-work being done now is permitting. The goal is to have that completed and advertising of the project by early 2022. Construction will start early summer 2022. The hope is to have parking done by the 2022 fall fishing season. Mitigation plantings will be done in late fall 2022. Grant is active through the end of 2022. There will be no in-water work. We can expect a closure for about a 2 month period some time between June and August 2022.

Questions included if there is any plan on how to handle the ongoing vandalism? There is some theory that if you put new infrastructure up, it will stay in decent shape. The infrastructure is built to be fairly indestructible and repairable. However he is aware of a new project on a lake in WA that was tagged within 24 hrs. All they can do is repaint it as uicly as possible. There are only 3 access managers that cover the region from Thurston County to Forks. However they are based in Lacey, so can jump on things quickly. Will the big log jam be moved downstream? Probably not as part of this project. That might be a different issue. Not within the project footprint. Shane will confirm that. The rip-rap or sheet pile edging on the river will not happen? The engineer said there is no in-river work. The proposal was put together by the site managers, who over aimed, but engineers determined that it is not needed.

The Luhr Landing Access Area Redevelopment. Is an RCO 2016 Project - #16-2305. This area was also acquired in the late 1960s. This is a boating facilities program focused on motorized boating. The grant is for \$485,000. This launch is embedded in the Nisqually Unit Wildlife Area. Luhrs landing is the only developed portion of the unit that has infrastructure. The launch started with just sand in the late 1960's, then an old style concrete ramp was added in 1974. The project will improve the existing ramp, widening it a bit. The articulated

concrete matting on the shoulders will be fixed. The vault toilet will be updated to a CTX vault toilet. There will be improved parking for cars and trailers. The Nisqually Reach Nature Center building is outside the scope of the project. There will be work along the shoreline to ease the impact of stormwater running down the steep slope of the ramp eroding the shoreline. There will be a loading platform added so that anyone in a wheelchair can get into a boat, there is an alternative to a boarding float. It will also be helpful if you have a lot of supplies to load. Placement will be right next to the kiosk. Construction is underway. In the next 2 weeks they will finish installing mitigation tree planting, installing root wad material along the shoreline, catchment basements for stormwater, working on the matting along the ramp, and removing the piles from the old fishing platform. The asphalt contract has been awarded. Paving is anticipated for mid to late October. Funding expires at the end of the calendar year, so it should be finished by December 31st.

Questions included will there be any improvements to the dock? Nope - it will no longer be there as piles are removed, except for the two pilings that are necessary to maintain the pumps for the Nisqually Reach Nature Center aquariums. Are any of the pilings removed hosting purple martin boxes? They did remove the boxes from the pilings that had them on there. The plan is to erect new posts that come off the aquarium pump posts and replace them there. There should be the same number of boxes afterwards. All of the pilings were creosote treated.

WDFW will post updates on the webpages for each property which you can find here:  
<https://wdfw.wa.gov/places-to-go/water-access-sites/30684>

### **3. Committee Reports and Updates**

#### **Advisory Committee Reports:**

##### *Citizens Advisory Committee - Lois Ward*

The CAC met last week. Phyllis is travelling, but was on the call. Justin Hall briefed on hiring the new NRC Program Coordinator. There was a discussion on the recycled asphalt project, which has been approved. The county will be monitoring it. Virgin asphalt storage on site is a concern with the potential for leaching from that pile. Holroyd has requested approval for deep excavation below the water table. Ed and Howard attended a meeting about that and the start of the initial SEPA review. Thurston County Flood Hazard Plan will be asked to present to CAC and/or NRC. Ed updated about Sequim Creek revitalization, which is a little mired down in politics, but expected to be completed nonetheless. Ed's Mount Rainier adventure recap included information about the lakes being created under the glaciers, the damage and melt of the heat wave in June, and a bear encounter! CAC is encouraging Ed to put together a presentation! Howard attended the recent FEMA meeting where they discussed redefining the flood plain. The 2006 flood was most severe, but did no damage to the lower valley because the reservoir was 53 ft. below

capacity and raised 37 ft, so there was no downstream flooding below the dam. The 1996 flood was a lesser flood, but the reservoir was topped off during the first day of the storm and the water had to be released enmasse.

*Chair Report – David Troutt*

There was no chair report.

*Staff Report*

We are reviewing the six candidates that have applied and will be reviewing those and interviewing next week.

**Thurston County Subarea Plan**

Not present

**Allied Program Reports:**

*Nisqually Land Trust - Jeanette Dorner*

There will not be a Salmon Bake/Annual Meeting this year due to the ongoing pandemic. In its place, there will be a virtual Annual Meeting Thursday October 14th. There will be an update on the 2021 work of the Nisqually Land Trust. The special guest will be Tim Ransom, who used to participate in Nisqually River Council in the early 2000's. He released a book about the history of Nisqually Delta, and specifically the Braget family. Everyone is invited to join!

There will be in person nature walks this fall so people can get out and enjoy the properties. There is a combined one tomorrow (September 18th) with slots available at the Petersen Family farm at the mouth of Yelm Creek. Part 1 is a stewardship event and Part 2 is a tour of the farm. There will be lunch provided afterwards, maybe chili! One week from tomorrow there will be a walk at the Ohop Restoration led by Jeanette. More walks are scheduled for October/November. Go to the Nisqually Land Trust webpage for more information and to register. Regular stewardship events are happening every Wednesday. There will be Saturday events added later in the fall and winter.

The Nisqually Land Trust has added two new AmeriCorps who started this month. Maya Nabipoor who was with Nisqually River Education Project, and Lottie who was with the Hood Canal Salmon Enhancement Group. They're doing a lot of stewardship work. Lots of acquisition project work is going on, but nothing to report just yet. Expect news towards the end of the calendar year.

The Sound View Camp project at the south end of Key Peninsula for environmental protection. Funding request was approved by Nisqually River Council through the Pacific Salmon Recovery Funding. Puget Sound Partnership's Executive Committee and State's

review panel have both approved. It should close the gap and be closed by the end of the year.

The 2021 Clearwater Award was given to the Nisqually Land Trust as an organization that protects and stewards waterways. - There will be an online event at the end of October.

The Nisqually Land Trust has a Washington Department of Fish and Wildlife grant from a program using funds from the Eagle license plates called "Watchable Wildlife Program" which connects underserved audiences to the outdoors. Will get youth of color in urban Tacoma areas out to observe wildlife. The Nisqually Land Trust will work with the Nisqually River Education Project and Billy Frank Jr Nisqually National Wildlife Refuge to get more folks out to Nisqually Land Trust properties who may not have opportunities otherwise. Work will begin Spring 2022.

#### *Nisqually River Education Project - Sheila Wilson*

Welcome to Layne and Nantz or new AmeriCorps. Layne is the more typical AmeriCorps person that we have that assists the Nisqually River Education Project. Nantz has a different role. They are in a brand new position, shared with the Nisqually Reach Nature Center. The bulk of Nantz's time will be working with Wa He Lut and the Tribal Youth program in support of our No Child Left Inside Grant. Julia has been pushing ahead towards our first season serving every 5th grader in North Thurston Public Schools. Water testing field trips can't happen this year but we will be going to the schools to present the program. 400 students or so with North Thurston alone. We are all still dealing with the pandemic and trying to be creative to keep our programs going. Two new grant awards, one is a NOAA B-WET grant. JEDI goals are a big part of this new grant. Sylvia from E3 Washington will be helping us with this part of the grant. Also received the NFWF Five Star Grant in cooperation with the Nisqually Land Trust and South Sound Green and the Chehalis Basin Education Consortium, and the Billy Frank Jr Nisqually National Wildlife Refuge.

#### *Nisqually River Foundation - Justin Hall*

Lots of administrative work. Not having the extra person has helped remind Justin exactly what the staff person does, which will help with training. Did a tour with the AmeriCorps of the watershed. Did a field trip with Jeff Barney to see the levee construction project near Ashford in the river.

#### *Nisqually Community Forest - Justin Hall*

Harvest is still ongoing. They are looking to bring in additional contractor before the snow falls and work stops. Northwest Natural Resources Group will do some research on snow accumulation in gaps vs. non gaps. We've brought GIS capacity into the Nisqually River Foundation office to support that project. Having forest necessitates controlling access, so

they're working with Hancock to install gates in cooperation with the Nisqually Indian Tribe. Gates are expensive! Precommercial thinning will start shortly and go for a couple of weeks in October. Kirk Hanson has a new video about what ecological forestry is and how it's done. <https://www.facebook.com/northwestnaturalresourcegroup/videos/1275146482920032/> Trying to do tours with Representatives Barkis and Wilcox so they can see the Nisqually Community Forest.

*Salmon Recovery Program - Ashley Von Essen*

Ashely has two funding amendments for the Nisqually River Council to consider. Approval for each of these today would be great, but having a week to consider is also fine.

The first is a letter of support from the Nisqually River Council for the Nisqually Land Trust proposed scope change and cost increase for the 2018 Middle Ohop Protection Phase II Project from RCO. This project was conceived as a conservation easement. However, the landowner is now willing to consider having it be an acquisition. This will make it more expensive. With the real estate market changes, it will be more expensive anyway. The Nisqually Land Trust is considering a scope change. The funding would come from a different project (an 11-acre acquisition) where the land owners have changed their mind and are no longer interested, so those funds could be available. There are also PSAR return funds available. The Nisqually Land Trust could request some of that money for this project. This project would be an acquisition of 35 acres. There will be some non-grant funds used, which would allow for public access. There would not be any planting at this time so all of that funding would go towards acquisition. There is a design being done by the South Puget Sound Salmon Enhancement Group. It would make a big difference for them if they could include this property as part of the whole Ohop project. This would make their restoration project much better. The project was awarded almost \$220,000 in 2018. Nisqually Land Trust would match with \$119,200. Cost increase for 2021 would move money from.... RCO grant #20-1030 for \$235,050 and additional funds to be requested from PSAR Return Funds \$197,480. Total project budget is \$771,230. The biological benefits of this project are really high. It has spawning areas for Chinook, steelhead, pink, and coho. It will be an opportunity for some incredible restoration and offers opportunities for salmon spawning viewing, which is something that we lack in the Nisqually Watershed. The 35 acres are upstream from where all of the lower Ohop restoration happened. This chance has not been seen or heard yet by the Nisqually Habitat Work Group or the RCO Technical Committee.

Rene moved to approve the funding, it was seconded by Lois and then passed unanimously.

Second amendment: McKenna Reach and Brighton Creek protection. Also seeking a Letter of Support from the Nisqually River Council for the Nisqually Land Trust proposed scope change and cost increase. Approval of this proposed scope change would expand the area protected as a part of this project from 17+ acres to 40+ acres. There have also been

significant real estate price increases since the project was proposed in 2020. Nisqually Land Trust is proposing that the funds for this cost increase come from two funded projects that are no longer viable within the grant windows associated with those projects (RCO Projects #20-1027 and #20-1030) No change to scope of protection of the 7.56 acres at Brighton Creek, but just an amount change to cover change in value. McKenna Reach would be 33 acres purchased (originally 10ish acres). So there is an increase of acreage and higher real estate costs. The landowner is giving a great price, but it is for more acres. The project was originally awarded about \$200,000 with a match of \$135,000. Nisqually Land Trust would cover cost increase by moving funds from 2 other projects. This project area includes the worst culvert in the entire basin. Pierce County is working on replacing this. It's got some great habitat value as well.

Rene moves to approve the change, and Ed seconded. No discussion. Motion carried unanimously.

The tribal fishery is closed for a week or two in river. The harvest has been below average. Fish are in the river.

#### **4. Pigeon Guillemot Study**

*Terrance Lee, Nisqually Reach Nature Center*

Pigeon Guillemot - They are a Puget Sound Partnership vital sign indicator species, and a community science project. Terrence has been with Nisqually Reach Nature Center since 2009. He started coordinating community science in 2014, this and the forage fish program and community stewardship committee. The Pigeon Guillemot is a seabird found locally, about the size of a crow, with bright red feet and mouth lining, white wing patch during breeding season. It is easy to identify in the summer because other seabirds aren't around. They are charismatic and show off during their breeding season, late spring through late summer. Nisqually Reach Nature Center studies them year round, but the main focus is during breeding season. Non breeding plumage is a lot more white. They vocalize during the breeding season, and need a running start to fly (kind of clumsy!). They have a really unique behavior when they have chicks. They feed them primarily fish, sculpin or bullhead and gunnel, which is eel-like. Sometimes they will also feed shiner perch. Predators include bald eagles. They nest in areas where nests are protected from predators, such as the south end of Anderson Island. This is actually one of the premier breeding colonies in all of the South Sound that is surveyed, and there are eagle nests right above it! Other predators include peregrine falcons. There is a pair of falcons nesting on the south end of Ketron Island. Gulls, crows, raccoons, etc. can also access burrows and eat the eggs. Pigeon Guillemot use a variety of habitats for nesting, including human structures (derelict piers, abandoned boats, etc.). They aren't particularly graceful, landing with a splash. They use wings and feet for propulsion underwater. They are agile and fast underwater, efficiently catching their prey. Pair bonding behavior includes billing, vocalizing, synchronized flying,

sky trilling. They typically mate for life. They hang on to fish for an extended period of time before delivering it to their chicks.

Cliff burrows have openings about the size of a football. The interior has a variety of shapes, sizes, and configurations. They'd like to learn more about this diversity. Some birds can utilize the same burrows. Belted kingfishers, swallows, barn owls, etc. can battle for burrows. Mating always happens on land, usually on a large rock, or float. The males and females look identical. They are in Washington mostly in the summer. In the winter they move north, from British Columbia to Southern Alaska. In South Sound, Nisqually Reach Nature Center is mostly focusing their monitoring efforts in the Nisqually Aquatic Reserve. Program started in 2013. There are a total of 6 different regions being monitored in Puget Sound. Vashon Island, Camano, Whidbey, Bainbridge, Clallam County, and Nisqually. The South Sound monitoring has expanded to Dana Passage, Totten Inlet, Bud Inlet, Hartstein Island, and Eld Inlet. This work started in 2002 on Whidbey Island. Our key volunteer Anne Mills. In 2011 was the formation of the Nisqually Reach Aquatic Reserve. 2012 Pigeon Guillemot was voted as a community science project. In 2013 the South Sound surveys started. In 2014 the Nisqually Reach Nature Center hired Terence as the community science coordinator. In 2016 Clallam County surveys started. Vashon started in 2018. In 2020 Bainbridge Island and Camano started. In 2021 surveys will be starting in Jefferson County.

Thanks to the Puget Sound Partnership, we have Puget Sound Vital Signs to help understand the ecosystem health. Pigeon Guillemot is one of four bird indicator species. Others include the marbled murrelet (endangered), the rhinoceros auklet, and all of the scooters. This group as a whole provides a measure of the health of Puget Sound. Pigeon Guillemot was chosen because it's here generally year round. It's one of the few seabird species that breeds in Puget Sound. It relies on a couple of prey species to feed their young that are not high up on the food chain. The basic concept of the research is to approximate population abundance by collecting data on breeding and any disturbances that interfere with that. Non-breeding surveys are also done monthly now through the spring. Breeding and non-breeding surveys done together gives a more complete picture of what's happening with the population. What's happening with the number of birds, but also some baseline data that has never been gathered.

Sea bird populations as a whole are on the decline. We do have some species with some degree of resilience. Pigeon Guillemot numbers are pretty stable from year to year, about 300-350 birds across the study area. Their diet consists of 70% gunnel, 20% sculpin, and 10% other, roughly. How does the data get used? The Nisqually Reach Nature Center data feeds into the greater Puget Sound efforts, informing natural resource managers to make informed decisions to manage the population.



The Nisqually Reach Nature Center is now using Survey 123 for ArcGIS, which gives them the capability to centralize the data collection, management, etc. It's an integrated platform to make maps, share data with partners, etc. Having data available at the Nisqually Reach Nature Center for visitors on a kiosk was the vision. The University of Washington is helping develop a model to better understand what is happening with the populations of these birds across the entire region.

The Nisqually Reach Nature Center is still accepting volunteers for this program! There are currently 60 in South Sound, and more than 200 throughout Puget Sound. Volunteers need to be detail oriented, ability to focus, sit still on the beach for an hour, early risers, consistent, reliable, love nature, and be curious!

Pigeon Guillemot are connected to Orcas! Their nesting habitat is naturally eroding bluffs. That eroded material then provides habitat for forage fish, which are prey for salmon, which are prey for Orcas. Preserving these habitats is very important for the food chain and ecosystem. Climate change is a concern. We don't have a great understanding of how it will impact birds directly, but how will it change their ability to utilize habitat, feed their young, etc. Air and sea temperatures, etc. This summer's heat wave, for example, probably "fried" some of the eggs. Over time, warming temperatures that persist could displace these birds, and there are already more birds than burrows. Nisqually Reach Nature Center is monitoring habitat conditions.

Questions: What is the impact of boaters on Puget Sound? They are a skittish bird, but they can adapt and get used to boats. Lyle Point is a popular fishing location, and the birds have gotten used to that. There are other signs of them acclimating to human disturbances. Changes to habitat are more impactful. Burfoot Park is an example of a place where there is a nesting colony and the birds pretty much ignore people unless you're within 5-10 feet of them. They don't even seem to mind dogs!

If you want more information or want to volunteer, please contact Terence Lee, Science Director, Nisqually Reach Nature Center [terencelee@nisquallyestuary.org](mailto:terencelee@nisquallyestuary.org) 360.459.0387

## **5. Pierce County Flood Management Code/Shoreline Master Planning**

*Dennis Dixon, Pierce County SWM*

National Flood Insurance Program and State Shoreline Master Program Requirements - Why are we in the National Flood Insurance Program?

Created in 1968 the National Flood Insurance Program covers the costs of flooding. Communities need to have plans to minimize future flood damages. We know where it happens and how to mitigate it. There are 3 components: flood insurance, hazard identification and mapping, and floodplain management. In floodplain management, the

Federal Emergency Management Agency (FEMA) set up standards that all local communities have to have in their ordinances. Local communities have to enforce their own regulations. It is considered a voluntary program. Example - a number of states Raised their drinking ages to 21 to avoid getting cut off from transportation funding. National flood insurance is similar, in that benefits are tied to maintaining regulations.

What are the federal and state roles? The federal government provides program oversight, mapping, establishes minimum development/building standards, provides affordable insurance coverage, provides technical assistance to local communities, evaluates and documents floodplain management activities. State law prohibits building in a regulated floodway. If you're in the program, anyone in Pierce Co. can purchase flood insurance, regardless of risk level. FEMA provides tools to evaluate risk.

What are the National Flood Insurance Program requirements?

Pierce County meets federal and state requirements, enforces their ordinances, uses the current FEMA flood risk map or more restrictive data. The ability to use the best available information is built into the process. Local governments can send risk map changes to FEMA if there is a change or discrepancy. For example, any culvert replacement in a flood plain or flood way, letter of map revision are required before and after the project to capture change in condition. The County is required to submit to a FEMA audit as often as every 5 years. An additional audit is required when receiving the Community Rating System - CRS insurance discount. Pierce, Thurston, and King Counties are considered class 2 rated communities. The benefits are that they get flood risk mapping and communication tools (flood depth grids, identification of different hazards); Availability of flood insurance; Ability to join up to 160 million in aid due to participation in this program. (small business loans, block grants, infrastructure, etc.) Without this the community would stand alone when disasters come.

Why participate? Increase the resilience of communities, minimize the impacts of disaster, recover more quickly, support business and affordable housing. In Pierce County, only 5% of the area is mapped as a high hazard flood plain. We have seen a great increase in flooding in the past 10-15 years. We know the floods will come, so best to avoid development in the floodplain.

Why now? FEMA Community Assistance Visit - CAV. It's an audit to make sure if they find anything wrong with the system, they can help fix it. It began in 2015. Some properties were flagged. Changes in the code that took place through the Shoreline Master Plan update, they flagged some issues. FEMA put the county on notice that failure to quickly change could lead to suspension.

National Flood Insurance Program suspensions can happen and get you kicked out of the CRS program. Flood insurance premiums could practically double. Policies could also get hit with a surcharge. National Flood Insurance Program flood insurance can not be purchased or renewed. You must have flood insurance if you have a federally backed loan. It would also stop federal grants or loans (HUD, EPA, SBA, etc.), stop federal disaster assistance for flood damage, and no federal mortgage insurance or loan guarantees.

County has responded by going through codes line by line, especially codes 18, 18e, and 18s. They completing changes required by FEMA, changes to improve functionality of code, changes to correct errors. Most changes are mostly of minor to moderate effect. There will be changes to Shoreline code as required by the WAC. It's basically taking it back to 2015 standards. Nothing major in the updates, such as taking away people's property rights. They do need to change the Shoreline code as required by the WAC.

How does this overlap with Shorelines (SMP) and Critical Areas (GMA)? The SMP and Critical areas are discrete. It's hard to start a set of rules so that something that happens within 200ft aligns with something 201ft away from the water. The great divorce - remove the floodplain ordinance, already authorized through RCW, so there's a stand alone flood code separate from SMP. SMP is set up to protect the environment. Flood code protects infrastructure. The County is currently trying to separate flood codes from the SMP. A 30 day public comment period has started. They will hold a joint hearing with Ecology and the Pierce Co. Economic Development on September 28th. It will allow for flood code and SMP changes simultaneously. When they go to the full Pierce County Council to pass the ordinance changes, they will then have to get approval from Ecology. Ecology will have 45 days to respond after public hearing. Consideration for adoption by Council may be in December. They're trying to speed that along.

FEMA is updating the Nisqually River flood maps. The big change on the Nisqually River is that flood discharge in McKenna would be about 30,000cfs. Actually, it was close to 50,000cfs. Public comment and appeal period are expected to start this winter. Appeals require technical information to back up your claim. Comments are small adjustments and fixes.

There could be a whole presentation done about the downstream portions of the system.

Questions: Three counties that qualify for the 40% discount. Only five in the whole nation qualify for this! Thurston County just had their review. Since Tacoma Public Utilities has no maximum levels in FERC license, the FEMA has set floodplains as though the dam does not exist. So Tacoma Power is not required to do advanced flood mitigation through the lower dam. Howard feels that the 2020 flood was significantly impacted by Tacoma Public Utilities

raising the level 2ft before the 2nd storm came along. Do you feel that it's fair that Tacoma Public Utilities does not need to do advanced mitigation? Not going to answer about another agency. They do have their process which included public comment. He does feel that the dam does a natural attenuation in the fall, but we are exposed to a risk in late winter and early spring. The flood discharge and risk that is there is mapped appropriately, but won't comment on the policy.

The FRC license says no more than 10ft below capacity from Memorial to Labor Day. There are graphics from NOAA that could help them take evasive actions early. Point on fall attenuation is that the reservoir is lower in the fall, so can take more in the fall. There is a period of time the dam does have flood risk benefits. Tacoma Public Utilities does not have a FERC license for flood risk. There is a risk when there are atmospheric rivers, especially when they are back to back.

**5. For the Good of the Order**

CEO and cofounder of Earth Views who does watershed mapping is interested in bringing some of the technology into the Nisqually.

The meeting was adjourned at 12:00pm.

*Next meeting: Friday, November 19, 2021  
Online*