Attendees:

Council Members:
- Dan Calvert – Puget Sound Partnership
- Amy Cruver – Pierce County Council
- Amber Martens - JBLM
- Glynnis Nakai – BFJNNWR
- René Skaggs – Pierce CD
- David Troutt, chair – NIT
- Kelly Still - WDFW

Citizens Advisory Committee Members:
- Phyllis Farrell, chair
- Ed Kenny
- Fred Michelson
- Marjorie Smith
- Robert Smith
- Lois Ward

Guests:
- Roger Andrascik – NLT/NSS
- Lloyd Fetterly – NLT/NSS
- Scott Hendrix – Avanti High School
- Paula Holroyde – League of Women Voters
- Joe Kalama – Nisqually Indian Tribe
- Kayla Cavagnaro – Avanti High School
- Amelya Cavagnaro – Avanti High School
- Becky Kowalski - JBLM
- Lorenzo Martin – Avanti High School
- Jim Reistroffer – NLT/NSS
- Etsuko Reistroffer – NLT/NSS
- Quasar Surprise – Avanti High School
- Maya Teeple – Thurston County
- Maxwell Moe – Avanti High School
- Amy Malik – Preserve the Commons
- Michelle Horkings-Brigham – Preserve the Commons

Staff:
- Brandon Bywater - NRF
- Justin Hall – NRF
- Joe Kane – NLT
- Emily McCartan – NRF
- Chrissy Webb – NRF
- Sheila Wilson – NRF

1. Call to Order, Introductions, Approval of Minutes and Agenda
   David called the meeting to order at 9:05. The minutes were approved, as was the agenda for the day.

2. Committee Reports and Updates
   Advisory Committee Reports:
   Citizens Advisory Committee – Phyllis Farrell
   The CAC meeting was cancelled this week due to weather. Members have been very involved in letter-writing and tracking the Yelm biosolids proposal. Ed, Phyllis, Fred, Howard, and others have written letters.
Chair Report – David Troutt
Ecology adopted our Streamflow Restoration plan on February 1, making Nisqually the only watershed to have met its statutory deadline so far. The Nisqually Land Trust also received two of the first project grants. Accomplishing this in such a short timeframe took a huge effort from many partners and speaks to the relationships and strength of the Nisqually community. The Planning Unit will continue to meet to discuss the conditions Ecology set on their approval and next steps toward implementation. David also spoke at the League of Women Voters’ Where’s The Water series, on streamflow restoration, the estuary, and I-5.

Staff Report – Emily McCartan
Emily was on vacation earlier this month. She is continuing to work with the Planning Unit on streamflow restoration activities, and resuming work on finalizing the NWSP report.

Thurston County Subarea Plan Update – Maya Teeple
The County received the revised draft report on RAP back from the consultant and it is out for internal reviewer comments now. Expecting that it will be ready for public viewing and comment in March, and a public meeting will be announced then. The subarea plan Community Working Group will also have its first meeting in March.

Allied Program Reports:
Nisqually Land Trust – Joe Kane
NLT received funding for two of its three proposals under the Streamflow Restoration Act grants from Ecology. Funding will allow acquisition of property for the Community Forest along Busy Wild Creek and provide match for SRFB/PSAR projects on the mainstem and Ohop. The NLT Annual fundraising dinner and auction will be March 16 at SPSCC Campus in Lacey. Tickets available soon. This is the Land Trust’s 30th year!

NREP – Sheila Wilson
Water Quality Monitoring Day was supposed to be yesterday, but the snow school closures meant that only one teacher was able to make it out. Brandon is working to reschedule for next week. CLAMSS meetings with teachers were postponed as well. Chrissy has visited 13 classrooms doing water quality presentations. NREP is working grant applications for ALEA for next year’s tree planting field trips, as well as for the No Child Left Inside grant from Washington State Parks, which would create programs to work with Nisqually tribal youth specifically. Student GREEN Congress is coming up on March 21. Volunteer sign-ups soon.

Nisqually River Foundation/Community Forest – Justin Hall
Justin has been meeting with representatives at the Legislature to talk about the importance of funding the River Council, and separately about a statewide community forest acquisition funding program. The Streamflow Restoration grant (see NLT report) will fund another section in Busy Wild for the Nisqually Community Forest – the question now will be getting the funding lined up with available purchases.

Salmon Recovery Program – David Troutt
David gave an update on the status of the chum run. Nisqually chum made the escapement objective (32,000) but because of the ongoing drought making prairie streams inaccessible,
almost all of their spawning has been in the mainstem. This can be a concern if there is late weather that causes scouring, which would impact the productivity of this year’s run. Steelhead spawning ground counts also started this week. The study on flame retardants in steelhead is complete, and will have a presentation to NRC when the final report is released.

3. Update on Fire Mountain Farms Biosolids Application
After last month’s meetings, a large group of citizens has organized in opposition to the proposed application of biosolids at a site in the Bald Hills near Yelm. Over 150 citizen letters have been sent to Ecology, in addition to letters from the Nisqually Indian Tribe and Thurston County staff. Concerns emphasize that there hasn’t been enough study of the impacts at this site to the Nisqually River, and that the company has a checkered history and an attitude that they were wrongly penalized for mixing industrial waste with biosolids at sites shut down by Ecology several years ago. The comment period closed on Wednesday (2/13), and it is now with Ecology to decide if their determination of non-significance (DNS) will stand. The Tribe has requested a government-to-government meeting with the Director of Ecology to make it clear that they will appeal if the application goes through under the DNS. The Director could instead revoke the DNS and put the application through additional study, which would likely mean that FMF’s new general permit (to be negotiated this summer) will drive the discussion and may be more protective of the river and other resources. Joe Kalama spoke as a tribal elder, noting that elders have a responsibility to make sure that quality of life and connection to the environment and salmon people is preserved for seven generations to come.

4. Avanti High School Class
*Quasar Surprise, Scott Hendrix, Maxwell Moe, Lorenzo Martin, Amelya Cavagnaro, and Kayla Cavagnaro*

Video: [https://www.youtube.com/watch?v=dJJcsQ5VYs0&feature=youtu.be](https://www.youtube.com/watch?v=dJJcsQ5VYs0&feature=youtu.be)

Avanti High School is a small school of choice (150 students) in the Olympia School District. Quasar teaches CTE/Science and Scott teaches social studies, and they designed an interdisciplinary project-based class focused on understanding the relationship between humans and nature through time in the Nisqually watershed. Students created a 3-D mosaic map of the watershed, divided into sections, and worked in teams included a naturalist, historian, artist, and cartographer. The class was rooted in place-based learning, with field trips to the Refuge, LOTT (for water quality), local house museums, and tribal historic sites. Tribal cultural history and experiences of Nisqually and Squaxin Island people in the region were an important emphasis. Students created their final map using GIS/ESRI data, translated into a topographical map. The class also participated in water quality monitoring with South Sound GREEN. They shared the final result at a community-wide exhibition night at their school. The class culminated with a four-day trip to Mount Rainier Institute at Pack Forest, where they took part in rigorous field science on fire risk and carbon sequestration.

*Panel Discussion:*
- Students studied native plants and their traditional uses for tribal people (rose hips, red huckleberries, willow trees were some favorites).
- Visiting Mount Rainier for the first time was a powerful experience. Learning about the cultures around the mountain and getting to visit and be a part of that place inspired me to
want to help improve the world by working on climate change issues, and to train to climb to the summit one day! Working with ARC GIS tools and learning about the geological processes that formed Mount Rainier over millions of years was very cool.

• The class also highlighted the big picture – not just the Nisqually Watershed, but impacts on the ecosystem as a whole (forest fires, carbon cycle). The real-life applications were powerful; our generation will need to do this work to combat climate change. Joe Kalama encouraged the students to think about helping teach the generation coming after you – everything that lives is in a cycle.

• There are no big towns in the watershed, so doing historical research means digging deep for sources. Mineral had one of the first UFO sightings. The historian for the Ohop section researched the communities that developed among settler families and tribal groups, starting with the Hudson’s Bay Company. Leading the class gave the teachers the opportunity to learn more about the history of the area and broaden their understandings, especially about tribal history.

• It was surprisingly challenging to find resources about the wildlife in the Ohop Valley. Maxwell took extra initiative and called the River Foundation to learn more about the restoration and species there.

• The field trip to the Refuge was surprising even for people who had visited many times before – learned how large the farm was and that the area almost became a port. It is important to be aware of that history so we know how valuable these places are.

• Avanti is different than a lot of traditional high schools and gives students a lot of freedom to choose assignments that fit their style of learning, although you still have to work hard (need to achieve 80% mastery to get class credit). The students noted they feel like their voices matter, and they value the opportunity to do interdisciplinary classes like this one and flexible personal projects. The teamwork and rigor in this class was amazing.

• Mount Rainier Institute got raves: “I was always interested in earth sciences, and visiting Pack Forest really cemented that as a career choice for me.” “The Pack Forest trip was so rigorous – I never thought I could get up at 8:00 in the morning and work until 10pm every single day and be positive the whole time and ready to do something new, both physical work and learning things. That trip was really eye-opening and one of the best experiences I’ve had in high school ever.”

• Quasar noted that they are eager to teach this class again in future years. This is an amazing community to be part of because there’s tremendous support for education and great access to professionals working in the field. The NRC would be happy to help with resources any time.

5. **AgForestry Class 40 International Seminar: Ecuador**
   
   **Justin Hall**
   
   The AgForestry Leadership Program was created 40 years ago to develop leaders in agriculture, forestry, and natural resources in Washington. Justin is a member of the 40<sup>th</sup> class. The program covers government, media, political action, social services, criminal justice system, and a variety of other issues in addition to agriculture and natural resources. There are 24 members of the class from across the state, with a diverse range of interests, ages, and backgrounds. The International Seminar fosters technical and cultural exchange with other countries. Justin’s class returned from their trip to Ecuador earlier this month.
Ecuador basics:
- Ecuador is about twice the size of Washington State, home to 17 million people.
- 4 life zones: Galapagos, Coast, Andes, Amazon. This trip visited the Andes and the Amazon regions. It’s steep country, with crops and flowers grown on terraces.
- Main exports:
  - Oil and mineral fuels - $6.9 billion
  - Fish and crustaceans (shrimp - effects on coastal mangrove swamps) - $3.3 billion
  - Fruits and Nuts (bananas) - $3.2 billion
  - Prepared Meats and Seafoods - $1.2 billion
  - Live Trees, Plants, and Cut Flowers - $900 million
  - Cocoa - $700 million

The class visited Quito (capital) and the surrounding Andean region, where they discussed public investment in agriculture, microlending, and trade. While in the Andean region, they visited local markets, a cut flower company, cheese factory, eucalyptus plantation (introduced, extremely water-intensive species), and an ecological reserve reforestation project to plant trees. They also toured several community cultural centers and had a homestay with a local family. Next they visited Ahuno in the Amazon region, on Napo River (Amazon tributary). Kids have to pay ferry or paddle themselves across in tiny canoes to get to school. Napo looked fairly similar to the lower reaches of the Nisqually – very muddy. Visited a cacao plantation (family farm) and got to participate in the chocolate making process. They are building a factory so they can make the bars locally as well.

Current issues and observations:
- Lack of regulations, compared to the US, was evident to Justin in many places. Fewer safety practices in place in timber harvesting. The cut flower industry is huge, and the company they toured claimed to be “organic,” but didn’t have convincing answers to tough questions about practices and workers were in chemical suits. “Green label” products allow chemicals not permitted in the US.
- The previous government moved a lot of investment towards China, including for major infrastructure projects. There are concerns about the use of Chinese funding, contractors, and labor on these projects which then don’t support local economies. Some have structural concerns. Heavy investments made in highways, which are some of the most expensive stretches of road in the world because of steep terrain. Lot of national debt from previous government investments.
- Venezuelan refugees are not allowed to immigrate permanently to Ecuador, but can walk through to Peru.
- 17% of the country is reserve/national park (3% in US).
- Water shortage issues are driven by lack of infrastructure to get water from where it’s plentiful to where it’s needed. Government provides water concessions, with large companies getting an inside line. Water for Quito is piped up through the pass (the class was warned not to drink non-bottled water). There are some treatment plants, but political issues have delayed improvements.
- Plastic and organics recycling were frequently available in public places.
• Indigenous people and environmental are legally protected under new (2008) constitution, although subsurface water and mineral rights still belong to the government and/or foreign interests (Australian, Canadian, and Chinese mining companies). Gold mining (strip mining) is just starting, bringing standard issues with runoff, cyanide products. They met with a local activist who shared concerns.
• Cool plants and animals included the walking palm (can move up to a meter in its lifetime towards the sun), toucans, egrets, parrots, poison dart frogs. They didn’t talk much about fish or water quality in rivers – rainbow trout are invasive, native fish include lots of white fish, piranhas, carp.

Overall, Justin has found the AgForestry program very useful, with many eye-opening experiences. It’s great to have the network of classmates and other alumni who you can call on. Graduation is here in Olympia in May and Justin will give one last overview presentation then.

6. For the Good of the Order
• LWV Thurston’s series on water will continue on March 5 at Olympia Community Center, featuring George Walter and Maia Bellon. The third meeting will be April in Yelm, about rural water issues.
• Pierce Conservation District native plant sale on March 1 and 2.