



Meeting Minutes
Nisqually River Council Meeting
October 16, 2015
UW Pack Forest
Information: 360.438.8715

Attendees:

Council Members

Roger Andrascik – Mount Rainier National Park
Amy Cruver – Pierce County
JW Foster – City of Yelm
John Hayes – UW Pack Forest

Amber Martens – JBLM
Rene Skaggs – Pierce Conservation District
Stephanie Suter – Puget Sound Partnership
* CAC Representatives (3)

Citizens Advisory Committee Members

Bryan Bowden
Phyllis Farrell *
Fred Michelson
Steve Pruitt*

Karelina Resnick*
Marjorie Smith
Bob Smith

Guests

David Hooper – Mount Rainier National Park
Susan Rosebrough – National Park Service
Chris Schutz – Pierce County

Donna Turnipseed – JBLM
Charissa Waters – Thurston County
Dan Wrye – Pierce County

Staff & Associated Nonprofits

Morgan Greene – Nisqually River Council
Justin Hall – Nisqually River Foundation
Joe Kane – Nisqually Land Trust

Alex Storvick – Nisqually River Ed. Project
Sheila Wilson – Nisqually River Ed. Project

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

Call to Order – Steve Pruitt called the meeting to order at 9:35 am.

Approval of Meeting Minutes and Agenda – There was a motion to approve the September meeting minutes as presented. They were approved, as was the agenda for the day.

2. Reports

Advisory Committee Reports

- *Citizens Advisory Committee* – The CAC has been busy updating their annual goals for the coming year. The group will be using a systems management approach to better understand threats facing the watershed. As soon as the goal list has been finalized, the CAC will present it to the NRC.
- *Chair Report* – David was unable to attend the meeting.
- *Staff Report* – Morgan reported that 22 people officially graduated from the Nisqually Stream Stewards (NSS) class during a celebration at the Nisqually Watershed Festival. The course was a big success; many participants have already made great progress towards their 40 hour volunteer commitment. The Nisqually Watershed Festival was also a success – final attendance numbers will be shared as they are available. Eatonville Salmon Fest is tomorrow from 10-3 at Millpond Park.

In other news, the Nisqually River Water Trail will have an open house on November 5 from 6-8pm in Yelm. The final meeting location is still to be determined; Morgan will share details as they are available. Additionally, the Water Trail survey is open through December 4th. Please consider taking the survey or sharing with networks.

Allied Programs

- *Nisqually Land Trust* – Joe announced Cris Peck is now a full time Land Trust employee after serving 3 Americorps terms. The new Americorps volunteer, Claire Cook, is a graduate of Evergreen. In addition, most of the Land Trust staff recently returned from a convention in California, where they learned about acquisitions and more. The majority of the travel costs were covered by RCO.

The NLT is working to transfer ownership of the Burwash Farm to the Eatonville School District. All partners are on board, and the School District envisions a STEM campus on-site. There are legal technicalities to be completed first, but Joe is hopeful it will be completed soon.

- *Nisqually River Education Project* – Alex Storvick is NREP’s new Washington Conservation Corps (WCC) Americorps volunteer. This is his second year in WCC: last year he worked for Puget Sound Corps monitoring conditions in Puget Sound. He accepted this position because of his interest in education and outreach; so far, he’s already been in multiple classrooms and on several field trips! Alex graduated from Evergreen.

Sheila added that the Nisqually Watershed Festival was a success: she completed a live salmon dissection, poster contest and the first ever Nisqually Idol. The top winner in that competition received \$150; there were three winners total. She noted that North Thurston Public Schools volunteer Jim Stanton took several busloads of students to Clear Creek Hatchery. The students spent the day assisting with spawning; carcasses were then taken to classrooms so that students could participate in salmon dissections. Jim will present at the November NRC meeting.

In other news, Sheila recently wrapped up Nearshore field trips this month in corporation with the Nisqually Reach Nature Center and American Oyster Company. Water Quality Monitoring day was yesterday, and Sheila had more volunteers on site than ever before. Volunteers stemmed from Evergreen, Stream Stewards, River Ridge High School and the Nisqually Environmental Team. Planting season is quickly approaching, and Sheila already has half of the Ohop planting slots filled. A community planting event is scheduled for October 31 from 9-12. RSVPS are required; email Sheila to sign up. Another community planting event will be held on November 21st at Red Salmon Creek—details will be shared soon.

Lastly, Sheila noted that several Stream Stewards have become very active in the Salmon Watchers program. She also has not heard from Peter Donaldson about the grant proposal that would support Sustainability Ambassadors and Nisqually Youth Council.

- *Nisqually River Foundation* – Justin reported that the majority of his time has been spent billing and reporting on grants. He is currently working on a report for RCO contract funding that supported Eatonville Salmon Fest and Nisqually Stream Stewards. Beyond that, most of Justin’s time has been dedicated to the writing of a management plan for the Nisqually Community Forest. The plan includes parcel prioritization; he will share the plan at an upcoming NRC meeting.
- *Salmon Recovery Update* – Both Chris and Ashley were unable to attend today’s meeting. Joe recognized the effort the Salmon Recovery Program has dedicated to many recent grant proposals. The Land Trust recently received a “Bravo” award from the RCO—he feels that speaks highly of the quality of the program. Justin added that salmon returns have been lower than anticipated this year, although he did not have current numbers to share.

3. Cultural and Ecological Relationship between the Nisqually Indian Tribe and the Plants of Mount Rainier National Park – David Hooper, PhD Mount Rainier National Park

Note: This presentation was moved to #3 in the agenda, due to a quick first half of the meeting. David recently completed his PhD research from the University of Montana. The focus of his study was to examine techniques that the Nisqually Tribe uses to harvest traditional techniques. The project stemmed from an MOU between the Tribe and Mount Rainier National Park to allow tribal harvest of 11 species of plants. Within the MOU, it was implied that

harvesting would be completed in a manner that would not impede upon the Park's Mission. In 2001, that MOU was questioned, because critics felt the MOU violated the Park's ability to fulfill the portion of its Mission dedicated to the conservation of natural objects. On the other hand, the Park must also recognize and respect the Medicine Creek Treaty of 1854, in which the Park is considered "unclaimed land," therefore allowing tribal access.

In 2005, a research permit was granted allowing David to begin to understand the impacts of harvesting within the Park. Under that permit, tribal members are able to harvest plants while David completes research. His project began in 2006, aimed at answering 3 questions: 1) what are the methods used by the Nisqually to harvest plants; 2) how does harvesting influence plant biology or local ecology; and 3) are there relationships between ecological impacts and harvesting methods? His work was informed by a framework of human-plant interactions and Traditional Ecological Knowledge (TEK). TEK is an adaptive and evolutionary process; cultures that depended on natural resources adapted harvesting methods so that practices did not have lasting, negative impacts. Without that adaptive flexibility, civilizations would collapse.

His research used ethnographic approaches; ecological monitoring and experimental approaches; and natural history. David focused on beargrass, princess pine, and western red cedar. Of those species, most data was collected on beargrass. It is a rhizomous plant, the leaves of which are used for basketry. Harvesters combs through bunches to search for long leaves with wide, white bases. The white bases—rather than purple—mean the dried plant will more readily accept dyes. Plots were monitored to observe whether the percent ground cover of beargrass decreased with harvesting. Initial data showed that beargrass increased throughout the study area, leading to three hypotheses: 1) harvesting stimulates leaf production; 2) harvesting causes the plant to produce new stems; or 3) the number of levels harvested per stem does not have a measureable affect. To test the hypotheses, David conducted an experimental harvest by collecting the maximum number of stems traditionally harvested. He returned two years later to measure the diameter of stems. He found a statistically significant reduction in diameters, but David does not believe it is biologically significant: the plants were alive and functioning, despite small stems. He believes that harvesting is completed within the plant's range of tolerance to damage, leading to no overall changes in abundance.

The next plants studied were western red cedar, and to a smaller extent, Alaskan yellow cedar. Although cedars are used for multiple purposes, David limited his study to bark harvesting only. His "subjects" were 8 trees that had been illegally harvested in a traditional manner by an unknown person several years earlier. Traditionally harvest methods call for peeled strips two hands-width wide; on smaller trees, no more than 1/4 to 1/3 of the tree's circumference was removed. This method is well known throughout the tree's range as a method that does not kill the tree. Other impacts are unknown, so David monitored secondary growth by placing metal bands around the tree. As the tree grows, the bands expand and allow David to measure how much wood was accumulated. His initial results showed the harvested trees grew more than non-harvested trees. To test why, he took cores of each tree to use ring width as a proxy of tree growth. He found that harvested trees had been growing faster before they were harvested, and that the rate of growth declined after peeling. No significant changes in secondary growth occurred after peeling. This shows that traditional harvest occurs within the plant's range of tolerance to damage.

Pipsissewa—also known as princess pine—is used to make tea. It is a small, rhizomous evergreen shrub. Harvesters snap the stem off at ground level, so as to keep the rhizomes intact. David's guidelines don't allow the harvest of plants with seedheads. Between two monitoring sites, David established 120 sample units. He measured stem density, species frequency and percent ground cover, which all yielded similar results; because of the similarity, David focused on stem density for this presentation. Results showed that stem density did not decrease stem density or ground cover. He believes that seed reproduction is very low, and that rhizomes make up the majority of the plants reproduction. In order to test this hypothesis, David established 3 plots that each had a different harvest scenario: no harvest, entire harvest and Nisqually harvest. Two years after harvesting, he harvested plots again and measured total shoot biomass. He counted the number of reproductive and non-reproductive stems in each plot. The results showed that harvesting did have an effect on the ratio of the number of overall stems; likewise, "entire harvest" resulted in no reproductive stems. The Nisqually harvesting methods also reduced the number of stems, but did result in reproductive stems two years later.

David is currently collaborating with Greg Burchard to turn his dissertation into a report. He is also examining other species, including their natural history, ethnobotanical uses and similarities to previously monitored species. If he's able to, David would like to examine other questions inspired by his study. For instance, what are the impacts of fire

on the plants? Does variation in harvesting methods between and within communities have an impact? Do different tribes have different harvesting methods, and therefore different impacts?

In summary, the Nisqually harvesting methods are not harmful to the environment. Tribal members recognize that their ancestors harvested in a sustainable manner, and that remains an important part of their cultural identity and health. David feels that if they continue to use their historic harvesting methods, it will result in no biologically significant changes to plant communities within the Park.

Questions:

- Steve wondered the inspiration behind David's involvement. David has had an interest in the topic for years. University of Montana had an advertisement for the research project, so he applied.
- Fred wondered how many tribes and tribal members accessed the park for harvesting. Legally, the Nisqually is the only tribe that has an agreement with the Park. One family primarily conducts the harvesting, and the largest group of harvesters has been about 15 people. David clarified that tribal harvest is not allowed under the Federal Code of Regulations; all harvesting occurs by permission under David's research permit. There is work underway to legitimize traditional harvest of all Treaty-associated Tribes.
- Chris asked if the research areas were 'off the beaten path' enough to assume that any other impacts were natural, not human made. Each site is in a different area, but in general, yes. The beargrass site was previously disturbed because of a utility line. The princess pine site is adjacent to Longmire Campground, in an effort to make it accessible to elders. The western red cedar site does not have any legal visitation.

David's presentation is available here: <http://www.slideshare.net/Nisqually/cultural-and-ecological-relationship-between-the-nisqually-indian-tribe-and-the-plants-of-mount-rainier-national-park>.

4. 2014 Watershed Health Report Card – Dan Wrye, Pierce County Water Quality Manager

Dan shared results of Pierce County's 2014 Watershed Health Report Card. He began by explaining that Pierce County (PC) takes a watershed approach to water quality, and uses multiple indicators to track progress towards improving water quality, or "raising the grade." The indicators relate to stormwater management compliance and watershed health performance.

PC is comprised of 4 watersheds: Key Peninsula/Gig Harbor, Chambers Clover, White/Puyallup, and the Nisqually. Within the Water Quality Program, there are 30 employees who track stormwater management compliance, by monitoring daily for violations. Stormwater runoff is one of the leading causes of untreated pollution in watershed, and can also cause floods or heavy flow rates. On average, the Program inspects about 1,500 sites that have permanent structures to manage or treat stormwater. When ranking, "1" denotes severe non-compliance and "5" denotes full compliance.

Based on that monitoring, Dan reported that the number of severe non-compliant infractions has been on the decline; in 2014, just under 5% of sites received that ranking. Meanwhile, the number of minor deficiency rankings (#3) has fluctuated, with 33.5% of sites receiving that designation in 2014. Countywide, 61.6% of all sites were compliant with stormwater runoff regulations (#4 or #5); in the Nisqually Watershed, only 50% were compliant. Dan noted that severe noncompliance is the lowest it's been, although he never expects the number to reach "0." Additionally, this is the first time that the number of compliant sites has exceeded 60%.

In addition to measuring stormwater compliance, PC tracks watershed health trends. The Program monitors stream quality at 53 sites on a monthly basis. The monitoring includes biological indicators, shellfish bacteria, weather, water levels, groundwater wells, and more, in addition to water quality parameters. All data is published on the watershed health web portal (www.piercecountywa.org/watershedhealthdata). Using an index developed by WA Department of Ecology, the results of the water quality monitoring is displayed in a number range. Meanwhile, PC monitors benthic macroinvertebrates, the data of which is translated in to the Benthic Index of Biotic Integrity (BIBI). The water quality index (WQI), combined with the BIBI, determines the 'grade' for each site and watershed. Each index is independent of one another, which means they are tracking different things. In 2014, nine sites had a statistically significant change in one or both of the indexes. The other sites did not have a statistically significant change.

Ten sites are within the Nisqually Watershed. Dan noted that from 2009-2014, Lynch Creek has declined in both the WQI and BIBI. No streams improved in both indexes, although several streams improved in one or the other. Dan added that the Nisqually Watershed had been ranked as one of the healthiest watershed in 2013; last year, it was one of the least healthy. The watershed's overall grade was a 'C.'

One reason watersheds may not improve as rapidly as hoped is due to unregulated stormwater runoff and a lack of regular, uniform enforcement. PC is a Phase I County, which means it has the highest standard of stormwater permits. In contrast, surrounding counties are Phase 2 Counties, or have no stormwater regulations at all. This has a large impact on the whole region. PC also has no jurisdiction on federal or tribal lands, which creates gaps in the program's monitoring and enforcement. In moving forward, Dan believes polluted runoff must be controlled; he also believes that permit-required inspections, and the focus on compliance, are working overall.

Questions:

- Steve wondered what should happen to ideally achieve complete stormwater compliance. Dan believes that uniform standards across all jurisdictions, drains, and discharges should be implemented. Ideally, a watershed-scale—not county—permit would allow for greater flexibility and coverage.
- Roger noted that the Mashel River isn't included in the County's monitoring—that seems to be a gap that should be filled. Dan agreed, but added that initial sites were selected based on access to monitoring locations. Currently, PC is under contract to analyze gaps and determine if changes should be made. Several NRC members wished to be involved in this process.
- Roger wondered if PC acknowledged citizen science data as way to track red flag sites. Dan replied that citizen science data cannot be used for this because the quality does not meet regulatory standards. It is useful in raising red flags, but PC has trouble receiving all data collected. Sheila noted that NREP operates under an EPA-approved Quality Assurance Project Plan (QAPP); she would like to work with Dan to figure out how her data might best be used by the County.
- Fred wondered if PC's data was shared with other jurisdictions. Dan noted that it was, but other jurisdictions had differing standards, so it is not always valuable.
- Joe noted that Lynch Creek flows through industrial zones—is there information that points to how that impacts the Creek? PC does not conduct too much monitoring near Eatonville, because they wish to give the Town time to begin implementing their own stormwater management plan. Joe recalled Bob McKane's presentation from several months ago, and wondered if data could be generated to show similar impacts.
- Karelina noted last time he was here, the NRC talked about monitoring the stormwater outflow before and after to measure the impacts of raingardens—is that still a possibility? It depends on access; Dan has monitoring set-ups in unincorporated towns, but Eatonville would be a different situation.
- How can the NRC be involved? WA Department of Ecology issues new permits in 2018, and the NRC could provide influence to focus standards on a watershed-scale. Roger added that if entities within a watershed agreed to work towards the same standards, it would make a big difference.

Steve requested that this be a follow up Executive Committee conversation. Morgan will set it up prior to the next meeting. Dan's presentation is available here: <http://www.slideshare.net/Nisqually/2014-watershed-health-report-card>.

5. Nisqually River Access & Water Trail – *Susan Rosebrough, NPS Rivers, Trails, and Conservation Assistance Program*

Susan works for the National Park Service's Rivers, Trails and Conservation Assistance (RTCA) program. She began by explaining that the term "water trail" refers to a boat route that is tied together with access points, signage, maps and other public outreach tools. RTCA provides staff time, not funding, to communities with the goal of producing on-the-ground successes. The program focuses on collaborative processes, and partners with non-profits, tribes, federal agencies and more.

The Nisqually River Water Trail (NRWT) planning process was inspired by the NRC's Nisqually Watershed Stewardship Plan and member calls for increased access to the river. The original Nisqually River Management Plan called for river access too, and eventually led to the creation of the Nisqually State Park, which has two potential access sites. The vision is that the NRWT provides high quality non-motorized public recreation opportunities that are aligned with efforts to protect the natural environment, including threatened and endangered species and protected lands. As a result of the planning process, the NRWT will provide public access to the Nisqually

mainstem, provide interpretation opportunities, recognize personal responsibility of users, and create a minimal impact on the natural landscape. The geographic area of the Plan is from La Grande Dam to the Nisqually Delta. Although the plan will focus on water-based recreation, it will tie into other recreation opportunities when appropriate. For example, the Plan will highlight wildlife viewing opportunities and nearby trails.

The river currently has less than 12 access points, and the majority are located below McKenna Park. Above McKenna (or the upper reach), the number of access points is very limited. Those that do exist require significant effort to use. The planning process has examined the existing sites, as well as any other potential sites that could be developed. During this analysis, the process also considered the current amenities and desired outcomes. Desired outcomes, for example, include a public outreach campaign that includes maps, signage and more.

The planning process will likely take 2 years; currently, it is one-year into the process. Successes during the first year include the formation of an Advisory Committee, starting the inventory process, identifying key issues, exploring management options, and creating ways for public involvement. An open house will be held on November 5th, and an online survey is open through December 4th.

Several key issues have been identified, including a lack of access from Nisqually State Park to McKenna Park. In addition, there are potential negative impacts on fisheries due to increased use, and safety concerns for users. However, Susan sees an opportunity to increase access and enjoyment of the river, along with opportunities for interpretation and education. She noted the rich cultural and natural significance of the area; the NRWT has a large potential to help tell those stories.

Because of potential impacts on Steelhead populations in the upper reach, Susan shared several management options for use from the State Park to McKenna. Beyond exploring options of additional access and/or camping sites, the Advisory Committee is considering ways to limit negative impacts. One option is to limit access in the upper reach to specific time windows to avoid spawning steelheads. Other management ideas might focus access at the confluence of Ohop Creek, rather than at the mouth of the Mashel. The group is also considering ways to better manage access sites, including gated access, permits, fee-based shuttles and more.

Next steps include analyzing results of the online survey and hosting the open house. The next Advisory Committee meeting will be held in January, and a draft plan will be available in March. The final plan will be completed in Fall 2016. Morgan will share final details of the open house meeting location soon; please email her if you would like to be added to the Advisory Committee.

Questions:

- Karelina wanted clarification on the details that Carl Rotter gave yesterday. Susan does not have details on State Park planning. Also, spawning Steelhead are the most easily disturbed from their redds, so reasons to limit river access near the Ohop and Mashel confluences to specific times of the year are to protect sensitive populations.
- Sheila wondered if management options would change as the State Park is developed. Susan noted that State Parks' original development plan received push back due to fisheries concerns. This process may help modify those plans so that all entities are happier.
- Bryan noted that this process has highlighted how special the upper reach of the river is. From Nisqually State Park to McKenna, there is very limited use. From McKenna down, the river already receives a lot of use. This process has the opportunity to make that upper reach a very special place to visit.

Susan's presentation is here: <http://www.slideshare.net/Nisqually/nisqually-river-access-and-water-trail>.

6. For the Good of the Order

Bryan announced that this is Roger's final NRC meeting as a Park Service employee. He is retiring in December, after 37 years. Roger stepped into his current position when Bryan retired, and has been an active NRC member for 2 years. Bryan thanked Roger for his dedication to the Nisqually Watershed on behalf of the NRC. Recently, Roger has taken the lead to help the Park adapt to regional climate change. Roger will continue to be active to the watershed through the Stream Stewards, Salmon Watchers, Eatonville School Board and more.

Roger noted that before he took his position, it had been vacant for 18 months, so he's unsure how long it will take to fill it when he retired. He noted that the Deputy Chief of Natural and Cultural Resources will likely fill in for the first 120 days, and will hopefully step into the NRC role. Rebecca Lofgren may fill in too.

Adjourn – Meeting was adjourned at 12:39pm.

*Next Meeting: Friday, November 20, 2015
Nisqually National Wildlife Refuge, 9:00 – 12:00
NWSP Topic: TBD*