



**Meeting Minutes
Nisqually River Council
September 21, 2012
Mount Rainier National Park, Longmire
Information: 360.438.8715**

Attendees:

Council Members

Ron Averill – Lewis County
Bryan Bowden – Mount Rainier National Park
Lisa Breckenridge – Nisqually Indian Tribe

Pam Hefley – Tacoma Power
Don Perry – Nisqually Indian Tribe
*** CAC Representatives (2)**

Citizens Advisory Committee Members

Paul Crosetto
Mary Foster*
Karelina Resnick*

Marjorie Smith
Robert Smith
Sunny Thompson

Guests

Nick Bond – Town of Eatonville
Nancy Franco – Pierce County
Paul Kennard -- Mount Rainier National Park

Rebecca Lofgren – Mount Rainier National Park
Barbara Samora -- Mount Rainier National Park
Chris Schutz – Pierce County
Debbie Young – Tacoma Power

Staff & Associated Nonprofits

Justin Hall – Nisqually River Foundation
Joe Kane – Nisqually Land Trust

Ashley Von Essen – Nisqually River Council
Sheila Wilson – Nisqually River Ed. Project

1. Call to Order, Approval of Minutes and Agenda

Call to Order – Karelina called the meeting to order at 9:47am.

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

2. Introductions, Reports

Advisory Committee Reports

- *Citizens Advisory Committee* – Karelina reported that the CAC met Wednesday, September 19th. Part of the discussion was dedicated to the Forest Buffer Committee and allowing more time for land nominations to create a forest buffer zone. This buffer would lie between working forests and growing towns and communities, and would aim to provide the first line of defense of encroaching development. A proposal is in the works and will be presented to the Council in the near future.

The CAC has been moving forward with Citizen Conservation Certification assessment. There is a working template in place, which will offer guidance though the development of this program. The assessment tool will be kept concise to ensure it can be used with ease. After completing the initial assessment, participants will be able to access an established website to gather more information on ways to promote sustainability in the Nisqually Watershed. Areas of interest have been identified and online resources are currently being compiled. The CAC hopes to have something to present to the NRC by the first of the year. Any ideas or suggestions should be submitted to Karelina or Ashley.

- *Chair Report* – Justin informed the Council that David was unable to attend today's meeting due to a pressing issue with the weir. The weir has yet to see an influx of wild salmon, prompting a discussion on whether there will be enough gametes sent up river to ensure a viable future salmon run.

Debbie Young, who has worked with Tacoma Public Utilities for a number of years, has decided to retire. She was honored at this meeting for her 14 years of involvement with the Nisqually River Council and was awarded a Nisqually tribal blanket and a Nisqually Watershed Plaque. She has been a very valuable and important partner through the years and we wish her luck in her retirement!

- *Staff Report* – Ashley reported that the Nisqually Watershed Festival would be held next Saturday, September 29th, at the Nisqually National Wildlife Refuge. There are still plenty of volunteer slots available for those who wish to take part in the day's festivities. This will be Ashley's first year in the role of Festival Director. She was also able to appear on yesterday's edition of CityLine on TVTacoma with Daniel Hull, Executive Director of the Nisqually Nature Reach Center, and Michael Schramm, Visitors Services Assistant for the Nisqually National Wildlife Refuge.

To further promote the Nisqually Sustainable program, a feature will run in the Nisqually Valley News for one of the program's participants. Yelm Earthworms and Castings has been chosen for their continued support and involvement over the last three years. Look for this feature in the near future.

Allied Programs

- *Nisqually Land Trust* – Joe Kane reported that Land Trust's annual meeting and salmon bake will take place on Sunday, September 23rd, at Oddfellows Park. There has been a lot of enthusiasm surrounding this event and is expected to be very well attended.

Joe also reported that they have just signed a deal with Hancock for 520 acres just behind Ashford County Park. This will complete the wildlife corridor between the national park and state forest in the upper watershed. With a price tag of \$2.8 million, this is the largest transaction carried out by the Land Trust to date. It is the future intent of the Land Trust to use this parcel for the trading of carbon credits and involvement in the carbon market.

Joe proudly reported that the Nisqually Land Trust has acquired over 4,500 acres of land since its establishment in 1989. When Joe first came to work for the Land Trust, this number was a mere 800 acres.

Since departing the NLT, Joe Kennedy's position as Land Steward has been divided and taken over by both Charlie Kearns and Candi Tobin.

The NLT's Community Forest is moving forward and will be holding a series of public meetings throughout the region. Joe will contact Ashley with the specifics of these meeting times and locations as to inform the Council. The committee would love to include local partners and organizations on matters as the project develops.

- *Nisqually River Education Project* – Sheila reported that tomorrow, September 22nd, a Water Quality Monitoring Teacher Training will be held Tumwater Falls in conjunction with ESD 113 and South Sound Green education programs.

Tuesday, September 25th, NREP will hold the Extreme Benthics Academy, a training on water quality and aquatic insects. This training, located at the Ohop Grange, will bring together 65 students from Nisqually Middle School, Columbia Crest Elementary, Pioneer Middle School, and Yelm High School, as well as members of Pierce County's Surface Water Management, Nisqually Stream Stewards, and the Nisqually River Foundation. This training will highlight the importance of aquatic insects and Benthic Index of Biological Integrity (BIBI) sampling in our streams. Students will then be given the opportunity to participate in upcoming field trips where they take benthic samples from multiple sites in the Nisqually Watershed and Pierce County.

There has been sudden increased interest amongst watershed schools in the Nisqually River Education Project. Sheila is taking on more teachers from Weyerhaeuser and Chloe Clark Elementary, as well as every 5th grade teacher in the Yelm School District. This means a lot of work to prepare for this fall's Water Quality Monitoring Day, scheduled for October 18th. Sheila is currently looking for volunteers from partner organizations that are willing to help out new teachers on this day, especially those who

may not have chosen to participate in the program. Ashley will email a reminder out to the NRC as the Water Quality Monitoring Day approaches.

- *Nisqually River Foundation* – Justin reported that he has been working on the Payment for Ecosystem services program, which will aim to facilitate trades on ecosystem services and promote responsible management of private forests, while upholding sustainable practices to ensure appropriate use of natural resources. The committee is currently in talks with the city of Olympia and is also looking at a project on a large parcel of land in the upper watershed.

After months of attempting to get on Norm Dicks' calendar, Justin has secured a date for the Dan J. Evans Stewardship Award Ceremony. The date will be October 24th, with the event running from 4 to 6pm at the Braget Farm. A \$5,000 contribution has been made by Boeing to hold the event, with an amazing \$20,000 gift from the Nisqually Tribe to support the work of the Nisqually River Foundation. Casual dress will be the night's attire, and beer and wine will be served!!

- *Stream Stewards* – Don Perry, who has been very busy over the past few months, reported that this year's Stream Stewards have graduated, adding 14 members to the Nisqually family.

Tomorrow, September 22nd, is the Salmon Watcher Workshop, to be held at the tribe's Natural Resources Office from 9am to noon. This workshop will teach participants how to identify and count adult salmon, while watching them spawn in reaches of the Nisqually.

More volunteers are needed at the Nisqually Watershed Festival. Interested parties should contact Michael Schramm at the Nisqually National Wildlife Refuge to be placed on the schedule.

Important Dates to Remember:

October 13th, NatureMapping

October 27th, Plant Maintenance at Ohop or Braget (to be determined)

November, Miscellaneous Planting Events

December, Salmon Watcher Workshop and Carcass Tossing

- *Salmon Recovery Update* – Chris was unable to attend today's meeting due to a scheduling conflict. Justin reported that the weir is working, but slower than expected. There are concerns of the lack of fish showing up, but with the absence of rain this summer, they could be running late. Fish are being seen, but there have been higher populations of coho rather than chinook. Harvest rates are being cut back to ensure healthy, future runs.

Don also added that the Department of Transportation is working on 6 more logjams, downstream of Smallwood Park in Eatonville. This will bring the number of logjams on the Mashel River close to 50, beginning at Boxcar Canyon and travelling towards downtown Eatonville. Construction of logjams began in 2006 to create vital habitat and resting areas for juvenile and spawning salmon, while providing bank support and erosion control for the town and its community.

3. Climate Change Ecological Studies in the Nisqually Watershed on Mount Rainier

Barbara Samora, MRNP Biologist and Research Coordinator

Barbara manages both aquatic and atmospheric programs for Mount Rainier National Park, as well as facilitates a number of research projects by students, scientists, and citizens. She is here today to share a number of the ongoing research projects being carried out at the park. More information can be gained on any one of these projects by contacting her directly.

Climate Monitoring and Extreme Events

Monitoring Lake Ice-Out and Ice-On

Mountain Lake Ecology (Lake Allan, in the Nisqually Watershed)

Amphibian Monitoring, Species of Concern in Breeding Sites

Air Quality Monitoring and the Effects of Climate Change

Monitoring of Methyl Mercury in Aquatic Systems
Monitoring Discharge of the Nisqually River
Songbirds and Bioaccumulations of Mercury Levels
Frog Species Population Declination Due to Presence of Chytridiomycosis
The Effects of Climate Change on Animal Immune Systems
Cascade Butterfly Project
Tree Seedlings and Climate Change
Black Carbon: Response of River Runoff Due to Black Carbon in Snow and Ice in WA State
Social Science: What Do People Know About Climate Change?

Barbara's presentation has been made available on the NRC's Slideshare website. To access, visit:
<http://www.slideshare.net/Nisqually/climate-change-studies-at-mount-rainier-national-park>

4. Thunder on the Mountain on the Mountain: Park Research on Angry Glaciers, Restless Rivers, and Climate Change on Mount Rainier

Paul Kennard, Regional Geo-Morphologist, and Rebecca Lofgren, Bio-technician and Glaciologist, Mount Rainier National Park

Since 2003, the areas that surround Mount Rainier have been experiencing significantly flooding. Roads are either being washed out due to unanticipated influxes of water or are being completely taken over. These events, which could be characterized as 100-year events, are now occurring every 14 years. This is due in part to the material that's coming down from the mountain and being deposited into these river systems, filling them, leaving less room for water to flow through. Researchers at the park have been looking at how fast river beds are filling, which is estimated at about 3 feet per decade, faster than ever before. Not only is more debris coming down from the mountain, but also these flows are occurring more often, as are events like slurries and lahar.

Researchers at the park are taking a broad approach to studying the events, providing a framework entitled "Goats to Geoducks: Research Plan", a collaboration of Mount Rainier National Park, Oregon State University, and United States Geological Survey. This team is currently focusing on the portion of the plan that involves furthering research on glacier and pro-glacier studies.

A cubic mile of ice makes up the glaciers on Mt Rainer. These glaciers are extremely responsive to the changes that are being incited by climate change, many of them already gone. Nisqually glacier has been in retreat for many years and is presently at a historic minimum. As these glaciers melt and retreat, sediment is exposed and can be easily washed downstream, contributing to the increased debris flows.

Another point of research has been the Mount Rainier Glacier Monitoring Measuring Mass Balance, headed by Rebecca Lofgren. This study focuses on measuring winter accumulation, or the winter balance, on the lower glaciers in mid-April, and the summer melt, or summer balance, later in the season. Comparing these two sets of data allows researchers to see how much activity is taking place between the two points, calculating a net mass balance. Between 2003 and 2009, the data has expressed a negative balance. Due to heavy snowfalls in the last two years, 2010 and 2011 have expressed a positive balance. This study also informs us that snowmelt contributes between 11-30% of the water in the Nisqually River.

Another ongoing project is the Nisqually Survey Data Analysis Project, which began in 1931. Using traditional survey methods, this research looks at two distinct summer debris flows and the fear of stagnant ice, which could contribute to glacier outburst floods. Though the stagnant ice doesn't move, the ice above tends to move rapidly. Once the stagnant ice does begin to shift, the release of water and ice could be substantial. This research currently focuses on whether the Nisqually is going stagnant, the potential for an outburst flood, and the devastation it would cause. Researchers have been field mapping ice, both buried and active, highlighting features to see whether these fears of stagnation may become a reality. This proactive research comes from the occurrence of other outburst floods from other glaciers on Mount Rainier.

The park is also looking at Tahoma Creek and the rate in which it is filling with debris. Sediment is being moved downstream from the upper portion of the creek and deposited the lower section. Research is being done to determine whether this is the worst of the debris movement. Similar research is also being done on Kautz Creek.

This ongoing research is being used to establish a way to predict the future debris flows, allowing scientists to become more proactive.

Paul and Rebecca's presentation is available upon request. Please email Ashley for more details.

5. Nisqually Watershed Stewardship Plan Discussion

Justin Hall, Nisqually River Foundation

Justin has been working closely with the Nisqually Watershed Stewardship Plan in order to take an inventory on what actions items being worked on by partner organizations. Agencies are being asked to look closely at current projects and identify how they may fit into furthering the work of the NWSP. A one-page document has been developed, that will feed directly into a working spreadsheet, to help the Council organize these items. Once an inventory can be taken, the Council will better be able to develop future projects, allowing the Foundation to pursue funding for these activities. Ashley will email the document to partner agencies, in hopes they will fill it in and return in a timely manner.

6. For the Good of the Order

None at this time.

Adjourn – Meeting was adjourned at 12:03pm.

*Next Meeting: Friday, October 19, 2012, 9:30am – 12:30pm
Ohop Grange*