



**Nisqually River Council
Citizens Advisory Committee
Meeting Minutes
May 12, 2015, 6:00 – 8:00 PM
Nisqually Tribe's Natural Resources Office**

CAC Members Present: *Fred Michelson, Karelina Resnick, Phyllis Farrell, Lois Ward, Steve Pruitt, Ed Kenney, Marjorie Smith, Bob Smith, Debbie Anderson*

Staff Present: *Morgan Greene*

Welcome and Introductions

The meeting was called to order at 6:10pm. There was a motion to approve February's meeting minutes. They were approved, as was the agenda for the evening. Please note—there were no meeting minutes available for the March or April meetings.

Nitrogen & the effects on the waters of Puget Sound – Ed Kenney, CAC member

Ed has been interested in nitrogen for over 4 decades, so although he's not a trained expert, he knows a thing or two. He first shared a handout—it can be viewed online here:

<https://fortress.wa.gov/ecy/publications/documents/0203020.pdf>

Nitrogen is a natural and important nutrient. However, in high levels, nitrogen depletes water of dissolved oxygen and creates dead zones. This is a problem in South Puget Sound, because the system rarely gets flushed with clean water. The problem starts when nitrogen runs off the landscape, without being filtered through soil and taken-up by vegetation. High levels of nitrogen can quickly enter water bodies through faulty septic systems or stormwater runoff. Right now, sewer systems are close to treating at least 50% of their runoff, but a large amount still enters Puget Sound untreated.

In general, a "good" septic system should release 30 parts per million (ppm) although as little as 10ppm can be toxic for the very young or older people. Unfortunately, most septic systems in Thurston County release over 100ppm. Ed noted that individuals can install a secondary filtration system, like a bed of wood chips, to further reduce nitrogen loads. Thurston County Health Department has a limited capacity to test septic system for homeowners.

To visualize the basic nitrogen cycle, Ed shared a video, which can be viewed here:

<https://www.youtube.com/watch?v=oy8e2HrOh6Q>. The video mentioned that some plants "fix" nitrogen. This means that bacteria in the soil, associated with particular plants, change nitrogen into a form that can be easily used by other plant species. In fact, Scots Broom can fix nitrogen, which Ed believes is the only benefit of the plant. The PNW is deficient in nitrogen due to acidic soils, so plants that fix nitrogen are essential. For clarification, chemical fertilizers do not need to go through the fixation process. Natural fertilizers, like compost, do.

To understand the impacts of nitrogen on plants, Ed shared the "Three Martinis" rule of diving. At sea level, the nitrogen in your blood is at a normal level. When an individual dives to 33 feet, the pressure magnifies the impact of nitrogen, so one's body functions the same as after having one martini. At 66 feet down, nitrogen impacts are the equivalent of having 2 martinis, and so on. The magnification nitrogen impacts due

to pressure is the same on plants—the impacts are much more severe at the bottom of a waterbody, creating large dead zones the deeper it gets.

Members present at the meeting had several questions about the topic. Phyllis reflected on nitrogen problems in Iowa and the impacts on drinking water. Marjorie wondered about Wilcox's manure spreading practices; Ed noted that Wilcox Farms sprays appropriately, though he's not sure if that practice still continues today. Debbie noted that foamy bubbles in creeks are an indication of failing septic systems—she's concerned about one on Tobotton Creek. Phyllis was curious about aquaculture. Unfortunately, this practice tends to concentrate a raw form of nitrogen in one place, leading to very high levels. Ed noted that oysters are filter feeders, so they remove nitrogen from the water. However, they can't handle too much water because they are quickly overwhelmed.

Ed noted that the purpose of his talk tonight was to help CAC members be more aware of high nitrogen loads, and to be cautious of any Plans that insert nitrogen into the system. He stressed the importance of having <10ppm be released from septic systems. Additional resources provided by Ed can be viewed at the following links:

Johan Rockstrom's Ted Talk: http://www.ted.com/speakers/johan_rockstrom

Hypoxia in Puget Sound: <http://www.ecy.wa.gov/programs/eap/Nitrogen/PugetSoundHypoxiaMap.html>

South Puget Sound Dissolved Oxygen: http://www.ecy.wa.gov/puget_sound/dissolved_oxygen_study.html

Nisqually River Water Trail Committee – Morgan, Ed & Fred

Morgan reported that the Nisqually River Water Trail Advisory Committee has met twice to date and is a diverse group of people. The scope of the plan is to examine non-motorized boat access opportunities on the Nisqually mainstem from below La Grande Dam to Luhr Beach. Expected products of the planning process will include an access plan, colorful brochures and maps. Fred noted that the brochures and maps are a really vital part of the planning outcomes. In the coming months, there will be a Focus Group Workshop to target values and barriers associated with river access, as well as explore additional access points. There will also be at least one public meeting for anyone interested in learning more. Morgan will share details at a later date.

Approve Lois Ward's Membership – All

Lois recently returned her CAC membership application, which is now submitted to the CAC for approval. There was a motion to approve her application. The motion was approved. Welcome, Lois!

Member Goal Reports

- *Nisqually Youth Council (Karelina)*: Peter Donaldson attended the last NRC meeting to discuss his model for Sustainability Ambassadors, a potential model for the Nisqually River Youth Council. The Ambassadors recently had a summit, which is a culmination of the student's work over the last year. Karelina attended the event to learn more about the program. She reported that students, community leaders, and public agency representatives work together to address environmental concerns. The summit acts as a venue for students to share the data, papers and presentations they've produced as a result. Students also developed solutions to minimize waste and water use; ideas included blackout days; increased composting; hosting waste free lunches and environmentally friendly cleaning solutions. Karelina noted that she is collaborating with Sheila and Peter to submit a grant proposal to help launch the start of the Youth Council in Eatonville. This will likely take place in August or September; Karelina will continue to update the CAC on progress.
- *Access and Hikes (Ed & Carl)*: Ed noted that the Nisqually Land Trust's most recent newsletter has a good list of hikes that they will be hosting this summer. Outside of that, the hiking season is about 6

weeks ahead of schedule due to the warm weather this year—many high elevation hikes are snow-free already.

- *Climate change planning updates (Morgan)*: Morgan has been working to find additional climate change funding, and has three grant applications submitted. Pending that funding, there is little to report.
- *Coal and oil trains (Grace Ann & Fred)*: Fred recently spoke with Danielle Butsick about the Nisqually Geographic Response Plan. He also spoke to the Senior Planner of the Southwest Region about Environmental Impact Statements (EIS) in the works, although she's mainly focused on the EIS in Grays Harbor. Fred is concerned that the typical EIS process isn't sufficient when it comes to oil and coal terminals. However, these recent conversations have made Fred realize that there are a lot of entities that are producing EIS documents for coal and oil projects. He would like to develop a list of all entities responsible for EIS documents, including due dates and public comment periods. This list would make it easier for the CAC to review documents. Karelina suggested calling representatives from local Congress districts—they should have information on projects in their district.
- *Neonicotinoids (Fred)*: By next month, Fred will have his draft letter available for the CAC to review. Once approved by the CAC, it will go to the NRC before being mailed. Fred also shared two articles about neonicotinoids.
- *New Directions--Newsletter, Outreach & Other (Karelina)*: Debbie and Karelina met recently to discuss a new direction for the CAC; they agreed that the group should put together a pony show and visit public meetings. Debbie and Morgan will work together to develop a presentation about the CAC, so that members can start visiting granges, chamber meetings and other public forums. It should be finished prior to the September CAC meeting, because the CAC will be hosting the Nisqually Stream Stewards class that night. In the meantime, CAC members should brainstorm information to be included. Karelina would also like to increase representation on agriculture at CAC meetings; potential speaker ideas are representatives from Pierce County, Pierce or Thurston Conservation Districts and the WA Office of Farmland Preservation. The CAC could take other actions to put increase their community presence. The CAC could 1) have their own newsletter or 2) be included in the Yil-Me-Hu each year. Steve noted that including information in the Yil-Me-Hu would require less funding and effort for the CAC. Developing a one-page brochure would also be helpful—it could then be displayed at local fairs and community events. Morgan will bring the NRC display to the next meeting, so members can see the current display.

For the Good of the Order – All

Karelina noted that a committee has been formed with regards to the proposed mine near Eatonville—further action is pending the release of the new EIS. On Saturday, she is attending a workshop to track black bears in the Eatonville and Elbe area. Karelina, Debbie & Fred want to do another field trip like the one to the Centralia dam. The CAC also wants to do more hands-on activities like tree planting and invasive removal.

David Hymel is willing to come next month to present on raingardens. New NSS email is streamstewards@nisquallyriver.org but you can also email Morgan, Ashley and/or Sheila directly.

- Important Dates:
 - Next NRC Meeting: May 15, 2015 at Ohop Grange, from 9:30-12:30.
 - Next CAC Meeting: June 9, 2015 from 6-8pm.

The meeting was adjourned at 8:12 pm.