

## **Meeting Minutes - Nisqually Watershed Planning Unit**

*July 24, 2018 – 1:00 p.m. – 4:00 p.m.*

*Nisqually Tribe – Natural Resources Meeting Room*

### **Present:**

George Walter, Nisqually Indian Tribe

David Troutt, Nisqually Indian Tribe

Rance Smith, Pierce County

Tom Kantz, Pierce County

Lois Ward, Nisqually River Council Citizens Advisory Committee

Matt Curtis, WDFW

Jesse Barham, City of Olympia

Mike Gallagher, Dept. of Ecology

Lisa Dally Wilson, Dally Environmental

Kevin Hansen, Thurston County

Abby Gribi, Town of Eatonville

Allison Osterberg, Thurston County

Davor Gjurasic, NIT Lobbyist

Julie Rector, City of Lacey

John Weidenfeller, Thurston County PUD

Grant Beck, City of Yelm

Emily McCartan, Nisqually River Foundation

Phyllis Farrell (observing)

### **1. Introductions, Agenda, and Minutes**

The agenda was amended to move Kevin's presentation to the end of the meeting.

Minutes were approved as corrected.

It was decided that going forward we should schedule meetings in the morning whenever possible, for people commuting on I-5.

### **2. Report from George Walter**

The Ecology grant has been submitted and awarded (\$155,000, with \$95,000 additional project funding available for supplemental studies if needed). The grant includes Lisa's contract for facilitation and support. George distributed copies of the watershed map from the 2004 plan, which outline the subwatershed definitions used in that document.

### **3. Old Business**

1) *MOA status* – The previous MOA from the original water planning group was adopted by the three county governments by resolution, with agreement from the Nisqually Indian Tribe and most of the other participating governments (some water districts did not ratify). Not all of the ratifying governments signed the same physical document – signatures were collected across multiple copies. We would likely need to at least modify the previous MOA to update the dates (the original extended for 6 years, through 2010). The original 2514 plan impacted a much broader range of participants than the current 6091 process, which impacts mostly

the counties and the Tribe, so making changes to the MOA could include changing the governments required to ratify. There were concerns about expediency versus process in trying to get a new or updated MOA through the approval process with the counties without falling behind on the very tight timeframe for the plan itself. It was suggested that we proceed under an informal process for now, with a statement that the planning and revised MOA will happen concurrently and be approved together. For Ecology's purposes, Mike indicated that the plan needed to address net ecological benefit, but there was no particular process requirement for how the governments adopt it. Representatives also wanted a clear statement about the existing agreement and the legislative authority the current group is working under.

- George will draft and circulate a document for review before the next meeting.

2) *Sub-watersheds* – Discussion of sub-watersheds was deferred until after Kevin Hansen's presentation.

#### 4. **Report of Sub-Committees/Workgroups**

- 1) *Growth and Demand Forecasts* – Thurston and Pierce County staff have been communicating. Allison obtained the current sub-basin boundaries from NIT and a report from Whatcom County on how they are approaching these issues in the Nooksack. Pierce County unincorporated growth has slowed since 1990s. Both counties are moving forward with internal data review and methodology discussions. Considerations include:
  - a. Varying assumptions and regulations across counties on growth projections
  - b. Amount of forecasted growth inside Thurston UGAs that may use wells, due to remote locations/difficulty accessing public services
  - c. Consumptive use estimates vs. allowable use – single family homes often use dramatically less, unless doing outdoor/irrigation

As data are obtained about consumptive use and projected growth, it may lead to alternative proposals for mitigation techniques based on the amount and location of water actually being consumed. Lisa is available to help coordinate with the counties on establishing apples-to-apples comparisons and a consumptive use number/range.

- 2) *Streamflow Mitigation Projects* – David, Tom, and Allison met with the Nisqually Salmon Habitat Work Group and asked them to look for restoration/mitigation opportunities, targeting the multiple desired outcomes for the Tribe, counties, and Ecology. The two funding streams available in the next several years are exempt well impact fees, and legislative appropriations for larger projects (more likely to address the multiple goals we have). Legislative funds will be available by application every year, with a \$20 million statewide cap on total annual spending, but no cap for individual projects. Ecology has emphasized that projects should address water quantity (vs. just water quality).

The Habitat Work Group's recent focus has been on ESA recovery goals, and this process may lead to developing some projects that may not be highest ESA priority but will address other mitigation goals. There may not be big projects ready to apply for funds right away – ex. Community Forest acquisition's in the Upper Mashel may be a good candidate, but is negotiation and opportunity-dependent. Other smaller opportunities could be in Yelm Creek, Tanwax, etc. Thurston County staff has also started brainstorming possibilities from existing project lists (ex. culverts and stormwater). Some Nisqually Land Trust properties could provide benefits for streamflows as well. Although the original Nisqually Water Plan did not address habitat, it seems within the scope of this update to include habitat improvement projects that also provide mitigation for water use.

- Allison will pass Thurston list along to Emily to send to the Habitat Work Group.
- David will coordinate a presentation on the Community Forest and upper watershed benefits for fish/streamflow for a future meeting.
- Mike will circulate draft Ecology guidance on net ecological benefit for funding applications, and will report back on whether awarded funds must be spent in a certain timeframe.

- 3) *Other Strategies* – George proposed setting aside time at the next meeting to brainstorm a wide net of ideas, to be adapted as more data comes in from the counties. Ideas could include tiered consumptive use, funding public service connections for houses far out in UGAs, incentivizing older homesteads to drill deeper wells – goal would be to cast a wide net at this point and see what makes sense with the numbers and to meet governments' priorities.

## 5. **Data Sources for the Nisqually Planning Unit - Kevin Hansen, Thurston County**

Prior to *Hirst*, there was not much cross-communication across domains of water issues:

- Water supply (drinking water)
- Stormwater
- Sanitary codes (Dept of Health wastewater rules)
- Groundwater system and its interactions with surface
- Ecosystem benefits of water management options

Data sources available include:

- *Hirst* due diligence
- Weather monitoring programs – 5 in Thurston portion of Nisqually basin
- County Water Data Dashboard
- Compilation of streamflows
- Yelm & Thompson Creek Study, 2007-2012
- Calculation of groundwater pumping rates (county-wide)
- Stream gain-loss studies

- MODFLOW groundwater model (now running county-wide in Thurston; Pierce has one in development. Kevin hopes we are within a year or two of being able to do numerical calculations across both counties.)
- 2010 McAllister Mitigation Plan

Many surface water rights in the middle watershed south of Yelm, where development and permit-exempt wells are growing fastest, are in intermittent streams. Thurston County currently estimates 21,180 active wells county-wide (both exempt and city wells). Groundwater pumping rates, in acre-feet per year, distinguishes by broad use categories (public supply Group A and B, irrigation, livestock, commercial, fish propagation, wildlife and recreation, industrial, and general domestic). The largest bucket is Group A systems from McAllister, the vast majority of which is transferred out of basin. One goal of the data collection is to build an understanding of groundwater banking through the seasons (deposits in winter and withdrawals in summer). Aquifer storage is enormous, with 375-500 feet of drinkable water flowing winter and summer.

The Deschutes River has a strong downward gradient, losing flow to feed McAllister and Puget Sound discharge. Gain-loss studies of the Deschutes and Nisqually have had difficulty determining whether water loss was due to a water right or to groundwater transfers. It's difficult to know if people are actually using their water rights. Deschutes is on a higher topographical plane than Chehalis or Nisqually, so it's not a huge surprise that it loses flow to them. Groundwater divide is somewhere to the west of the surface water divide, so the aquifer pulls water from far outside the basin. In consequence, drilling deeper doesn't mean it's "free" water – it will mean base flow lost from another stream, possibly outside the basin. Drawing water from deeper means depleting across a larger area, which in this case tends to be a net withdrawal from the Deschutes. Likewise, recharging to a shallow aquifer may not benefit the deeper aquifer, and shallow/surface systems flow out faster, meaning the deeper aquifer will not recharge as fast. The deep aquifer in Thurston County feeds three major river systems and Puget Sound, and is big enough that we would still have groundwater available through decades of drought that dried up surface rivers. Loss of surface water, however, has to be mitigated, and the aquifer's interaction across the river systems indicates that drilling deeper might mean mitigation is required in other watersheds. Riparian rights model states that 1 molecule of loss needs to be mitigated from surface streams.

Kevin noted that studies to quantify the effects of a potential project take time, so if the group hopes to do that for any project proposals this year, we would need to start soon. He also noted that streamflow represents a large amount of water: based on a Deschutes project, it would take capturing 900 acres of drainage to produce 1 cfs. Available data could allow us to calculate the impact on the Deschutes from doing deepwater mitigation in the Nisqually, but will need growth estimates from the counties and enough time to process it.

## **6. Other discussion and next steps**

*Sub-basins* – Given the time constraints, participants agreed to use the sub-basins defined in the existing watershed plan. Adjustments can be made by mutual agreement. It was also noted that groundwater basins are larger than surfacewater, and longer-term or deeper well drilling would require looking outside surface sub-basin boundaries for potential impact.

*Future presentations* –

- VELMA model on forest and streamflow interactions (August)
- Thurston County growth numbers (August)
- USGS or Pierce County hydrology (TBD)
- Water Trust water banking presentation (after growth forecasts are available)

**7. For the Good of the Order**

The new law (ESSB 6091) is now codified – RCW 90.94.

The meeting was adjourned at 3:42pm.

Next Meeting: TBD (Late August)