## Nancy Soriano

## 6/7/2019

Comment " Net Ecological Benefit"

My husband and I are "Member" and "Alternate", respectively, on the WRIA 49 Planning Unit. Based on our experience of the meetings so far, as well as our knowledge of the Okanogan Watershed, we are motivated to take this opportunity to comment on Net Ecological Benefit and the process prescribed for achieving that.

Our take on it is that the demands of the Streamflow Restoration Act or impossible to meet, for WIA 49.

As DOE is well aware, the waters of WRIA 49 are already over-appropriated and junior water rights are curtailed frequently because of low instream flows.

Our primary concern though is that the focus on NEB does not provide protection for the Tributaries to the Okanogan River.

The Okanogan River presents profound and unique challenges. It is described by some as a slow moving, shallow lake, which results in water temperatures inhospitable to fish. The Colville Tribe has done extensive research on the River and its Tributaries and their best available science concludes that the cold water from the Tributaries is essential to endangered fish.

Without protecting perennial streams in the sub basins, particularly those which border the Okanogan River on the east side, it is not possible to protect or enhance endangered salmonoids. The 2009 WRIA 49 Watershed Report identified ten " Perennial Streams of Concern. " These are Tributaries to the Okanogan River, including

(---Antoine Creek, with a low summer flow of 0.01cfs, and overappropriated by 87,000 percent ---Bonaparte Creek, with low summer flow of 0.04 cfs, and overappropriated by 41,188 percent. ----Tonasket Creek, with a low of 0.7 cfs and overappropriated by 54,000%

-----Tunk Creek, with low flow of 0.1cfs and over-appropriated by 1,300%

Allowing 20 years of exempt wells in these tributaries is a disaster. We do not believe there is any realistic way to mitigate for unlimited wells in the necessary-to-fish perennial streams that are over-appropriated and already have less than 1 cfs in the summer.

Included in the 1976 Instream Flow Rule for Okanogan River, The Department of Ecology recognized the scarcity of water in these perennial streams. Withdrawals were curtailed for six months of the year, EVERY YEAR. It is unfortunate that the DOE's own understanding, from over 40 years ago, of the extreme water scarcity in these tributaries was ignored when it suggested that 20 years worth of exempt wells could be mitigated for.

WAC 173-549-070 goes on to address the potential impacts of too many exempt wells in these tributaries:

Single domestic use and stockwatering use shall be exempt from the provisions established in this chapter except that, when the cumulative impacts of numerous domestic diversions begins to significantly affect the quantity of water available for instream uses or the maintenance of lake levels, then any water rights issued after that time shall be issued only for in-house use if no alternative supply is available...

In 1976, it was understood that exempt wells could impact perennial streams, and exempt wells would have to be limited.

Now, with NEB, there has been a giant step backwards into magical thinking. The fact is, there is not a satisfactory way to mitigate in the Tunk and other tributaries.

We are most familiar with the Tunk Valley. In 2006, the Colville Tribe commissioned a study of water rights in the Tunk Valley Drainage. The purpose was to identify water rights for purchase to provide more water in the perennial stream for fish.

This study (Rajala, attached) identified the two largest senior irrigation water rights, to irrigate a total of 100 acres of alfalfa. Since the time of the report, both of these water rights have been abandoned because of lack of water in the Tunk Creek.

These water rights holders both attribute the loss of streamflow to the rapid increase in exempt wells, that have been drilled in the headwaters.

One of the two water right holders attempted to convert the surface water right to a ground water right, under the name: Tunk Valley Water Association. Their "Memorandum" is attached. It took about 5 years to go through all the procedures and paperwork and analysis, to get that conversion of a surface water right to a ground water right. By then, the water resource in the Valley had been depleted to the point that there was insufficient ground water to irrigate.

The point is that the analysis of water availability for one water right conversion to groundwater, took DOE about 5 years, but the DOE and Legislature expect a group of local citizens with little or no qualifications, to come up with a NEB for an entire watershed in just a couple years. This WRIA Planning group meets only 2 hours per month.

Attendance is sketchy. Sometimes there is a strong smell of alcohol in the room. Discussion, not infrequently goes way off topic.

I fear for the future of WRIA 49 under the Streamflow Restoration Act.

We are concerned that perennial stream, Tunk Creek, as well as the aquifer, will not be protected. In the case of Tunk Creek, the fish can only go up the creek six tenths of a mile. In discussion with a technical advisor, one suggestion was to capture run-off and inject into the ground to compensate for wells that are dug as far up stream as 20 miles. First of all, That's not going to happen. There will never be funding for that and secondly, it would allow the rest of the sub basin to go dry. And what about the other tributaries?

A major flaw of this NEB, is that it only requires ideas for mitigation, without any guarantee that mitigation for the Tunk and other perennial streams with extremely low flow, will ever occur. Attached you will find research that was done by hydrogeologist, Gina McCoy on the Tunk Valley. The evapotranspiration rate for the valley is 96%. The run-off is 4%. That accounts roughly for 100% of precipitation, which is the sole source of aquifer recharge. There is concern that the aquifer is already being depleted faster than it is being recharged.

The Tunk Valley is 53,000 acres. We now have just over 200 wells. Hundreds of additional wells could be drilled in the next 20 years, especially with the high rate of growth that could result as spillover from the unprecedented population explosion in King County. As you can see, in Gina McCoy's report, the rate of growth in the Tunk Valley has been over 1,300%, while the rate of growth in the county as a whole was only about 34% over the same time period.

The Tunk Subbasin, is very dry. Just 4 years ago, we had drought and a after a few days in which the temperatures went above 100 degrees, the Valley exploded in wildfire. It was actually more like a firestorm. It burned so hot and fast that, for example, there was no trace of power poles. Just the wires on the ground. Tunk Valley is already very, very, dry. It's a powder keg. We are in Drought again this year. NEB and 20 years of additional exempt wells will result in terrible destruction, and will not help fish.

Net Ecological Benefit could allow the WRIA Planning Unit to decide that there is no way to mitigate for 20 years of exempt wells in the Tunk Valley. The NEB would allow the Plannig Unit to triage the Tunk; allow it to go dry and do some mitigation somewhere else.

No perennial stream, and the wildlife habitat it supports, should be sacrificed, for NEB.

The Water Resources Act of 1971 states that fish are not the only consideration in protecting perennial streams: 90.54.020(1).)

The act further specifies that "Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." (RCW 90.54.020 (3)(a).)

Tunk Valley is an important habitat for another endangered species, the Sharp-tailed Grouse. These grouse require large areas of un-fragmented habitat and they require healthy riparian habitat, which would be lost as a result of 20 more years of unlimited wells.

We would argue that the Streamflow Restoration Act and Net Ecological Benefit does not fulfill the requirements of the Water Resources Act of 1971, because it does not provide for preservation wildlife, scenic, aesthetic and other environmental values...

Thank you for considering our comments on Net Ecological Benefit.

Sincerely, Jim and Nancy Soriano PO Box 8 Riverside WA 98849