NORTHWEST
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Consulting in Hydrogeology

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May 31, 2025

Dr. Holly Myers, Director
Washington Department of Health
Office of Drinking Water
P.O. Box 47822
Olympia, WA 98504-7822

Casey Sixkiller, Director
Heather Bartlett, Deputy Director
Washington Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

Dan Cardwell, Chair
King County Utilities Technical Review Committee
201 S Jackson Street, Room 512,
Seattle, WA 98104

Dear Dr. Myers, Mr. Sixkiller, Ms. Bartlett, and Mr. Cardwell:

I am writing on behalf of the Friends of the Snoqualmie Valley Trail and River ("FRIENDS"). As a dedicated community stakeholder, FRIENDS has a strong interest in ensuring that flows in the Snoqualmie River system are not adversely impacted. In particular, FRIENDS is concerned about the recent significant changes involving the interties[1] between the City of North Bend (CNB) and the Sallal Water Association (Sallal)[2]—and their efficacy in mitigating the impacts of pumping from the Centennial Well (Source NB-3) on Snoqualmie flows. To our knowledge, and to date, neither purveyor has provided documentation of hydrologic analyses to support the intertie's effectiveness, nor have they provided specifics about their proposed operational protocols.

Therefore, FRIENDS strongly urges you to require both the CNB and Sallal to submit an amendment to their Water System Plans (WSPs) *before* the intertie takes effect, in accordance with Washington Administrative Code (WAC) 246-290-132 3(a), which states:

> *...prior to department approval, purveyors proposing nonemergency interties shall ensure that the intertie is addressed in an approved coordinated water system plan, water system plan, water system plan update, water system plan amendment, or small water system management program...*

[1] *One intertie is for supply (potable) water, another is for mitigation water.*

[2] *Both the CNB and Sallal operate under WAC 246-290-100.*

It is critical that this amendment document not only the projected impacts to the Snoqualmie River system under a range of supply-demand scenarios but also the specific operational protocols that will be implemented to mitigate these impacts.

BACKGROUND

Under the protested Report of Examination (ROE) for the Centennial Well, impacts must be offset (mitigated) whenever instream flows are not met and the well, which is in hydraulic continuity with the Snoqualmie River system, is operated. Such periods have been documented to occur more than 100 days per year[3]—a condition that presents a major challenge for mitigation compliance, particularly during drought years.

Hydrologic Setting

Various investigators, consultants, and agencies have studied and discussed the hydrologic connection between the Cedar and Snoqualmie watersheds in the vicinity of Masonry Pool and Rattlesnake Lake. The U.S. Geological Survey estimated that 50 cfs of the groundwater seepage from the Chester Morse Lake–Masonry Pool System (CML-MPS) discharges to the Snoqualmie River system; the remaining 180 cfs, which represents most of this seepage, discharges to the Cedar River[4]. Other reports map limited groundwater data, along with elevations of various hydrologic features, and estimated groundwater flow patterns. However, monitoring data—specifically, geographically and temporally comprehensive elevation data for groundwater and surface water—is either unavailable for the Masonry Pool–Rattlesnake Lake area or, to our knowledge, has not been made public.

The area straddles the topographic divide between the Cedar and Snoqualmie River watersheds. It also straddles a corresponding "dynamic" hydrologic divide—that is, a divide where flow paths for groundwater and surface water may feed either river, fluctuating on a seasonal, annual, and decadal basis at any given location. The controls on these flow patterns are highly influenced by Seattle Public Utilities' (SPU's) operations at CML-MPS and, to a lesser degree, by Sallal's operations at its wellfield of Wells 1, 2, and 4 (S124). Numerous springs, seeps, wetlands, and creek headwaters are fed by groundwater discharge that fluctuates as water levels rise and fall. The stage of Rattlesnake Lake, which is fed in part by Hobo Springs Creek, also fluctuates seasonally.

[3] *Golder, 2016. City of North Bend Mitigation System Under Water Right G1-26617(A) Annual Report for 2015, January 27, 2016*

[4] *Hidaka, F.T., and Garrett, A.A., 1967. Evaluation of Seepage from Chester Morse Lake and Masonry Pool, King County, Washington. Geological Survey Water-Supply Paper 1839-J.*

Mitigation Water Sources

Hobo Springs and the proposed Sallal Wells 1 and 2 (S12) are the two mitigation sources for the CNB's impact offset. The mitigation water from Hobo Springs (>100 AF/yr) is held administratively under a claim by SPU; the mitigation water from S12 (100 AF/yr) is part of Sallal's water right for those wells[5].

Mitigation water from these two sources is conveyed to Boxley Creek, where it flows downstream to the South Fork Snoqualmie River and is credited to the CNB as an offset. Discharge from Hobo Springs is known to be unreliable under drought conditions[6]. Another key consideration is that both Hobo Springs and S12 rely on the same upgradient water source in the Cedar River watershed; thus, their capacity as mitigation sources depends on SPU's operations at the CML-MPS, leaving both mitigation water sources particularly vulnerable during drought years.

Note that if this water were not conveyed to Boxley Creek for mitigation purposes, it would likely feed both the Cedar River and the Snoqualmie River system, in proportions that vary depending on the status of the dynamic hydrologic divide.

Optimization of Operational Protocols

Assuming completion of the interties, the CNB and Sallal would be intricately coupled. We understand that the CNB would supply water to Sallal when instream flows in the Snoqualmie River are met (generally, during winter and spring) and that Sallal would convey mitigation water from S12 when instream flows are not met and the Centennial Well is operating. This arrangement requires that both entities make frequent decisions based on daily and cumulative water use—decisions that would also be constrained by Sallal's Qi and Qa. These decisions compound those the CNB must already make when mitigating with water from Hobo Springs. Furthermore, it is important to note that any new land development—including the addition of King County Parcel #132308-9020 and other proposed developments to either the CNB or Sallal's service area—will increase water demand, affecting supply and mitigation operations, particularly during drought years.

If the intertie is to mitigate *volume-impacted* with *volume-replaced* in the Snoqualmie River, the operational protocols must be highly optimized; otherwise, periods of non-mitigation will likely persist and increase in frequency, adversely impacting the river system and fish. Such optimization would be extremely complex and likely require the use of a decision support model, which must be developed by a skilled individual. However, the protocols must be documented, presented, and communicated in a manner that FRIENDS and the public can review, understand,

[5] *Sallal Wells full water right stipulates Qa= 696 AF/yr, Qi = 1,691 gpm, Priority date = 5/28/1985*

[6] *Northwest Land and Water, 2022. Letter to Richard Rodriguez, WDOH, and Ria Berns, Ecology, regarding North Bend's changes to its water demand-supply-mitigation strategy. Dated September 16, 2022.*

and comment on. Furthermore, the CNB and Sallal must commit to considering any requested changes.

Key Questions for Developing a Scope of Work

The WSP amendment should ensure that mitigation is both water-budget neutral and meets the timing needs of the Snoqualmie River system under a range of scenarios. *Therefore, it should feature comprehensive documentation on the effectiveness, protocols, and implementation of supplying and using mitigation water to offset these impacts*.

The following questions provide a guide for developing a scope of work for the amendment:

- **Q1**: What is the legal basis for the change in the Sallal well's water rights and the Hobo Springs claim for use as mitigation water? How does the mitigation use of Sallal[7] well water, which is junior to the Snoqualmie River instream flow rule, comply with Washington state water law?

- **Q2**: Can the CNB/Sallal fully mitigate the Snoqualmie River under dry / drought years while conjunctively optimizing demand, supply, and mitigation under each of the conditions listed below?

Demand	**Supply**	**Mitigation**
Current conditions (today's population / developed land)	Drought year such as 2015	Coordinated pumping from all CNB and Sallal wells
The coordinated CNB/Sallal intertie strategy	No flow available from Hobo Springs	Coordinated use of all CNB and Sallal above-ground reservoirs
Conditions imposed by the CNB/ Sallal Water Conservation Ordinances (WCOs)[8]	Reduced S12 capacity due to low available drawdown	Constrained by each CNB and Sallal well's stream-depletion characteristics
	No, or limited, water available from Mount Si Springs above its bypass requirement	

[7] *Sallal's water right is junior to the Snoqualmie River instream flow rule, and Ecology's historical administrative action has permitted Sallal's water use to proceed without mitigation when instream flows are unmet. Now, CNB and Sallal are poised to use 100 of the 696 AF of Sallal's water right to mitigate when the Centennial Well is impacting the Snoqualmie River and instream flows are unmet. This represents a change to the Sallal water right—a change that impacts the Snoqualmie River system from one well source to mitigate impacts from another well source. Hydrologically, this may not be water-budget neutral when instream flows are unmet.*

[8] *CNB has 5 years of data to evaluate the WCO's impact on water demand.*

- **Q3:** How does adding King County Parcel #132308-9020 and other planned development affect the ability of each provider to meet water demand and fully mitigate under each of the conditions listed above?

- **Q4:** Assuming the CNB/Sallal can meet water demand and fully mitigate based on the current population, at what buildout threshold do these efforts fail, given our current understanding of drought conditions, seasonal increases in human and evapotranspirative demand (higher consumptive use), and the climate changes that are forecast through 2050?

- **Q5:** What agreement, either formal or informal, have the CNB and Sallal made with SPU regarding its operation of CML-MPS to maintain Hobo Springs discharge while also maintaining groundwater levels at S12, which control withdrawal capacity, especially during drought years?

- **Q6:** How has the impact of using mitigation water from Hobo Springs and S12 on the Cedar River been reconciled with the *Cedar River Watershed Habitat Conservation Plan*?

- **Q7:** How will the CNB/Sallal ensure that this coordinated tracking, decision-making, and action process for supply and mitigation is transparent to FRIENDS and the public?

- **Q8:** Have both the CNB and Sallal conducted an internal review of their staff's capacity and know-how? Are their staff ready to successfully meet the complexity of this new coordinated, interconnected supply and mitigation strategy?

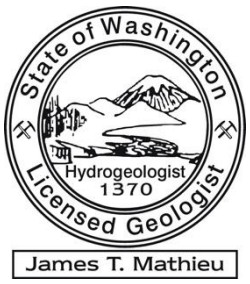
As stakeholders in the health of the Snoqualmie River system, FRIENDS requests that Ecology, WDOH, and the UTRC require CNB and Sallal to answer these questions as soon as possible (prior to implementing the interties) and to deliver required WSP amendments. In addition, CNB and Sallal should make the scope of work available for public review and comment, with a commitment to make requested changes. FRIENDS also requests that the CNB and Sallal make any analyses, results, and documentation publicly available for review and comment, again with a commitment to consider requested changes.

We look forward to your response.

Sincerely,

James T. Mathieu

James T. Mathieu, LG, LHg
President / Principal Hydrogeologist
Northwest Land & Water, Inc.



Email cc to:

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Cindy Spiry, The Snoqualmie Tribe (Environmental & Natural Resources Director)

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Trish Rolfe, Center for Environmental Law & Policy (Director)

Patrick Williams, Law Office of M. Patrick Williams

Mayor Mary Miller, Mayor North Bend WA

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Admin, Sallal Water Association

Jean Buckner, Friends of the Snoqualmie Valley Trail and River (President)