WASHINGTON REALTORS®

January 17, 2020

Annie Sawabini
Department of Ecology, Water Resources Program
PO Box 47600
Olympia, WA 98504-7600

RE: Comments on Nooksack Instream Flow Rule, Chapter 173-501 WAC

Dear Ms. Sawabini:

Washington REALTORS® represents the interests of over 20,000 REALTORS® and their clients in Washington State. We appreciate the opportunity to submit comments on the Washington Department of Ecology's ("Ecology") proposed amendments to Chapter 173-501 WAC, the Nooksack Instream Flow Rule.

Over the past 20 years, the issue of rural water availability has significantly impacted the real estate market and homeowners in many parts of Washington State. Our state's near obsession with exempt wells has resulted in a regulatory system that is costly and complicated. The financial and human resources and legal complexity associated with exempt wells has been disproportionate to their water resource impact. Or as said in the song *Juice* by Lizzo, "the juice ain't worth the squeeze."

Much of this complexity has been caused by Ecology's instream flow rules. Implementation of ESSB 6091 is an opportunity to reduce regulatory complexity that provides no commensurate water resource benefit. In reversing the Hirst decision, the Legislature provided a record amount of capital funding. Projects, not regulations, are the best path to protect and restore instream flows. REALTORS® ask that Ecology strive to create a simply regulatory structure with the end users in mind – people who own or buy vacant land in rural areas, REALTORS® who assist them in this process, homebuilders, homeowners, and counties.

We have prepared more detailed comments included with this letter, as well as technical and other documents to be included in the rulemaking record. If you have further questions, please contact Bill Clarke at (360) 561-7540.

Sincerely,

Kitty Wallace
Kitty Wallace, 2020 President
Washington REALTORS®

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Comments on Proposed Amendments to Chapter 173-501 WAC
Nooksack Instream Flow Rule
Bill Clarke, for Washington REALTORS®

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1. The Rule Creates an Overly Complicated System That Increases the Amount of Time, Money, and Human Resources Devoted to Analyzing and Regulating Small Water Uses (That Will be Offset Anyway)

Over the past 20 years, the increasingly complexity of Ecology's instream flow rules on exempt wells has created significant problems for landowners, local governments, and agency itself – all without a commensurate water resource benefits. The implementation of ESSB 6091 is an opportunity to end this trend, and redirect water resource efforts toward more significant issues. Under ESSB 6091, the consumptive use from new domestic exempt wells will be entirely offset by projects within the Nooksack Basin – so why both offset consumptive use projections AND create a complicated regulatory system?

Ecology's proposed rule would establish a number of different limits, under different situations, that unnecessarily limit homeowners and that neither Ecology or local governments are or should be staffed or funded to implement in a meaningful way. For example, the rule proposes a daily gallon per day limit of 500 gallons per day – as opposed to a much simpler to implement metric of a maximum average annual withdrawal, used by the Legislature in ESSB 6091. RCW 90.94.020(5)(f)(ii). The proposed rule limits outdoor irrigation to 1/12th of an acre per single domestic connection.

These limits are far lower than those adopted by the Legislature in ESSB 6091, and far less than what a reasonable homeowner may need to use. Further, Ecology's rule analysis compares the proposed Nooksack limits to those in other recent Ecology instream flow rules (Stillaguamish, Entiat, Quilcene, etc.). The significant difference is that in the Nooksack Basin under ESSB 6091, all new domestic exempt use will be offset through instream flow projects. In the other WRIA rules used for comparison by Ecology, there is no such equivalent provision. And ironically, Ecology's rule analysis does mention, let alone analyze, its most recent adopted instream flow rule, Chapter 173-557 WAC, for the Spokane River. In that rule, Ecology adopted a far simpler rule structure without domestic exempt well limits and instead acquired water rights to offset future projected exempt well consumptive uses.

The drought limits also create complexity, especially given the increasing occurrence of declared droughts in Washington State. Outdoor irrigation can be curtailed during a declared drought, but only to the extent that the outdoor irrigation is not "subsistence gardening." That likely means that lawns, flowers, and non-fruit bearing bushes and trees could not be irrigated, but food-bearing crops could still be irrigated in a drought. Taken together, this means that by adopting such a proposed rule, Ecology is creating the expectation that it will meaningfully enforce the variety of limits during non-drought and drought conditions on new domestic exempt wells.

If Ecology's objective is to reduce consumptive outdoor water by exempt wells, its priority should be on those exempt well users whose outdoor use exceeds the ½ acre non-commercial lawn and garden limit in RCW 90.44.050. The irrigation acreage analysis provided to Ecology by RH2 Engineering shows that 34% of homes built between 2000 and 2014 have no outdoor irrigation at all; and that if irrigation over ½ acre was eliminated, the mean area irrigated by homes built during this time period would be only .18 acres, about 1/3 of what could be lawfully irrigated under the ½ acre non commercial lawn and garden limit in RCW 90.44.050.

2. The Rule Analysis Greatly Overestimates the Impact to Instream Flows Associated With New Domestic Exempt Wells.

Ecology's rule analysis greatly overestimates the impact of new exempt wells on instream flows by improperly focusing solely on the quantity of water withdrawn from new exempt wells, rather than calculating the actual impact on instream flows.

One of the purposes of ESSB 6091 was to offset impacts to instream flows that may occur over the next 20 years. The statute is replete with some version of the phrase "impacts to instream flows" – see RCW 90.94.020(1) (. . . "potential impacts on a closed water body and potential impairment to an instream flow are authorized . . . "); .020(4)b) (". . . those actions . . . necessary to offset potential impacts to instream flows . . . ") The statute is not focused narrowly on the quantity of water withdrawn from wells, but rather, more broadly on impacts to instream flows *associated with* permit-exempt domestic water use."

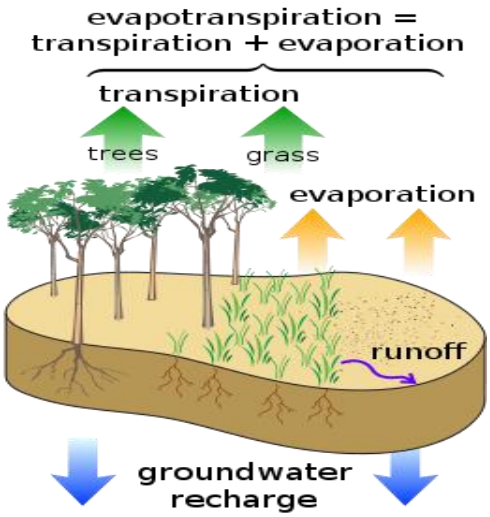
In contrast, Ecology's proposed rule, and related documents focus narrowly on the withdrawal from the well, not the impacts on instream flows. For example, the Ecology document "Recommendations for Water Use Estimates" document states: "ESSB 6091 requires offsetting the quantity of water consumptively used by future domestic permit-exempt wells . . . " (Page 4). The statute is not tied narrowly to water "used by" the well as Ecology's document states – the statutory phrase is "impacts to instream flows "associated with" permit-exempt domestic water use.

So, what is the actual, factual, "impact" over 20 years that is "associated with" domestic water use on instream flows? As to this question, Ecology's proposed rule and related guidance documents presume only those actions that will increase the "impact" on instream flows – but reject or ignore those actions that will reduce the instream flow impacts.

In the construction of a new house, there will typically be the removal of existing vegetation, and the consequential reduction in water use. This will occur in those areas needed for the driveway, septic drainfield, building footprint, and other structures. Ecology's acknowledged this reality in the Water Use Spreadsheet from one of its "Net Ecological Benefit (NEB) Workshop, as the water use projections stated: "** Does not take

into account direct and indirect impacts of property development – tree removal, impervious surfaces, stormwater control regulations."

In the pre-development condition, vacant land will have a certain amount of consumptive water use, depending on the type of vegetation on site. Some of this vegetation (and thus the consumptive use associated with the vegetation) will be permanently removed as part of the home construction process. For example, if the diagram below represents a building parcel in the pre-development condition, home construction might eliminate 1/3 of the existing vegetation, and replace those areas with impervious surfaces that would have zero evapotranspiration:



An additional way that the "impact" to instream flows is being overestimated is lack of recognition of well depth. The removal of vegetation that occurs during development will reduce shallow groundwater use. In contrast, groundwater wells are much deeper than the root zone, and so will withdraw water that recharges shallower aquifers through septic return flows. In some cases, water is provided to shallow groundwater areas that contribute to streamflow only because of the withdrawal by the well and septic recharge.

This combined effect of reduced vegetative evapotranspiration and deep-to-shallow recharge has been documented. For example, see USGS Conceptual Model and Numerical Simulation of the Groundwater-flow System of Bainbridge Island, Washington (2011) https://pubs.usgs.gov/sir/2011/5021/. The USGS document stated as follows:

"The calibrated model was used to simulate predevelopment conditions, during which no groundwater pumping or secondary recharge occurred and currently developed land was covered by conifer forests. *Simulated water levels in the uppermost aquifer generally were slightly higher at the end of 2008 than under predevelopment conditions, likely due to increased recharge from septic system returns and decreased evapotranspiration due to reduced forest land cover*." (Page 91) (Emphasis Added)

3. Robinson & Noble Analysis re: Water Balance "Associated With" Rural Development

Further, during the period of time after the Hirst decision, but prior to passage of ESSB 6091, some counties required additional analysis of water use associated with rural residential development. An example of this is in the attached water balance analysis provided by Robinson & Noble for an actual single-family residential development in Pierce County. The analysis calculates all changes in consumptive water use from the "pre-development" to "post-development" condition and estimates that the post-development condition will cause an increase in groundwater recharge of 485 gallons per day. This analysis is summarized in the report as follows:

"In the post-development condition, groundwater use from the planned well is partially offset by the infiltration of septic return flow and the partial infiltration of water used outside the home. The decrease in evapotranspiration of the developed area of the property, when coupled with the decreased runoff and increased infiltration capacity of the amended soils, will result in an increased to the amount of water recharging the subsurface. The resulting water balance of this project entirely offsets the consumptive use from the proposed well on the property and provides an increase in recharge as a result of the post-development condition." (Page 8)

Robinson & Noble – Pierce County/Sullivan Project Water Balance Analysis (Attachment A)

Robinson & Noble also prepared a similar analysis for Washington REALTORS®, based on an actual development in Thurston County. (*Water Balance Analysis, Typical Rural Large Lot Residential Developments in Western Washington,* Attachment B) This analysis is based on an actual 10-lot, 50 acre development. For this analysis, the area of forested/vegetation cover and associated consumptive water use was calculated in the pre-development condition, and compared to the area of outdoor irrigation and associated consumptive use, assumed indoor water use, and septic recharge. The analysis includes both a "high water use" scenario, based on assumptions developed by Ecology as part of the ESSB 6091 implementation, and a "moderate water use" scenario based on other reports (Culhane & Nazy, 2015; Golder, 2011).

For each lot, under the high water use scenario, groundwater recharge in the post-development condition increases by 277 gallons per day. In the moderate water use scenario, groundwater recharge increased by 1,041 gallons per day at each lot. The conclusion of the water balance analysis was summarized by Robinson & Noble as follows:

> "In the post-development condition, groundwater use from the planned well is partially offset by the infiltration of septic return flow and the partial infiltration of water used outside the home. The decrease in evapotranspiration of the developed area of the property, when coupled with the decreased runoff and increased infiltration capacity of the amended soils, results in an increase in the amount of water recharging the subsurface. *Our analysis suggests that the resulting water balance of the project like this, under either water use scenario, more than completely offsets the consumptive use from the proposed well on the property, providing an increased amount of groundwater recharge under the post-development condition*."

(*Water Balance Analysis, Typical Rural Large Lot Residential Developments in Western Washington, Page 5 – 6*) (Emphasis Added)

REALTORS® are not asking that the reduced water uses associated with vegetation removal be afforded any legal status as mitigation, or suggesting deforestation as a instream flow restoration strategy. Rather, if ESSB 6091 requires calculating and off-setting the "consumptive use impacts to instream flows associated with permit-exempt domestic water use" (RCW 90.94.020(4)(b)), then all actions – those that both increase and decrease groundwater use – should be part of the calculation. This more holistic and hydrologically honest framework would great decrease the supposed "impact" (and in some cases show a benefit) to instream flows – thereby supporting a rule amendment that more closely reflects water needs of rural residents.

4. The Proposed Outdoor Use Limits Conflict With Legislative Intent, and Further the Trend of a Complicated and Hard to Implement Water Resource System

RCW 90.94.020(8) states "This section only applies to new domestic groundwater withdrawals exempt from permitting under RCW 90.44.050 . . . " Under RCW 90.44.050, the exemption for single or group domestic use is one of four separate exemptions. One of the other exemptions in RCW 90.44.050, and one explicitly excluded from RCW Chapter 90.94, is for the irrigation of ½ acre non-commercial lawn or garden. Ecology's proposed rule conflicts with RCW 90.94.020(8) by including outdoor irrigation limits (1/12th of an acre) with the domestic limit of 500 gallons per day. In addition to conflicting with RCW Chapter 90.94, Ecology's "bundled" interpretation of RCW 90.44.050, combining multiple exempt uses into a single exemption, was rejected by the Washington Supreme Court in the Five Corners Family Farmers decision.

In that case, the Court stated:

> With collapse of the "bundle" interpretation, [Ecology's] argument that permit-exempt stock-watering withdrawals are limited to 5,000 gallons per day also fails. Accepting, as the sentence structure makes clear, that the exemption clause contains four distinct categories, it becomes apparent that each category is limited by its own qualifying language and only its own qualifying language. Given that the "five thousand gallons a day" limitation appears twice in the exemption clause, it is evident that the legislature knew how to attach that limitation to multiple categories, and yet it chose only to apply it to two categories. There is simply no textual basis for the conclusion that "five thousand gallons a day" modifies "for stock-watering purposes." RCW 90.44.050. Accordingly, Appellants' proposed interpretation is not reasonable.

Five Corners Family Farmers v. Ecology, 173 Wn.2d 296, 312–13 (2011).

By including outdoor irrigation limits, which cannot be attributed to any authority in RCW Chapter 90.94, Ecology is using the same "bundled" interpretation of RCW 90.44.050 rejected by the Supreme Court.

Further, beyond the legal interpretation, the 1/12th acre provision is an example of a regulatory provision that creates unnecessary complexity over a few small amount of water (and again, based on the Robinson & Noble analysis, perhaps even positive increases to groundwater recharge associated with new development). In the case of group domestic use, the total outdoor use is limited to ½ acre, regardless of the size of the group use.

Another example of unnecessary complexity is the drought curtailment provision in proposed WAC 173-501-065. In the event of drought, the rule would Ecology to determine whether outdoor uses are "noncommercial subsistence gardening purposes" – as opposed to (we assume?) lawns, trees, shrubs or gardens that are not necessary for subsistence. In drought events, Ecology should focus its efforts on larger water resource issues – both instream and out-of-stream, and not adopt regulations on homeowners whose impacts during normal or drought years are immeasurable.

5. Ecology's Proposed Rule Inconsistent With WDOH Group B Water System Rule

While the proposed amendments describe potential group domestic use, it is unclear whether the 500 gallon per day water use limit would even allow group domestic use. If not, this will result in the need to drill more wells, rather than fewer wells. The Washington Department of Health's Group B rule includes a water supply minimum source capacity of 750 gallons per day, per dwelling unit, for Whatcom County. WAC 246-291-125(4)(d), Table 1.

Washington REALTORS® suggest that 750 gallons per day, average annual use, for indoor use be the minimum quantity allowed under Ecology's amended rule. This would ensure consistency with WDOH's Group B, and ensure sufficient domestic water supply for larger families. Outdoor water use would be allowed in addition to this 750 gallon per day average annual use limit.

In addition, the change from ESSB 6091 in establishing gallon per day limits on an average annual basis, to having a daily 500 gallon per day maximum, further complicates the rule. An average annual GPD limit is easier to understand, implement, and enforce.

6. Ecology's Proposed Rule Inconsistent With GMA Rural Element

Ironically, Ecology's proposed rule is the product of the GMA decision (Hirst), overruled by the Legislature (ESSB 6091), and now ultimately resulting in an Ecology rule that is inconsistent with the GMA – which is exactly where this whole mess started. Under the GMA, "rural character" is defined to include patterns of land use "that foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas. RCW 36.70A.030(20)(b). The Department of Commerce's GMA rules further define the Rural Element of the GMA at WAC 365-196-425.

Whatcom County's GMA Comprehensive Plan states as follows:

> "Whatcom County's rural lifestyle is one where residents enjoy views of a green landscape dotted by homes and barns, and have an appreciation for clean water and air. Residents can work and shop in small rural communities, or earn a living on their own rural lands, but these enterprises do not detract from the overall sense of openness and predominance of the landscape in the rural area. Rural Whatcom County has long been a place to raise children with the values of hard work and responsible stewardship of the land, and where residents can grow food and livestock for themselves or for market. While rural property owners do not expect to be provided with urban-level services, they enjoy a quality of life and sense of self-sufficiency not ordinarily found in the urban areas."

The "traditional rural lifestyles" that the GMA describes necessitate sufficient water supply for outdoor water use – not 1/12th of an acre. Many people choose to live in rural areas so they have space – space for lawns, gardens, trees, animals, and other pursuits – all of which require outdoor water use. The analysis provided to Ecology by RH2 analyzing outdoor water use shows that on average, homeowners stay well under the ½ acre outdoor lawn and garden limit in RCW 90.44.050. Homeowners should be given this flexibility to irrigate up to ½ acre, and with realistic projections of actual water use impacts, this amount can be offset through projects funded by the Legislature.

Attachments:

A. Robinson & Noble – Pierce County/Sullivan Project Water Balance Analysis.

B. Robinson & Noble - Water Balance Analysis, Typical Rural Large Lot Residential Developments in Western Washington.