EARTHJUSTICE

January 17, 2020

SUBMITTED ONLINE VIA
WASHINGTON STATE DEPARTMENT OF ECOLOGY WEBSITE:
https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-501

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

RE: Comments on Proposed Rule and Proposed Rule Supporting Document for the Amendment of WAC 173-501

Dear Ms. Sawabini:

The Department of Ecology has proposed language amending WAC 173-501, the instream flow rule for WRIA 1 (Nooksack Basin), pursuant to the process established by ESSB 6091, RCW 90.94. We appreciate that Ecology has the unenviable task of developing the amended rule by August 1, 2020, a relatively tight deadline given the import of the task. However, we are concerned both with Ecology's decisions specific to the Nooksack Basin as well as some of the general policies and interpretations of ESSB 6091 that have been put into practice here.

This rulemaking is critical for multiple reasons. It is the first rule issued pursuant to ESSB 6091 without the guidance of an amended watershed plan, and consequently, Ecology is establishing and implementing standards that will influence the thirteen watersheds that are still in the process of developing plans under the new law.

The outcome here is also vital for protecting the resources of the Nooksack Basin. Water shortages in WRIA 1 are well established, with the rivers and streams routinely failing to meet established minimum instream flows.[1] The basin is home to two populations of chinook salmon listed under the Endangered Species Act, the preferred food source for our struggling population of Southern Resident killer whales.

The problem of low flows in the Nooksack is in part a result of the unrestricted growth in permit-exempt wells over many decades. As early as 1999, Whatcom County recognized that the proliferation of rural, permit-exempt wells was creating "difficulties for effective water resource

[1] *Whatcom Co. v. Hirst*, 186 Wn.2d 648, 662 (Wash. 2016) (noting the finding that minimum flows are not met on average 100 days per year).

management."[2] Since that time, hundreds more wells have been drilled in the county.[3] The rulemaking here will determine how to manage future permit-exempt wells in the watershed and how to mitigate the depletions caused by their withdrawals of water over the next two decades.

With one notable exception discussed at the conclusion of these comments, the proposed rule language and accompanying Rule Supporting Document (RSD) appear to largely recapitulate the preliminary draft rule language and RSD released by Ecology for comment in the spring. Consequently, we are attaching our previous comments for inclusion here and urge Ecology to consider all of the comments submitted at that time.

Withdrawal Limits and Metering

While we support Ecology's inclusion of withdrawal limits on permit-exempt wells, we believe that lower limits are justified by existing data. As noted in the preliminary comments submitted by the Washington Water Trust, its work in WRIA 18 (Dungeness Basin) supports capping withdrawals at no more than 200 gallons per day (gpd), including both indoor domestic use and outdoor lawn and garden irrigation.

This amount should provide a reasonable margin of error. According to the Water Trust, actual average use in the Dungeness has been approximately 120 gpd.[4] This is especially notable given that the Dungeness River watershed is located in the Olympic rainshadow, making it the only coastal watershed that must rely on irrigation to support its local agriculture.[5] Accordingly, Ecology should limit withdrawals from all new permit-exempt wells to 200 gpd year-round. At a minimum, 200 gpd should be the daily limit during declared drought emergencies.

Regardless of whether Ecology adopts these lower amounts, it should require metering and reporting so that whatever limits it does set are actually enforceable. Indeed, it is difficult to see how homeowners themselves can be expected to remain within established thresholds without a sense of how much water they are using. Ecology's instream rule in the Dungeness Basin requires the metering of all new permit-exempt wells, which promotes the efficient use of water documented by the Water Trust.[6]

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[2] *Id*. at 663 (quotation marks and citation omitted).

[3] *Id.* at 662-63.

[4] Letter from Suzanne Skinner, Washington Water Trust, at 2 (May 10, 2019).

[5] *See* Clallam County, Elwha-Dungeness Watershed Plan at 2.8-1 (May 2005). The Lummi Tribe has found 350 gpd sufficient for both indoor and outdoor use on the Lummi Peninsula. Letter from Merle Jefferson, Lummi Indian Business Council, at 1-2 (May 9, 2019) ("Lummi Tribe Cmts").

[6] WAC 173-518-060 ("All future new surface and groundwater appropriations, other than rainwater collection, shall measure withdrawals").

Beyond the importance of using metering to facilitate meaningful withdrawal limits, there is an even more compelling reason to require metering here. Discussed in more detail, *infra*, ESSB 6091's command to "offset" future consumptive groundwater use requires a bucket-for-bucket replacement of water in the basin. Maintaining that balance necessitates ongoing metering to allow for potential adjustments to the projects providing the offsets.

Again, the Dungeness Basin is instructive. The decision to require metering there is an outgrowth of the fact that new domestic-well groundwater users in WRIA 18 must either draw from established reserves or mitigate their water use.[7] While there are important differences between this approach and ESSB 6091, the Dungeness rule recognizes that there cannot be any real accounting without metering and reporting: tracking the drawdown of the reserves and confining water use to match a mitigation plan requires accurate measurement.[8]

Net Ecological Benefit

As mandated by ESSB 6091, Ecology must find that its chosen projects in the Nooksack Basin meet the "net ecological benefit" standard. Two aspects of the net ecological benefit finding in the Nooksack are contrary to Ecology's legal responsibilities: 1) Ecology unreasonably conflates out-of-stream habitat work with bucket-for-bucket water replacement; and 2) Ecology has failed to include adequate adaptive management to overcome the uncertainty around whether the selected projects will be implemented and achieve their stated goals.

As a result, Ecology must reevaluate its net ecological benefit finding. It should consider the need for new offset projects that will provide in-kind water as well as new habitat projects that will benefit instream resources where offset water is either non-existent or unlikely to occur.

Trees-for-Water

Ecology's proposed rule relies on an untenable interpretation of ESSB 6091. Under the statute, the watershed plan rule must both "offset" the projected impacts to instream resources from new permit-exempt wells as well as provide benefits that will "exceed" those impacts.[9] In other

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[7] WAC 173-518-070; -080.

[8] There is truth to the maxim, "You cannot manage what you cannot measure." Although ESSB 6091 establishes pilot projects for metering, it does not preclude Ecology from also doing so when it amends instream flow rules. *See* RCW § 90.94.040.

[9] RSD at 63 (quoting Dep't of Ecology, Washington State, Publ. 18-11-009, Interim Guidance for Determining Net Ecological Benefit (2018) ("Interim Guidance")). According to the statute, Ecology "must determine" that the actions identified "will result" in a net ecological benefit to instream resources. RCW § 90.94.020(4)(c).

words, projects must: 1) replace the consumptive use of water from the groundwater use, bucket-for-bucket; as well as 2) provide a degree of additional ecological improvement. The latter can rely on additional water instream and/or habitat work (non-water projects) that would improve stream conditions.[10]

In the WRIA 1 proposed rule, however, Ecology unreasonably relies on habitat projects to "offset" new withdrawals without adequate support for the amount of water they will provide. Such projects are more appropriately included as habitat improvement projects that "protect or improve instream resources without replacing the consumptive quantity of water," and as such must be "in addition to" projects that provide a specific amount of water.

In the RSD for the Nooksack Basin, Ecology identifies thirteen projects to support its net ecological benefit conclusion, including both traditional streamflow augmentation (e.g., pumping groundwater to surface water) as well as habitat-focused projects that it maintains will result in additional "wet water."

Ecology includes both types in support of its determination that the future groundwater impacts will be "offset."[11] For example, Ecology claims that habitat restoration efforts in Skookum Creek will add 1,449 acre-feet per year (AFY) to a tributary of the Nooksack River, well over a third of the total claimed water savings for the entire watershed.[12]

The other project that most clearly relies on habitat restoration is a 7,000 acre conservation easement on Stewart Mountain. Although the RSD claims an eye-popping 7,240 AFY for Stewart Mountain based on reduced timber harvest, Ecology does not include the figure in the total because it will "not be fully realized" in the twenty-year horizon demanded by the law.[13]

In its Interim Guidance, Ecology contemplates a limited role for habitat projects in calculating offset water.[14] Its list of "water offset projects" with an express habitat component includes only

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[10] Non-water projects "must be in addition to water offset projects" that are needed "to offset the consumptive domestic permit exempt use impacts to instream flows[.]" Interim Guidance at 6.

[11] *See* RSD at 41 (calculating the claimed water gains associated with each project).

[12] The total amount of water for all thirteen of the projects included in the watershed plan is 3,767 AFY. *Id.*

[13] *Id*. at 41, 44-45.

[14] *See* Interim Guidance at 5 (noting that offset projects can include water right acquisitions as well as "other projects that provide flow benefits"). The Nooksack rule is governed by Ecology's Interim Guidance. Dep't of Ecology, Washington State, POL-2094, Streamflow Restoration Policy and Interpretive Statement, at 6 n.14 (2019) ("POL-2094"); *see also* RSD at 54 (applying the interim guidance).

floodplain restoration and levee removal, both of which arguably more closely resemble managed aquifer recharge. The list does not include forest regrowth or riparian restoration.[15] Ecology's inclusion of Skookum Creek and Stewart Mountain may have been influenced by its later-issued final guidance, which more aggressively embraces allowing habitat work to offset water use.[16]

The claimed in-stream benefit for habitat projects in the Nooksack Basin is troubling in two key respects.

First, the supporting information is thin. The Skookum Creek project evidently involves the protection of "high quality forested riparian habitat" while restoring areas that have had "major logging operations[.]"[17] The references to restoration in Ecology's single-paragraph description provide little more than the expressed intent to "restore the property to allow natural ecosystems to function" resulting in "significant landscape-scale restoration[.]"[18]

The only additional details come from a technical report cited by Ecology in the RSD. The report states that it is

> estimated that the cessation of timber harvesting on this land could result in a 2 [cubic feet per second (cfs)] increase in instream flow and the reintroduction of beavers to Skookum Creek and other restoration work could further enhance instream flows.[19]

This summary description raises a number of questions. How exactly was the 2 cfs increase calculated? To what extent will the benefits accrue during the twenty-year time horizon mandated by the legislation? Like the Stewart Mountain project, Skookum Creek is relying on

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[15] Interim Guidance at 5.

[16] Dep't of Ecology, Washington State, Publ. 19-11-079, GUID-2094, Final Guidance for Determining Net Ecological Benefit, at 11 (2019) ("Final Guidance") (allowing for the inclusion of projects that "result in an increase in streamflow" even if they otherwise "prioritize the habitat benefits"). However, even there, Ecology acknowledges that it may be "difficult to quantify the offset benefits" of habitat projects and that this reality would "potentially increas[e] uncertainty" for any watershed plan. *Id*.

[17] RSD at 43; *see also id*. at 57 (describing project).

[18] *Id*. at 44. It is unclear whether Ecology is also relying on habitat protection for flow benefits. Ecology's Final Guidance includes projects "that protect current habitats" in its list of examples where streamflow dividends are possible. Final Guidance at 11. That inclusion is curious given that preserving the status quo would not in any sense appreciably alter streamflows for the better, especially considering the twenty-year time horizon required by ESSB 6091.

[19] RH2, Final Task 2 Deliverables – Projects and Actions, at App. C (Oct. 2, 2018). A 2 cfs increase roughly corresponds to 1,449 AFY.

reforestation, but Ecology did not include the Stewart Mountain instream flow because it would "not be fully realized" within twenty years. How does Ecology differentiate between the two?

In comments submitted on preliminary proposal for WRIA 1, the Washington Department of Fish and Wildlife (WDFW) raised concerns with Ecology's approach: "Numerous habitat restoration and conservation projects are characterized as having streamflow benefits commensurate with in-kind projects."[20] The problem, in WDFW's view, is that the "uncertainties inherent with these kinds of projects make it difficult to accurately quantify those benefits."[21]

Indeed, the RSD seems to be at odds with the specificity demanded by the Interim Guidance. For habitat projects as floodplain restoration or levee removal where benefits will vary year-to-year, Ecology urges the inclusion of estimates of flow improvement "over an entire year for a range of average and low precipitation years," information absent from the WRIA 1 documentation.[22]

Second, regardless of the underlying proof, Ecology is blurring the established distinction between water-for-water replacement and habitat restoration, *i.e.*, in-kind versus out-of-kind mitigation.[23] The PCHB has long been skeptical of land use changes allowing for increased water use, as in *Black River Quarry*, which found, "No credit is merited nor authorized under the Water Code for returning to nature, what originally belonged to it."[24]

Habitat work traditionally has been categorized as out-of-kind mitigation, potentially useful for improving the ecological function of a stream generally but in a separate category from the in-

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[20] Letter from Megan Kernan, Washington Dep't of Fish and Wildlife, at 2 (May 10, 2019) ("WDFW Cmts").

[21] *Id*.

[22] Interim Guidance at 6. In fact, more information is needed to justify the offset assumptions for most of the projects. We have been unable to locate the underlying calculations in either the RSD or the RH2 technical memorandum.

[23] WDFW Cmts at 2 (cautioning against "open[ing] the door to greater uncertainty by characterizing out-of-kind projects with possible streamflow benefits as having in-kind benefits"). Ecology recognizes that "calculating the benefits may be more complicated for [non-water acquisition] projects." Interim Guidance at 5.

[24] *Black River Quarry v. Ecology*, PCHB No. 96-56 Findings of Fact, Concl. of Law, at 15 (1996) (rejecting attempt to create "new water" though the infiltration of stormwater runoff); *see also Manke Lumber v. Ecology*, PCHB 96-102-106, Findings of Fact, Concl. of Law, at 11 (Nov. 1, 1996) (finding that the water trees leave in the ground at any point in time "is merely a portion of the ground water resources that belongs to the people of the State").

kind mitigation that can provide wet water. It simply is not a substitute for maintaining and improving flows, although habitat restoration can certainly benefit instream resources.[25]

The legislation here in no way disturbs that division. Instead, when ESSB 6091 does refer to "out-of-kind" mitigation, it does so within its commonly understood meaning: projects that "improve or enhance existing water quality, riparian habitat, or other instream functions and values[.]"[26] This description of out-of-stream mitigation pointedly does not encompass water *quantity*.[27]

Where the legislature intended to rewrite water law, it did so clearly and unequivocally. Out-of-time and out-of-place offsets for permit-exempt wells were unambiguously embraced by the law. Obscuring the division between in-kind and out-of-kind mitigation was not.

Ecology can and should include habitat projects in order to create an overall enhancement of stream resources to support a net ecological benefit finding. Indeed, where offset projects do not replace the same quantity of consumptive use during the same time and in the same tributary or sub-basin, Ecology must include significant habitat projects in addition to lower-priority offset projects to reach a defensible net ecological benefit determination.[28] While ESSB 6091 does create an important role for habitat projects, Ecology's claim that the habitat projects provide offset water is inconsistent with the statute and Ecology's supporting documentation.

Adaptive Management

As noted, Ecology must certify that projects "will result" in a net ecological benefit.[29] Ecology recognizes that in doing so it must be "reasonably assured" that the projects will "be carried

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[25] *See, e.g., Foster v. Dep't of Ecology*, PCHB No. 11-155, Order Granting Partial Sum. Judgment, at 27 (2013) (distinguishing between habitat restoration projects with "flow enhancement benefits" from "in-kind mitigation").

[26] RCW § 90.94.090(9)(c).

[27] Proposed legislation from 2015 similarly demonstrates this conventional understanding, noting that out-of-kind mitigation includes "land development practices, habitat restoration, and best management practices[.]" Sub. Senate Bill 5965, 64th Leg. Session, Sec. 2(d) (2015).

[28] Three subbasins will not benefit from any offset water and two have no projects at all. RSD at 41.

[29] RCW §§ 90.04.020(4)(c) (Ecology "must determine that actions identified in the watershed plan . . . will result in a net ecological benefit"); .020(7)(a) (Ecology "must adopt rules" that "meet the requirements of this section").

out."[30] At the same time, Ecology insists that there is no requirement that the identified projects and actions actually come to fruition:

> RCW 90.94.020 and 90.94.030 do not create an obligation on any party to ensure that plans, or projects and actions in those plans or associated with rulemaking, are implemented. Further, the law does not predicate the issuance of building permits on the implementation of watershed plans or any projects and actions in those plans.[31]

This reasoning extends to the issue of funding established by ESSB 6091: Ecology has found that while projects identified in the watershed plans are prioritized, "[t]here is no guarantee that any application or project proposal will be funded[.]"[32]

Ecology's cramped interpretation is contrary to its statutory responsibilities. While true that the statute does not place a direct obligation on project proponents or localities to complete the work in the watershed plans, it does task Ecology with ensuring that the standards set by ESSB 6091 have been met. The fact that the statute allows permit-exempt wells to be drilled in advance of the projects heightens rather than diminishes the importance of implementation and the achievement of stated goals.

Ecology's use of the term "reasonable assur[ance]" in its guidance document is instructive. This term also appears in the Clean Water Act Section 401 certification rules, providing a standard Ecology uses to certify that a federally permitted activity will not violate state water quality standards.[33] The Pollution Control Hearings Board held that Section 401 "reasonable assurance" means "something is reasonably certain to occur. Something more than a probability; mere speculation is not sufficient."[34] The Washington Supreme Court further recognized the

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[30] RSD at 39 ("Ecology selected the list of projects based on the above criteria to be reasonably assured the projects would be carried out.").
[31] POL-2094 at 10; RSD at 49 (same); *see also* RSD at 40 ("Neither the completion of the projects nor the attainment of their anticipated results are guaranteed").
[32] Dep't of Ecology, Washington State, Publ. 19-11-089, Streamflow Restoration Competitive Grants, 2020, at 1 (2019); *see also* RSD at 40 ("the listing of a project herein does not obligate Ecology to fund a project").
[33] 40 C.F.R. § 121.2(a)(3) (agency must provide a statement that "there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards").
[34] *Port of Seattle v. Pollution Control Hearings Board*, 151 Wn.2d 568, 600 (Wash. 2004) (citation and quotation marks omitted).

importance of robust adaptive management to support a finding of "reasonable assurance," given the uncertainties of ecological mitigation outcomes.[35]

Yet the section of the Nooksack RSD devoted to "adaptive management" includes only information gathering, requiring Whatcom County to prepare annual and five-year self-assessments.[36] There are no built-in penalties, incentives, or adjustments designed to actually produce results.

At the same time, Ecology appears to assume that adaptive management will play an important role in the Nooksack Basin: "Ecology's adaptive management approach will enable adjustments and course corrections over time and establishes an approach to incorporate new information as well as new projects and actions."[37] How this will occur without an ongoing assessment of impacts through metering or triggers for mandatory intervention is not discussed.[38]

Ecology must include steps to intervene if the recommended projects falter before full implementation or do not achieve the instream benefits projected in the RSD. Monitoring and real adaptive management are essential for overcoming the uncertainties necessarily involved in projections that, at a minimum, extend out over the next two decades.[39] At a minimum, this would require that whenever monitoring reveals that projects are not providing the water projected in the RSD in a reasonable amount of time, enforceable contingency plans would be automatically triggered, resulting in the development of additional offset water.

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[35] *Id.* at 606 ("Monitoring and adaptive management provide a mechanism through which Ecology can mitigate [the] inherent uncertainty" that comes with predicting future results.). That uncertainty is only magnified when Ecology relies on projects that are not traditional "wet water" mitigation. *See, e.g.,* RH2, App. A, at 6 (noting the "uncertainty of the quantity of offset water provided" for the Skookum Creek Project); Final Guidance at 11 (habitat projects increase uncertainty).

[36] RSD at 49-51.

[37] *Id*. at 63.

[38] *See Airport Comm. Coal. v. Dep't of Ecology*, PCHB No. 01-160, at 82, Findings of Fact, Concl. of Law (Aug. 12, 2002) (noting that reliance on adaptive management means including "specific enforceable requirements" if "monitoring data indicate [that] standards are being violated").

[39] Ecology instructs planning groups to assess "the likelihood that project and action benefits will occur, including local support, and any possible barriers to implementation." Final Guidance at 12. As noted by the Lummi Tribe, projects such as the managed aquifer recharge at the North Fork Site (#8) and Storage Projects (#28) remain, at best, conceptual. Lummi Tribe Cmts at 3. Neither has a project proponent, and the storage at the North Fork site "has not been critically evaluated" nor have any discussions taken place with landowners. RSD at 43, 47. Yet Ecology has continued to rely on them.

Ecology should begin by incorporating key elements of the RSD, such as adaptive management, directly in the actual rule language. As the Pollution Control Hearings Board recognized in a water right challenge, necessary conditions must be documented in such a way to become "an enforceable provision[.]"[40] The Board directed Ecology to "place in the [water right] permit" the relevant condition, rather than rely on language appearing in an accompanying Report of Examination (ROE).[41] The same logic applies here.

Additionality

Watershed plans must include "recommendations" for projects and actions.[42] Built into this concept of "recommend[ed]" projects and actions is the implication that they should arise, at least in part, as a result of ESSB 6091 and its associated watershed planning. The law would have little value if it meant only that plans contain a survey of pre-existing commitments in order to claim their benefits to streamflow.

Indeed, Ecology recognizes the need for some consideration of this concept of "additionality."[43] Ecology has stated that it will not credit mitigation that is "required by existing regulations"; that is, if the outcome would have occurred "regardless of the passage of chapter 90.94 RCW."[44] Ecology has also introduced a timing element, disallowing projects that were completed before January 19, 2018, the date of the law's passage.[45]

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[40] *Center for Environmental Law and Polcy v. Dep't of Ecology*, PCHB No. 13-117, Order on Mot. For Summ. Judg., at 20-21 (June 24, 2014).

[41] *Id*. at 20; *see also id*. at 12 (noting language in ROE); *id*. at 20 ("Mere reference [to the condition] is not enough."); *id*. at 12 (noting language in ROE). WDFW agrees: "Monitoring and adaptive management requirements should be contained directly in the rule, or at least incorporated elsewhere, but referenced in the rule." WDFW Cmts at 2 & 3.

[42] RCW § 90.94.020(4)(a).

[43] Undertaking a review of a project's "additionality" is an attempt to determine whether a claimed effect would have happened even absent the action designed to promote that result. *Additionality*, Wikipedia, https://en.wikipedia.org /wiki/Additionality (last visited Jan. 17, 2020). The concept of "additionality" commonly arises in the context of greenhouse gas cap and trade programs for determining the validity of – appropriately enough – carbon "offsets." *See* Pew Center on Global Climate Change, *Greenhouse Gas Offsets in a Domestic Cap-and-Trade Program*, Congressional Policy Brief, at 3 (Fall 2008), https://www.c2es.org/site/assets/uploads/2008/11/greenhouse-gas-offsets-domestic-cap-trade-program.pdf. One aspect of additionality is to avoid "double counting," the claiming of the same benefit for two separate purposes.

[44] POL-2094 at 8.

[45] *Id*.; *see also* Adaptive Management, *supra*.

Yet Ecology does not fully embrace the need for additionality. Beyond its date threshold and avoidance of legally mandated actions, Ecology has not developed any means to evaluate whether projects would proceed independently of ESSB 6091. In fact, as noted, Ecology takes the position that it is under no obligation to use ESSB 6091 funds to support "recommended" projects, and those projects that are funded entirely by other means may still be counted.[46]

Consequently, for the Nooksack Basin, Ecology has proposed including projects that are fully supported by alternative sources of money, for example a levee breaching (Project #23), funded through Ecology's Watershed Plan Implementation and Flow Achievement Program.

Given that Ecology is the source of the money, this complaint may seem to be legalistic hair-splitting. But the distinction is important for the same reason that Ecology applies its rudimentary version of additionality, noted *supra*: the project would have happened "regardless of the passage" of ESSB 6091. The levee breaching project is intended to *improve* flows, not free up water for developers to claim in order to build new homes and subdivisions. And yet the latter will be the result if Ecology's reasoning is allowed to stand.

Ecology should amend the proposed rule to make clear that only projects that rely on funding from the Streamflow Restoration Fund count toward the offsets required under ESSB 6091.[47]

Rule Language

Finally, in its preliminary rule language, Ecology proposed edits to WAC 173-501-070 to make clear that the "[s]ingle domestic use" referenced in the section would be subject to the newly proposed withdrawal limits in WAC 173-501-065, with the implication that section .070 was directed to permit-exempt wells. This approach conforms to the Washington Supreme Court's interpretation of the section.[48]

In the proposed rule language, Ecology introduces significant confusion by modifying "[s]ingle domestic" with "surface water use" and removing any cross reference to the limits in WAC 173-

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[46] *Id*. at 8. As noted in the preliminary comments submitted by the Lummi Tribe, most of "the listed offset projects were identified for alternative purposes prior to the passage of RCW 90.94," meaning that the projects are "unrelated to RCW 90.94 . . . thus undermining the goal of streamflow restoration." Lummi Tribe Cmts at 2-3. *See also* Letter from Ross Cline, Nooksack Indian Tribe, at 3 (May 7, 2019) ("Nooksack Tribe Cmts") ("Accounting for the benefits of restoration projects that will already be implemented undermines our collective ability to recover imperiled salmon populations.").

[47] As argued by the Nooksack Tribe, flow benefits "should be accounted for proportional to the amount of Streamflow Restoration funding supporting the project." Nooksack Tribe Cmts at 3.

[48] *Hirst*, 186 Wn.2d at 676 (interpreting WAC 173-501-070).

501-065. Evidently, it is Ecology's belief that the provision has always exempted single domestic *surface* water diversions from the instream flow rule. That view, however was rejected by the Washington Supreme Court, despite Ecology's arguments.[49]

Regardless, the instream flow rule should not now be amended to establish two tiers of domestic water users: permit-exempt groundwater users who must conform to the limits established in WAC 173-501-065 and permitted "single domestic" surface water users who are not subject to instream flows or the newly enacted limits. The legislature enacted ESSB 6091 to relax instream flows for a select class of users under the conditions established by the law. Ecology's proposed rule risks creating a privileged group of users outside the reach of ESSB 6091, resulting in further difficulties for achieving the instream flows in WRIA 1. Ecology should take the opportunity to correct this error rather than magnify the problem.

We strongly recommend that Ecology clarify that .070 does not exempt surface water diversions.

Conclusion

Thank you for your consideration of these comments and your efforts to protect instream resources in the Nooksack River basin.

Sincerely,

Michael Mayer

Amanda Goodin
Attorneys for Earthjustice

Attachment: Earthjustice May 10, 2019 Informal Comment Letter

[49] Amicus Br. of Dep't of Ecology, No. 91475-3, 2015 WL 5636892, at *15-16 (Wash. Sept. 18, 2015).

Attachment

EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

May 10, 2019

Submitted online via
Washington State Department of Ecology website:
http://ws.ecology.commentinput.com/?id=GFRjc

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

Re: Amendment to Chapter 173-501 Instream Resources Protection Program – Nooksack Water Resource Inventory Area (WRIA) 1 to implement Chapter 1, Laws of 2018 (ESSB 6091) and Chapter 90.94 RCW

Ecology's proposed rule and rule supporting document for the Nooksack River basin must do more to ensure that the newly authorized groundwater withdrawals and proposed offsets do not further harm already imperiled populations of chinook salmon and the Southern Resident orca population that depends on them. We support lower groundwater withdrawal limits and encourage Ecology to set limits as low or lower than in the proposed rule. We urge Ecology to ensure that the proposed rule adequately protects chinook salmon populations by considering additional offset projects (including conservation) that would address downstream reaches of the Nooksack River basin and tributaries. And we urge Ecology to create accountability by requiring metering and reporting for withdrawals and binding requirements that offset projects actually occur.

I. Background

The Nooksack River basin is home to two populations of chinook salmon that are listed as endangered under the Endangered Species Act and are at historically low numbers. Both populations migrate to the ocean through the Nooksack River basin beginning in the spring and in following years return in spring to spawn in late summer. Over one-third of chinook juveniles in the Nooksack spend a year maturing upstream before migrating out to the ocean, making freshwater habitat particularly important. Historically, 39,000 adult wild chinook salmon migrated through the Nooksack River basin, but in 2004, their numbers fell to 443, or 1.1% of historic populations.

The decline in chinook salmon population is largely due to decline in suitable habitat. Low water flows reduce and degrade available habitat. Low flows also cause temperature increases that make existing habitat unsuitable for survival in summer months and will become worse with climate change.

The decline in chinook salmon populations in the Nooksack also impacts the survival of critically endangered Southern Resident orca whales. The primary threat facing the Southern

705 SECOND AVENUE SUITE 203 SEATTLE, WA 98104
T: 206.343.7340 F: 206.343.1526 E: nwoffice@earthjustice.org W: www.earthjustice.org

Resident population is lack of prey, and specifically lack of chinook. Recovering the Nooksack runs of chinook would provide a badly needed increase in prey availability, and such recovery will only be possible if Ecology protects flows in the Nooksack and all its tributaries.

Low water flows are an increasing problem throughout the state and in the Nooksack in particular. The recently-passed Streamflow Restoration Act allows new domestic groundwater permit-exempt well withdrawals notwithstanding availability of water. Additional water withdrawals will deplete already low flows in the Nooksack River basin. Approximately 72% of all wells in WRIA 1 are in basins closed either year-round or seasonally.

To offset these increased groundwater withdrawals, the new legislation requires the State to approve a watershed management plan with mitigation projects that provide a "net ecological benefit." RCW 90.94.020(4)(a). Qualifying projects must not result in "negative impacts to ecological functions or critical habitat." *Id.* At minimum, the watershed plan must include actions "necessary to offset potential impacts to instream flows associated with permit-exempt domestic water use" and "[t]he highest priority recommendations must include replacing the quantity of consumptive water use during the same time as the impact and in the same basin or tributary" and may include "lower priority projects…not in the same basin or tributary and projects that replace consumptive water supply impacts only during critical flow periods." RCW 90.94.020(4)(b). Ecology must determine that actions "will result in a net ecological benefit to instream resources within the water resource inventory area." RCW 90.94.020(4)(c).

Pursuant to these requirements, Ecology proposed amendments to the Washington Administrative Code ("WAC") with lower groundwater withdrawal limits for WRIA 1, a list of mitigation projects considered by the WRIA 1 planning group, and adaptive management. Amendment to Chapter 173-501 WAC, Instream Resources Protection Program – Nooksack Water Resource Inventory Area (WRIA) 1, Preliminary Draft Rule Language for Public Comment, April 8 – May 10, 2019 (hereinafter "Draft Amendment"); Rule Supporting Document, Preliminary Draft for Public Comment, April 8 – May 10, 2019 (hereinafter "RSD").

II. Ecology's Proposed Amendment and Rule Supporting Document

We support Ecology's efforts to protect chinook salmon populations in the Nooksack under the proposed lower groundwater withdrawal limits in the Draft Amendment and mitigation in the Rule Supporting Document, and encourage Ecology to incorporate: (1) lower groundwater limits, (2) other mitigation projects that offset withdrawals in the lower reaches of the Nooksack and tributaries, and (3) greater accountability for both withdrawals and implementation of mitigation projects.

Based on estimated consumptive use over 20 years, Ecology set a daily maximum of 500 gallons per day (gpd) for single connection indoor domestic use and 3,000 gpd for a group domestic system, which includes a 500 gpd limit for each single connection in the group. Draft Amendment WAC 173-501-065(5)(g)-(j). Ecology also set limits on the area that groundwater can be withdrawn for outdoor domestic use at 1/12 of an acre for single connections and groups, which would increase the offset needed for indoor use by 32%. *Id.*; RSD, at 13. As a buffer, it applied a 150% safety factor. RSD, at 13-15. Ecology reserved the right under Draft Amendment WAC 173-501-065(k) to impose metering and reporting requirements.

Ecology recognized that highest groundwater withdrawals are often during peak temperatures in July and this is also when the lowest flow occurs in connected surface waters when fish are returning to streams to spawn. RSD, at 9. In its review, Ecology noted that during drought, some WRIAs included a reduction of the individual limit for indoor use to 350 gpd. *Id.* The proposed rule curtails withdrawals during drought emergencies, except for domestic indoor water use and outdoor water use for gardening purposes. *Id.*

We support Ecology's decision to reduce the groundwater withdrawal limits in the proposed amendment and would support an even lower water limit, especially during peak temperatures. A daily maximum of 500 gpd is more than adequate for single-family use, and given the lack of available water in the Nooksack, 350 gpd would be a more appropriate limit at all times (not just during drought emergencies). During drought emergencies Ecology should consider limits that are lower still. We also support Ecology's decision to set these withdrawal limits at a daily maximum, rather than a maximum annual average, so that withdrawals for individual connections do not exceed 500 gpd (or even lower limits) in the hottest months. To ensure compliance with these daily limits, we encourage Ecology to create metering and reporting requirements before finalizing the rule, rather than wait until flows are even lower.

Under RCW 90.94.020(4)(c), Ecology must approve mitigation projects to offset the new groundwater withdrawals and provide a "net ecological benefit" to instream resources in WRIA 1. The WRIA 1 Planning Unit proposed 45 mitigation projects and Ecology put forward 13 of these projects under the Rule Supporting Document. RSD, at 23-31. Ecology chose projects based on existing funding, likelihood of achieving offset, location, feasibility, and partner willingness. *Id.* Ecology estimates based on estimated consumptive use for 20 years and a 150% safety factor, that the mitigation projects will yield a tenfold offset. RSD, at 40. These projects benefit upstream reaches of the watershed in the mainstem, which Ecology asserts will have downstream benefits. RSD, at 38-41. Ecology acknowledges that much of the increased groundwater withdrawal is expected to occur in downstream reaches of the watershed where significant population growth occurs, but these offset mitigation projects are not targeted at these downstream areas. RSD, at 39. According to the RSD, most of the offset projects are located in higher value salmonid presence and distribution areas. RSD, at 41. However, chinook salmon are present throughout the Nooksack at all life stages, especially at times when flow is the lowest.

Ecology must offset new groundwater withdrawals with projects that provide a "net ecological benefit"– meaning that the new withdrawals and offsets must together be better for salmon than leaving the water in place. Under RCW 90.94.020(4)(b), Ecology must prioritize projects that replace the quantity of water in the same time as the impacts occur in the same basin or tributary, but may include others as long as the actions will result in a net ecological benefit. We are concerned that the preliminary draft may not meet the "net ecological benefit" requirement because the mitigation measures Ecology proposes are spatially and temporally inadequate to mitigate the effect of anticipated new withdrawals, and moreover, are not certain to occur.

Ecology has not adequately supported its conclusion that the rule will provide a net ecological benefit to salmon when its own analysis shows that new withdrawals will deplete flows in portions of the river where salmon are present and additional water offset projects could

be developed in lower portions of the watershed where a majority of the consumptive use impacts are anticipated. Ecology should mitigate fully the consumptive use impacts in all affected streams, year-round and including drought periods, by increasing the number, magnitude, and/or location of project offsets, including consideration of location-specific conservation requirements in addition to (or, where appropriate, instead of) other offset projects. We encourage Ecology to consider a broader range of mitigation projects (including conservation) to ensure that they collectively offset the increased groundwater withdrawals with a "net ecological benefit" that is spatially and temporally adequate for instream resources in WRIA 1 before finalizing the rule.

Ecology should also consider incorporating other measures to ensure that the rule provides a significant net benefit to the already-imperiled Nooksack chinook runs. For example, since inadequate flows in the Nooksack contribute to increases in temperature that harm salmon, Ecology should consider additional projects that require riparian buffers in areas where they are lacking. Such projects cannot substitute for mitigation that replaces water in the time and place it is removed, but instead should be in addition to bucket-for-bucket mitigation projects. Such additional habitat projects are appropriate in light of the legislature's command that the rule provide a net "benefit" to salmon.

Ecology must also do more to provide accountability and certainty surrounding withdrawals and mitigation. To ensure that projects produce a net ecological benefit that offsets new groundwater withdrawals, Ecology selected projects based on the likelihood of implementation and devised an Adaptive Management Approach that includes annual reporting from Whatcom County and 5-year self-assessments from Whatcom County and project proponents. However, we are concerned that these projects will not actually offset new groundwater withdrawals if mitigation projects do not occur or if withdrawals exceed the required limits. We encourage Ecology to impose metering and reporting requirements on groundwater withdrawals and require Whatcom County to include them in their annual and five-year reporting. Additionally, Ecology must ensure that that the projects included as offsets will be completed, or otherwise create enforceable accountability measures ensuring that sufficient mitigation is mandatory and timely. Otherwise, new withdrawals could easily outpace mitigation.

III. Conclusion

Ecology must ensure that new groundwater withdrawals do not further harm already low populations of chinook salmon and the orca populations that depend on them. We encourage Ecology to set limits on new withdrawals that are lower than 500 gallons per day. We encourage Ecology to consider additional offset projects (including conservation) that are spatially and temporally adequate to protect chinook salmon throughout the Nooksack River basin and incorporate these projects into the final rule. We also encourage Ecology to incorporate additional projects that benefit salmon, to ensure that the rule provides the required net benefit. And finally, we ask Ecology to create greater accountability by requiring metering and reporting and creating legal mechanisms to ensure mitigation projects occur as intended.

Thank you for your careful consideration and efforts to protect instream resources in the Nooksack River basin.

Sincerely,

Paulo Palugod
Amanda Goodin
Attorneys for Earthjustice