

March 29, 2023

Senator Keith Wagoner  
112 Legislative Modular Building  
PO Box 40439  
Olympia, WA 98504

Representative Debra Lekanoff: Co-Chair  
422 John L. O'Brien Building  
PO Box 40600  
Olympia, WA 98504

RE: ESSB 6095: Skagit Water Supply, Joint Legislative Water Task Force: Comprehensive Hydrologic Study of the Skagit Estuary: Water Withdrawal Modeling Scenario Request

Dear Senator Wagoner and Representative Lekanoff,

Skagitonians to Preserve Farmland (SPF) and the Skagit County Drainage and Irrigation District Consortium LLC (Consortium) appreciate the continued opportunity to participate in the Skagit Water Task Force and your commitment to fund studies that will inform water supply.

As members of the Skagit Water Task Force, we would like to respectfully request an evaluation of two alternative water withdrawal scenarios as part of the Comprehensive Hydrology Study of the Skagit Estuary (CHSSE Study).

### [Background / History](#)

When the 2001 Skagit Instream Flow Rule (2001 IFR) and the published WAC Chapter 173-503 was established on April 14, 2001 the agencies and principals who were involved in developing the 2001 IFR did not include, analyze, or allocate water for agriculture. Irrigation is critical for high-value specialty crop production in Skagit County. The failure to include, analyze, or account for agriculture's water needs in the 2001 IFR has resulted in the lack of a reliable irrigation water supply for one of the last fully functioning agricultural economies remaining in Puget Sound and represents a major obstacle for ensuring sustainable local food security in the face of climate change.

The combined effects of the 2001 IFR and subsequent litigation has resulted in significant differences between the estimated irrigation water supply needs and uninterrupted water supply allocated for irrigation (Yoder et al 2021).

These resulting differences, coupled with the pressures on municipal water suppliers due to restrictions on rural residential wells, and increasing costs of municipal water supply, make finding a reliable and cost-effective water supply for agriculture difficult.

Recognizing the growing issues surrounding the 2001 IFR, in 2018 the Legislature authorized and funded the Joint Legislative Taskforce on Water (Skagit Water Task Force) to, in part, "review surface water and groundwater needs and uses as they relate to agricultural uses, domestic potable water uses, and instream flows, and to develop and recommend studies."

The quarter century old 1999 Duke Study remains the only scientific basis for the 2001 IFR. The 1999 Duke Study recommended minimum instream flow rates and a total maximum allocation for the Skagit River extending from the USGS gage in Mount Vernon downstream to Skagit Bay. This is the only place in Washington State where an instream flow rule is applied downstream of a USGS gage and in a tidally influenced portion of a river.

In 2020, the Skagit Water Task Force authorized the Washington State Academy of Science (WSAS) to conduct a peer review of the Estuary portion of the 1999 Duke Study. The WSAS peer review identified

*" . . . several issues with the study's methods", including "the methods used in watershed site selection, data collection and use, water level and tidal data analysis and evaluation of low-flow conditions, measures of water quality, evaluation of fish ecology and habitat, and modeling." (WSAS 2021)*

As part of this peer review, WSAS made several recommendations to the Skagit Water Task Force. Based on these recommendations, in 2022 the Water Task Force authorized the CHSSE Study.

The CHSSE Study is being conducted by Research Team comprised of experts from the University of Washington Salish Sea School, Washington Water Research Center, NOAA Fisheries, and the Skagit River System Cooperative. This study will use the Skagit Hydrodynamic Model to model several physical parameters of the Skagit River downstream of the USGS gage in Mount Vernon and the estuary.

These physical parameters, in addition to information about the fisheries resources, will then be used to define a baseline condition for the purposes of comparison. The Research Team is also tasked with an evaluation of up to three alternative water supply scenarios and will report on the effects each alternative water supply scenarios may have on baseline physical parameters and fisheries resources in the lower Skagit River and estuary.

## Scenario Request

As members of the Skagit Water Task Force, and participants in the CHSSE Study workgroup, SPF and the Consortium have been working closely with a locally established Skagit Agricultural Water Advisory Group (SAWAG) over the last two years to develop consensus support for two alternative withdrawal scenario requests. The SAWAG is made up of large and small scale farmers from all over Skagit County along with elected representatives from our local Drainage & Irrigation Districts.

These alternative water withdrawal scenarios were developed with input and feedback from the SAWAG to address two problems: 1) many agricultural water rights, and the remaining water rights under the 2001 Skagit IFR are interruptible, and 2) the total allocation available for the purpose of agricultural irrigation under the 2001 Skagit IFR is not adequate to meet existing needs and future demand in the face of climate change.

As the two agricultural representatives on the Skagit Water Task Force, we are respectfully requesting the Research Team evaluate two alternative water withdrawal scenarios as part of the CHSSE Study:

1. Making the current remaining allocation of 200 cfs in the 2001 IFR uninterruptible, and
2. Increasing the allocation of uninterruptible water by 390 cfs.

### Agricultural Alternative Water Withdrawal Scenario #1

Our first requested alternative water withdrawal scenario is to evaluate the potential effects of making the current allocation of water under the 2001 IFR, a total of 836 cfs, uninterruptible. The 2001 IFR determined that approximately 200 cfs of the total 836 cfs allocation would be interruptible water.

Based on recent Ecology accounting in a draft *Report of Examination*, we understand approximately 130 cfs of the water that has been allocated to users under the 2001 IFR is interruptible; about 70 cfs municipal and 60 cfs agricultural of water rights have been allocated and about 70 cfs remains unallocated; all of these water rights are interruptible. However, interruptible rights do not meet the reliability needs for agriculture in the Skagit basin, which is the basis for our request in Scenario #1.

### Agricultural Alternative Water Withdrawal Scenario #2

Our second requested alternative water withdrawal scenario builds on our first request. In addition to requesting an evaluation of making the entire Skagit 2001 IFR allocation uninterruptible, we are requesting an evaluation of allocating an additional 390 cfs of uninterruptible water below the USGS gage. This would be in addition to the 836 cfs for a total allocation of 1,226 cfs uninterruptible water.

This request is based on the current estimated agricultural water deficit, future needs for sub-irrigation and controlled drainage, axillary water needs, climate change, shifting away from the use of public water supplies, and finally a shift to a greater density of higher water duty crops.

### Conclusion

Since the late 1990's, when technical work to support the 2001 IFR was completed, millions of dollars have been invested in technical studies pertaining to hydrology, water supply, and fisheries in the lower Skagit River and estuary. Although scientists cannot unilaterally define best available science, it is universally recognized that scientists have an ethical duty and professional obligation to participate in the dialogue over how science is defined and applied to environmental policy (Sullivan 2006).

We are grateful that the CHSSE Study is being conducted by independent third party researchers and that the final report will be reviewed by the Washington State Academy of Sciences. We believe that utilizing improved methods, data, and more recent scientific and technical studies through an open and transparent process will ensure that the Skagit Water Task Force has a solid basis of understanding of water allocation in the lower Skagit River and moving forward that this improved understanding will create a foundation for sound policies and management recommendations regarding water supply in the lower Skagit River.

Thank you for the continued opportunity to participate in this important work.

Sincerely,



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## References

Washington State Academy of Sciences. (2021). Independent Peer Review of the Estuary Study Portion of the 1999 Duke Engineering 'Final Technical Report: Lower Skagit River Instream Flow Studies'. Seattle, WA: WSAS, 1-30.

Jonathan Yoder, Siddharth Chaudhary, Brittany Duarte, Correigh Greene, Jordan Jobe, Gabe LaHue, Cindy Maroney, Guillaume Mauger, Harriet Morgan, Julie Padowski, Kirti Rajagopalan, Crystal Raymond, Matthew Rogers, Nathan Rossman, Navdeep Singh, Britta Timpane-Padgham, Chad Wiseman, Jason Won. 2021. Skagit Water Supply and Demand Synthesis. Story Map Series Prepared for the State of Washington Joint Legislative Task Force on Water Supply. <https://doi.org/10.7273/4n11-9k73>