

Snoqualmie Indian Tribe

Hello Laurie,

On behalf of Snoqualmie Indian Tribe, please accept the attached comments regarding the application to ECY for NPDES Permit Modifications for Cooke Aquaculture marine net pens in the Salish Sea. Thank you for the opportunity to comment.

Sincerely,
Matt

Matthew J. Baerwalde
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June 8, 2020

Laurie Niewony
Water Quality Program
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504

Submitted via email to: laurie.niewolny@ecy.wa.gov

RE: NPDES Permit Modifications for Cooke Aquaculture for transitioning marine net pen operations from raising non-native Atlantic salmon to raising female triploid rainbow trout/steelhead (Permit Numbers WA0031534, WA31593, WA0031526, WA0031542)

Dear Ms. Niewony,

This letter is submitted on behalf of the Snoqualmie Indian Tribe, a federally-recognized sovereign Indian Tribe with its governmental offices at 9571 Ethan Wade Way SE, Snoqualmie, WA 98065 ("Tribe"). See Indian Entities Recognized and Eligible To Receive Services From the United States Bureau of Indian Affairs, 82 Fed. Reg. 4235 (January 30, 2018). The issuance of the modified NPDES permit has the potential to negatively affect the recovery of ESA Threatened Puget Sound steelhead, Puget Sound Chinook, and other imperiled salmonids, including those which hail from the Snoqualmie/Snohomish basin. Additionally, more information is needed on water quality monitoring and the potential impacts associated with introducing genetically modified female, triploid steelhead trout into the Salish Sea. Please accept these comments on behalf of the Tribe.

The Snoqualmie Indian Tribe—*sduk^walbix^w* in our Native language—consists of a group of Coast Salish Native American peoples from the Puget Sound region of Washington State. We have been in the Puget Sound region and the Snoqualmie Valley since time immemorial. *sq^wed* (Snoqualmie Falls) is the birthplace of the *sduk^walbix^w*. We had more than 90 long houses along the Snoqualmie River and its tributaries. These rivers and streams were the highways used to travel from village to village and connected all the *?acitalbix^w* (Natives). The fish, game, trees and roots provided us with everything we need to live. All of this was given to us by *duk^wibet* (Transformer) in the ancient times when all of the animals could talk and before things were what they are now.

We are the *sduk^walbix^w*, People of Moon. We are the descendants of *stuk^walb tə duk^wibet*. We have lived, hunted and fished this area for as long as the earth and rivers remember. Our people

were one of the largest tribes in the Puget Sound region totaling around 4,000. We are still here today; caring for the land, water, fish and game that dukʷibet gave us.

The Tribe is a signatory to the Treaty of Point Elliott of 1855 in which it reserved to itself certain rights and privileges, and ceded certain lands to the United States. See Treaty of Point Elliot, art. V, 12 Stat. 928. Tribal treaty reserved rights are a property right which is protected by Article V of the United States Constitution, as applied through the Fourteenth Amendment, which cannot be deprived without due process of law and just compensation. Only Congress can abrogate the Tribe's treaty rights, which it has never done. See, e.g., *Menominee Tribe v. United States*, 391 U.S. 404, 412-13, (1968) (treaty rights may only be abrogated by Congress).

Net Pen Aquaculture in Puget Sound May Affect Salmon and Steelhead Recovery

Puget Sound Chinook salmon were listed as Threatened under the Federal Endangered Species Act in 2005, and Puget Sound steelhead officially achieved the same dubious distinction in 2007. These populations remain listed, and could even be downgraded to Endangered, due to a lack of substantial progress and many examples of losing ground. Additionally, years of study of the impacts of net pen aquaculture on local ecosystems have advanced our knowledge in this area. We now know that these operations can be massive sources of pollution, in an already over-polluted Puget Sound, regardless of what species are raised in captivity. They also spread dangerous and potentially deadly disease and viruses to wild fish, and, since escaped *O. mykiss* can interbreed with native wild stocks, the proposal has the potential to negatively alter the remaining native gene pool. Even though the proposal would use triploid *O. mykiss*, this sterilization procedure is not 100 percent successful. The potential impacts of using a struggling species native to Puget Sound in these net pen operations are a new consideration. The impacts would be unique and potentially distinct from the previous practice of using Atlantic salmon as the primary cultured species, and therefore they should be fully evaluated in a new EIS.

Additionally, the Salish Sea ecosystem (of which Puget Sound and the Strait of Juan de Fuca is a part) has changed significantly in recent decades, likely due to the interaction of a number of overlapping factors, many of which are anthropogenic and within our power to improve or eliminate as impacts. This includes contamination and disease, which we know net pens can contribute to. The effect of this change is that marine survival of Chinook, coho salmon, and steelhead populations in the Salish Sea have declined by up to 90%, and their abundance remains well below what it was 30 years ago. To the best of our knowledge, Snoqualmie fish must use these same migratory pathways where *O. mykiss* net pens would be located, and Snoqualmie fish are also in severe decline. Given the level of investment in recovery from tribes, their federal and state partners, and the citizens of Washington State, allowing potential increased impacts to struggling stocks, without giving them full evaluation based on the best available science and temporal context, seems downright irresponsible.

There is Insufficient Water Quality Monitoring and Data to Support this Proposal

The current water quality monitoring in place for this facility only requires grab samples throughout the year. This is insufficient to paint the entire picture of the water quality status in this area. Daily water quality monitoring at varying depths would be beneficial in understanding the health of the water throughout the water column.

What we do know is that there are very few studies that have been conducted that focus on triploid salmonid health and immunity. For example, one study suggests that the altered physiology of triploid fish may affect the numbers of microbiota within their GI tract, causing drug resistance issues. *The Culturable intestinal microbiota of triploid and diploid juvenile Atlantic salmon (Salmo salar) – a comparison of composition and drug resistance*. BMC Veterinary Research. Nov. 2011. It is also known that triploid fish are larger in size and require a shorter time to grow than hatchery and wild fish populations since they do not expend energy on developing reproductive organs or secondary sexual characteristics, but direct their increased caloric intake to increased growth and metabolism. The increase in fish waste from increased food consumption is not trivial, and can only lead to increased degradation of water quality. Higher concentrations of waste in the water has the potential to negatively impact native species by introducing viruses and other lethal diseases. More information is needed on these types of operations before a NPDES permit can be issued.

Cooke Aquaculture’s Safety Record Calls for Additional Scrutiny of this Proposal

Many parties, including the Tribe, have expressed trepidation when it comes to Cooke Aquaculture’s approach to aquaculture operations. When Cooke’s Cypress Island net pen operation breached in August 2017, over 250,000 farmed salmon dispersed into the waters of Puget Sound, threatening native fish. Cooke responded extremely slowly, under-reported the number of spilled fish, and attempted to cover up their disregard for the Puget Sound ecosystem, claiming that a solar eclipse was responsible for the catastrophe. In reality, Cooke’s negligence was responsible, and follow-up investigations at their other facilities revealed that some of those had also not been maintained properly, in violation of their existing permits, and the trust of the state and its citizens. The result was a substantial fine from the Ecology, and the passing of HB 2957 by the Washington State Legislature in 2018.

We need not mistake the recent attempts to transition from non-native Atlantic salmon to triploid steelhead as a good-faith gesture to help the environment and the health of the Salish Sea. The bottom line is that time is running out for Cooke to continue their operations as they exist. Their options are to phase out their existing brood, and introduce “frankenfish” without sufficient data to know what implications this will have. Thus, the amount of data and monitoring to support this proposal is severely lacking. In the event of another fish escape, the ramifications remain unknown at this point. This proposal is a threat to water quality and native fish, and the NPDES needs to be denied until additional information is collected and effective monitoring is in place.

It is also worth mentioning that there are issues with the determination of non-significance issued by Washington’s Department of Fish and Wildlife (“WDFW”) in response to Cooke’s Aquaculture’s

SEPA application. WDFW did not comply with its obligations in determining the lead SEPA agency, and it erroneously issued Cooke a Marine Aquaculture Permit.

The Tribe respectfully requests that Ecology not issue a NPDES until there is a decision regarding the pending complaint against the Washington Department of Fish and Wildlife for failing to follow SEPA requirements and issuing a determination of non-significance (*See Petition for Judicial Review of Agency Action and Associated Environmental Review, King County Superior Court, Cause No. 20-2-03704-4SEA (Feb. 11, 2020)*). Additional studies were needed as part of an EIS, and additional studies are needed before a NPDES can be issued. Although the two permits are separate, the underlying issues and concerns are the same.

In closing, the Snoqualmie Indian Tribe feels that more data and monitoring are required to understand the ramifications of triploid steelhead being introduced into the Salish Sea. The proposed data and monitoring are insufficient to meet this need. Additionally, there is little known about the impacts of triploid fish to wild, native populations, and some studies suggest that the altered physiology of triploid fish may affect the numbers of microbiota within their GI tract, causing drug resistance issues. This could be extremely problematic for the many fragile native salmonid populations in the Salish Sea. Cooke Aquaculture has already demonstrated that they do not take seriously their responsibility to help steward the Salish Sea. Therefore, it is Ecology's fiduciary responsibility to step in and use this as an opportunity to implement stricter monitoring. **The Tribe requests that Ecology deny the NPDES permit.** Thank you for your time and consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Baerwalde', followed by a long horizontal line extending to the right.

Matt Baerwalde
Environmental Policy Analyst
Snoqualmie Indian Tribe ENR Department
425-363-2008