



EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

June 8, 2020

To: Washington Department of Ecology
PO Box 47600 Olympia, WA 98504-7600
cc: Evergreen Islands Board of Directors

Submitted via online comment portal:
<http://tcp.ecology.commentinput.com/?id=HshGa>

Re: Cooke Aquaculture Pacific NPDES Permit Applications

Dear Ecology:

INTRODUCTION

Evergreen Islands opposes the State of Washington's efforts to allow Cooke Agriculture to convert their fish farms from raising Atlantic salmon to raising all-female, lab-sterilized steelhead.

Also, Evergreen Islands supports the efforts of the four nonprofits, Wild Fish Conservancy, Center for Biological Diversity, Center for Food Safety and Friends of the Earth, who filed a joint lawsuit February against the state Department of Fish & Wildlife for issuing a permit for steelhead farms in the marine waters of Skagit and Kitsap counties. These organizations argue that allowing Cooke Aquaculture to raise steelhead in floating net pens would jeopardize the region's wild steelhead, salmon and endangered Southern Resident orca whales.

BACKGROUND

in January 2019, Cooke submitted a five-year Marine Aquaculture Permit application to WDFW, and a SEPA Environmental Checklist with supporting documents in July 2019.

On January 22, 2020, WDFW issued a five-year Marine Aquaculture Permit to Cooke to culture all-female triploid rainbow trout/steelhead at existing Fort Ward, Orchard Rocks, and Clam Bay; and Hope Island facilities. In the event that the Department of Natural Resources restores or issues new leases to Cooke for their other existing facilities, WDFW plans to extend the five-year Marine Aquaculture permit to include these facilities.

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OUR CONCERNS

Evergreen Islands is sincerely concerned about the following negative impacts on the marine environment that are associated with fish farms:

- Nets dipped in a water-based copper antifouling paint.
- Allowable level of biofouling
- In-water rinsing of nets with pressurized seawater.
- Escaped fish competing with the federally-listed species such as endangered Puget Sound steelhead trout for spawning habitat and displace spawning behavior
- Potential for increased lice loading that is fatal or detrimental to wild juvenile fish
- Devote resources to aiding sustainable seafood production alternatives
- Fish-farming contributes to marine waters eutrophication, feces and uneaten food pellets from fish farms alter the organic matter in the sediment, which can change the consumption of oxygen and cause local eutrophication
- impact wild fish populations by transferring disease and parasites to migrating fish.
- pollute water systems with excess nutrients and fecal matter due to the large numbers and concentrations of farmed fish.
- Since fish raised by aquaculture are typically predatory fish:
They are fed pellets made from other fish like anchovies or sardines.
So, wild fish are being caught to feed farmed fish.
the practice of trawling the bottom of the ocean for marine life in order to make fishmeal scrapes the sea floor, thus harming the sensitive ecosystem.
- The increased amount of pollutants in fishmeal, caused by toxins from ocean pollution, is also raising concerns because these harmful toxins make their way into food targeted for human consumption.
- Outbreaks of disease from fish farms can spread quickly due to the high concentrations in which fish are retained and is easily spreadable into wild fish populations if uncontrolled
- In an attempt to deter seals, which can cause damage to underwater netting, acoustic deterrents have been deployed in some cases. These devices are thought to have unintended negative impacts on whale and dolphin populations over a wider area due to their sensitivity to acoustic noise over a larger distance.

DISCUSSION

Evergreen Islands is surprised and dismayed that the Washington State is considering permitting Cooke Aquaculture fish farming for a couple of reason:

- The Southern Resident Killer Whales are approaching extinction, and the viability of Chinook salmon is critically important to their survival.
- The proposed mitigations measures present in Attachment 1, Condensed Summary of Mitigation Measures, give an ample list of the multiple risks engendered by fish farms.

CONCLUSION

Evergreen Islands is opposed to Washington State allowing commercial fish farms not only for their documented harm to native salmon population but also, and especially, for Cooke Aquaculture's disastrous failure.

Respectfully yours,



Tom Glade
Evergreen Islands Board of Directors

ATTACHMENT 1

CONDENSED SUMMARY OF MITIGATION MEASURES

Risk to the natural or built environments

WATER AND BENTHIC QUALITY

These new permits require more frequent peak biomass sediment and water column dissolved oxygen monitoring than did the previous NPDES permits.

DISEASE TRANSMISSION

Cooke is required to submit to WDFW each year a revised Regulated Finfish Pathogen Reporting Plan and is required to maintain appropriate biosecurity at all their facilities, including regular fallowing of all net-pen facilities after harvest.

FISH ESCAPE FROM NET-PENS

Cooke will be required to implement procedures and monitoring activities to further reduce and document risk – see the Mitigating Provisions section below

Infrastructure maintenance and integrity

Cooke is required to have each net-pen facility inspected above and below waterline by an engineering firm approved by WDFW, **roughly every two years** when the facilities are fallow.

Triploidy error rates

Theoretical probabilities – no concrete data

WDFW disagrees with the method Cooke provided to estimate triploidy error rate.(p4).

Estimating risk to native steelhead from escaped steelhead from net-pens

Theoretical probabilities – based on single data points

Proportion of diploid fish sexually mature at time of escape

Theoretical probabilities

Proportion of fish that will survive long enough to attempt to spawn: 50% of fertile fish

Cooke is required to have each net-pen facility inspected above and below waterline by an engineering firm approved by WDFW, **roughly every two years when the facilities are fallow.**

Mitigating Provisions

Operations, including future finfish transport permits:

Marine net-pen aquaculture must be conducted only where Cooke holds a valid lease

All requirements stipulated by Ecology on NPDES permits must be followed.

All activities described in Cooke Aquaculture's Plan of Operation –

All-female Triploid Rainbow Trout; Fish Escape Prevention, Response, and Report Plan

Regulated Finfish Pathogen Report Plan

The Fish Escape Prevention, Response, and Report Plan

must be drafted in consultation with DNR, Ecology, and WDFW.

Before January 2021 Cooke must implement an alternate method, approved by WDFW, to visually identify their fish.

For each lot of fish to be transported into marine net-pen facilities, Cooke must provide to WDFW a sample of tissue from 150 fish (or 150 embryos) appropriate for genetic analyses...

Prior to stocking net pens, Cooke must provide WDFW, DNR, and Ecology the approximate dates for stocking. Within one month after stocking is completed Cooke must provide to WDFW, DNR, and Ecology a report documenting the facility stocked, dates in which stocking occurred, the total number of fish stocked per day, and any complications that may have occurred during stocking. Cooke must report immediately if fish escaped during stocking.

Prior to harvest, Cooke must provide WDFW, DNR, and Ecology the approximate dates for harvest. Within one month after harvesting is completed Cooke must provide to WDFW, DNR, and Ecology

A report documenting the facility harvested, dates in which harvesting occurred, the total number of fish harvested per day, and any complications that may have occurred during harvesting.

Cooke must report immediately if any live fish escaped during harvesting, or if any fish carcass, parts, or offal were discarded into the Puget Sound waters. The discard of carcasses, fish parts, or offal is also a violation of Cooke's NPDES permit.

The following monitoring data needs to be reported to WDFW, DNR, and Ecology as part of an expanded Monthly Feed, Biomass, and Disease Control Chemical Use Report, or as separate monthly report(s):

the feed conversion rates at each facility,

the estimated number of individuals at each facility, and

the number of dead fish collected or observed (the greater of these two numbers) at each facility

Escape Prevention, Response, and Reporting:

for each net-pen facility, Cooke must hire a marine engineering firm approved by WDFW to conduct inspections.

Inspections must occur approximately every two years, when net pens are fallow, and must include topside and mooring assessments related to escapement potential, structural integrity, permit compliance, and operations.

Cooke must report to WDFW Fish Health Supervisor, Lead Veterinarian, or Aquaculture Coordinator within 24 hours of discovery any fish that has been observed to have escaped from any net-pen facility or during transfer into or out of a net-pen facility, regardless of numbers of fish involved (i.e., the minimum reporting number is one).

Cooke is required to work with WDFW, Ecology, and DNR to include a no-recovery option in the 2020 Fish Escape Prevention, Response, and Reporting Plan, to be finalized December 2019.

This option should include when, where, and under what conditions a recovery effort should not be attempted. A no-recovery option would be triggered by the state, in consultation with co-managers and federal agencies for the purpose of protecting native Pacific salmonids. A no-recovery option can be triggered by Cooke if the attempted recovery would put the health and safety of its employees at risk.

Both the Washington Department of Health and WDFW need to be notified if escaped fish were on medicated feed at the time of their escape or are within the required withdrawal period for the medicated feed used.

Before January 1, 2021, Cooke must have engineered mooring and anchoring plans and site-specific engineered drawings stamped by a structural engineer, for each net-pen facility.