



NPDES Compliance Inspection Report

Makah National Fish Hatchery

Makah Tribe

Neah Bay, WA

NPDES Tracking Number

WAG130004

Inspection Date: 09/07/2022

Prepared by:

CJ Langlois

U.S. Environmental Protection Agency, Region 10

Enforcement & Compliance Assurance Division

Water Enforcement & Field Branch

Field, Data & Drinking Water Enforcement Section

Inspector Signature/Date:

Supervisor Signature/Date:

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Attachment A – Aerial Image

Attachment B – Photograph Log

[Unless otherwise noted, all details in this inspection report were obtained from conversations with Kristin Bates, a review of facility documents, and/or from observations made during the inspection.]

I. Facility Information

Facility Name:	Hoko Creek Hatchery
Facility Owner:	U.S. Fish & Wildlife Service
Facility Operator:	U.S. Fish & Wildlife Service
Physical Address:	897 Fish Hatchery Rd Neah Bay, Washington 98357
Mailing Address:	P.O. Box 739 Neah Bay, Washington 98357
Lat/Long:	48.2901938°, -124.6517443°
Facility Contacts:	Kristin Bates, Hatchery Manager Makah National Fish Hatchery Office: (360) 645-2521 Cell: 360-640-2006 Email: kristin_bates@fws.gov
Permit Number:	WAG130004
NAICS Code:	112511 (Fish Hatcheries)
Nearest Surface Water:	Tsoo-Yess River (receiving water)

II. Inspection Information

Inspection Date: September 7, 2022

Inspector: CJ Langlois
EPA Region 10, ECAD/WEFB/FDDWES
Phone: 206-553-2739

Arrival Time: 11:00 a.m.

Departure Time: 1:30 p.m.

Weather: Partly Cloudy, 50° F

Purpose: To evaluate compliance with the requirements of the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) permit for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the boundaries of the State of Washington

III. Permit Information

On June 21, 2016, the U.S. Environmental Protection Agency (EPA) issued the National Pollutant Discharge Elimination System (NPDES) permit for Federal Aquaculture Facilities and Aquaculture Facilities within the boundaries of the State of Washington ("Permit"), permit #WAG130000. The permit became effective on August 1, 2016, and expired on July 31, 2021. Subsequently, the permit was administratively continued.

On February 2, 2021, the facility submitted a Notice of Intent to discharge to EPA. On July 22, 2021, EPA Region 10's NPDES Permitting Unit (NPU) authorized the facility to discharge under NPDES tracking # WAG130004.

IV. Enforcement Background

The facility had an inspection by the EPA on April 4, 2018, and has had no prior enforcement actions.

V. Inspection Chronology

This was an announced inspection. On July 26, 2022, I first contacted the EPA Region 10 tribal coordinator, Mahri Lowinger, for contact information for the Makah Tribe. Mahri Lowinger provided the name and contact information for Ms. Kristin Bates, the Makah National Fish Hatchery Manager. On July 26, 2022, I reached out to Ms. Bates to schedule the Clean Water Act inspection of the hatchery.

On September 7, 2022, Vanessa Oquendo and myself arrived at 11:00 a.m. and I presented my credentials to Ms. Bates. Vanessa was attending for training and observation. I was accompanied by Ms. Bates throughout the inspection and was not denied access to any area of the facility. Ms. Bates answered all my questions.

I began the inspection with a brief opening conference with Ms. Bates and explained the scope of the inspection. We first sat down in the office on site, and I conducted a file review. Ms. Bates then led us on a tour of the facility and explained the various processes of their operation. We ended with a brief closing conference outside to discuss observations and next steps.

VI. Opening Conference

The Makah National Fish Hatchery is in the temperate rain forest of Washington's Olympic Peninsula. Since 1981, the hatchery has annually raised around 3 million salmon and trout for release into the Tsoo-Yess River on the Makah Indian Reservation. The hatchery is owned and operated by the U.S. Fish & Wildlife Service and partners with the Makah Tribe to raise Chinook salmon, coho salmon, and steelhead. The hatchery has a 2.3 million release goal of Chinook salmon, 300,000 release goal of coho salmon, and a 180,000 release goal of steelhead. Their average daily flow is approximately 16,560,000 gallons per day. Flow is measured at each of their six pumps located in their pumphouse. The pumps are always running at their maximum capacity.

Ms. Bates stated that she is concerned about how the hatchery has been reporting their settleable solids. The permit has a settleable solids limit of .1 ml/L and the lab that the facility uses, Freemont Analytical, only has a lower detection limit set to <.2 ml/L. The facility has been reporting <.2 ml/L in their DMR's which has consequently given them effluent limit exceedance violations. Ms. Bates has since been informed to consult with their lab to see if that detection limit can be met. These testing procedures must meet the requirements listed under 40 CFR 136. If Freemont

Analytical is not able to meet these standards, this may require that the Makah National Fish Hatchery change contract labs. Ms. Bates also has the option to enter “Non-detect” or “ND” on the DMR, but this would likely be considered a permit violation.

The influent sampling point is right before the pumphouse and the effluent sampling point is towards the end of the effluent channel. Their effluent sampling point isn’t at the nearest possible point before discharge. It’s possible that some algae at their current effluent sampling point is contributing to their settleable solids limit exceedances.

VII. Laboratory Inspection

Water samples are collected by Ms. Bates (Hatchery Manager). Samples are sent off to Freemont Analytical for analysis. Per the permit, the facility is required to sample for total suspended solids, net settleable solids, total residual chlorine, and temperature.

VIII. Site Review

Ms. Bates led Vanessa and myself on a tour of the facility. An aerial image appears in **Attachment A** and a photograph log appears in **Attachment B**.

We first started off at the receiving water, the Tsoo-Yess River. The facility’s influent sampling point is right before the pumphouse. Their monthly composite samples are taken four times per day towards the beginning and ends of each month. We then entered the pumphouse where I visually inspected the six water pumps. Each water pump has a different flow rate and all six pumps are running at their maximum capacity. I then visually inspected their degassing area. The hatchery uses an older gravity fed system (**Photo 1**) to degas. The intake pond and raceways (**Photo 2**) were also visually inspected. A UV light system is utilized for sockeye salmon. Chorine is used in the sockeye isolation building. Chloramine-T is used for the sockeye eggs. The facility also utilizes florfenicol as a preventative from bacterial coldwater disease. Oxytetracycline is also used for bacterial coldwater disease. I next visually inspected their sand filters and diesel generators. Their effluent samples are taken towards the end of the effluent channel (**Photo 3**). I mentioned to Ms. Bates that a more representative effluent sample could be taken at the effluent waterfall (**Photo 4**).

IX. File Review

I reviewed the following records:

- Notice of Intent (NOI) dated February 2, 2021
- Discharge Monitoring Report (DMR) for Aug. 2022

- Chain of custody – August 2022
- Quality Assurance Plan (QAP) dated Jan. 2022
- Best Management Practices (BMP's) Plan dated Jan. 2022
- Authorization to Discharge dated July 22, 2021

X. Areas of Concern

- A. Part IV.3.b of the permit states that “The Permittee must limit discharges from all outfalls authorized under this permit as specified in Tables 1 and 2, below, as applicable. The limits in Table 1 apply to all hatchery discharges except those from separate off-line settling basin outfalls and rearing pond discharges during drawdown, limits for which are listed in Table 2. All limits represent maximum effluent limits, unless otherwise indicated. The Permittee must comply with the applicable effluent limits in the tables at all times, unless otherwise indicated, regardless of the frequency of monitoring or reporting.”

Table 1 Effluent Limitations for Hatchery Discharges¹			
Pollutant	Average Monthly Limit	Maximum Daily Limit	Instantaneous Maximum
Net Total Suspended Solids²	5 mg/L	---	15 mg/L
Net Settleable Solids²	0.1 ml/L	---	---
Total Residual Chlorine³ – into fresh water	9.0 µg/L	18.0 µg/L	---
Total Residual Chlorine³ – into marine water	6.1 µg/L	12.3 µg/L	---

Since September 1, 2017, there have been a total of eight effluent limit exceedances for settleable solids according to ICIS (Integrated Compliance Information System). The reported effluent limit violations for settleable solids are due to their lab, Freemont Analytical, not being able to precisely measure down to .1ml/L. The lab's cutoff point is <.2 ml/L so when that measurement is reported on the DMR, it is flagged for a violation. It should also be noted that subscript 2 of the above table states that “Net concentration = effluent concentration – influent concentration. Net TSS and settleable solids determinations will require influent analysis in addition to effluent analysis unless the permittee chooses to assume that the pollutant concentration in the influent is zero...”

As per the permit, the effluent for net settleable solids must be reported relative to 0.1ml/L.

XI. Closing Conference

I held a closing conference with Ms. Bates following the inspection outside. I stated that no areas of concern were identified over the course of the inspection and gave a brief overview of the post-inspection process. I thanked her for her time and assistance.

Attachment A – Aerial Image



Figure 1 - Aerial image taken from Google Maps

Attachment B – Photograph Log

(Photographs were taken by CJ Langlois on September 7, 2022, with a Panasonic DMC-FH25.
Timestamps on the photographs are inaccurate and would range in time from 12:00 p.m. – 1:30 p.m.)



Photo 1/ P9060052 - Degassing area



Photo 2/ P9060054 - Raceway for steelhead



Photo 3/ P9060062 - Effluent sampling area



Photo 4/ P9060063 - Effluent waterfall

A complete list of photographs taken during the inspection:

- P9060047
- P9060048
- P9060049
- P9060050
- P9060051
- P9060052
- P9060053
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