Annual Report of Operations for Year 2021

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:
13-0013

Facility & Owner Information

Facility Name:
Upper/Lower Ponds

Operator Name (Permittee):
Tulalip Tribes of Washington

Address:
6406 Marine Drive
Tulalip, WA 98271

Email:
mcrewson@tulaliptribes-nsn.gov

Phone:
360-222-2690; 425-754-0955

Owner Name (if different from operator):
Same

Email:
Same

Phone:
Same

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ■ Yes ☐ No

Does the BMP Plan fulfill the requirements of the General Permit? ■ Yes ☐ No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

None

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 34,097lb gain; 102,843lb total biomass

Pounds of food fed to fish during the maximum month:
10,780 lb

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
BY20 Chinook	31,288	Tulalip Bay/Port Susan/Puget Sound	May June Oct
BY19 Coho	44,213	Tulalip Bay/Port Susan/Puget Sound	July
BY20 Coho	27,342	Not Released: Transferred to 13-0013	December

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	0	0	July	64,484	880
February	0	0	August	0	0
March	22,510	3,960	September	0	0
April	31,783	10,516	October	7,513	2,112
May	35,930	10,780	November	0	0
June	43,759	8,272	December	27,342	748

Additional Comments:

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
10 lbs fish morts	March-July, Oct, Dec	Upland disposal site
7,482 lbs spawned out carcasses	August-November	Upland disposal site

Additional Comments:

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
None			

Additional Comments:

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

None

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
Weekly/Monthly	N/A	Ponds, grounds

Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year**.
Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
☐ Yes ☒ No	Azithromycin
☐ Yes ☒ No	Chloramine-T: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Chlorine
☐ Yes ☒ No	Draxxin
☐ Yes ☒ No	Erythromycin - injectable
☐ Yes ☒ No	Erythromycin - medicated feed
☐ Yes ☒ No	Florfenicol (Aquaflor)
☒ Yes ☐ No	Formalin - 37% formaldehyde: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Herbicide - describe:
☐ Yes ☒ No	Hormone - describe:
☐ Yes ☒ No	Hydrogen Peroxide: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Iodine: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Oxytetracycline
☐ Yes ☒ No	Potassium Permanganate: ***See additional reporting requirements on page 7***
☐ Yes ☒ No	Romet
☐ Yes ☒ No	SLICE (emamectin benzoate)
☐ Yes ☒ No	Sodium Chloride - salt
☐ Yes ☒ No	Vibrio vaccine
☐ Yes ☐ No	Other:
☐ Yes ☐ No	Other:

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Treatment 2: Parasite-S		Generic Name: Formalin (37% formaldehyde)
Reason for use: External parasites on fish - Ich, fungus		
☐ Preventative/Prophylactic ■ As-needed	Total quantity of formulated product per treatment (specify units) 23.9 gal	Total quantity of formulated product used in past year (specify units): 1,004 gal
Date(s) of treatment: 7/27 to 9/21 except Aug 7,8,14,15,21,22,28,29 and Sept 4,5,14,15,16,19,20		Total number of treatments in past year: 42
Maximum daily volume of treated water: 962,368 gallons	Treatment concentration (specify units): 24.9mg/L	Duration and frequency of treatment(s): 4 to 8 hours/treatment, 42/57 days
Method of application:	☐ Static Bath ■ Flow-through	☐ Medicated Feed ☐ Other (describe):
Location in facility chemical was used (check all that apply):	☐ Raceways ☐ Incubation building	■ Ponds ☐ Off-line settling basin ☐ Other (describe):
Where did water treated with this chemical go? (check all that apply):	■ Discharged w/o treatment ☐ Settling basin	☐ Septic System ☐ Publicly owned treatment works ☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:		

Brand Name:		Generic Name:
Reason for use:		
☐ Preventative/Prophylactic ☐ As-needed	Total quantity of formulated product per treatment:	Total quantity of formulated product used in past year (specify units):
Date(s) of treatment:		Total number of treatments in past year:
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s):
Method of application:	☐ Static Bath ☐ Flow-through	☐ Medicated Feed ☐ Other (describe):
Location in facility chemical was used (check all that apply):	☐ Raceways ☐ Incubation building	☐ Ponds ☐ Off-line settling basin ☐ Other (describe):
Where did water treated with this chemical go? (check all that apply):	☐ Discharged w/o treatment ☐ Settling basin	☐ Septic System ☐ Publicly owned treatment works ☐ Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:		

Aquaculture Drugs and Chemicals (cont'd)

Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments	
Tank Volume	N/A Liters
Desired Static Bath Treatment Concentration	µg/L
Volume of Product Needed	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Active Ingredient: Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	Specify Units
Maximum % of Facility Discharge Treated	% of Total Discharge

Flow-Through Treatments	
Tank Volume	6,852,666 Liters
Calculated Flow Rate	12,665 Liters/Minute
Duration of Treatment	240 or 480 Minutes
Desired Flow-Through Treatment Concentration of Product	<25,000 µg/L
Amount of Product to Add Initially	0 Liters Product
Amount of Product to Add During Treatment	323.1 mL/Minute
Total Volume of Product Needed	90.5 Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 24.84 Active Ingredient: 9.3mg/L formaldehyde Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	4,818,000 gallons/day Specify Units
Maximum % of Facility Discharge Treated	20.0 % of Total Discharge

Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.

None

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name of person signing	Title
Michael J. Crewson	Salmonid Enhancement Scientist
Applicant Signature Michael J Crewson	Date Signed 1/20/22

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

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Seattle, WA 98101-3140