Annual Report of Operations for Year 2020

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:
WAG-13000-6

Facility & Owner Information

Facility Name:
Spring Creek National Fish Hatchery

Operator Name (Permittee):
USDOI/USFWS/Spring Creek NFH

Address:
61552 State Road 14
Underwood, WA 98651

Email: kenneth_lujan@fws.gov
Phone: (509) 493-1730

Owner Name (if different from operator):

Email:
Phone:

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.

Water measurements section, beginning in 2020, a Hobo Box Water Level Station was installed and water will be measured from the effluent discharge (FFSB).

Specific drug use section - Aqua Des™ was used to disinfect spawning room surfaces and pond walls. It was also used to disinfect burrows ponds and filter-beds after rearing and spawning season.

EPA General Permit WAG130000 - Annual Report

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs):	111,847.71 pounds
Pounds of food fed to fish during the maximum month: 29,788	

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
Fall Chinook	Smolts	Columbia River	April

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	18,479	6140	July	NA	NA
February	45,977	14,470	August	NA	NA
March	77,779	29,788	September	NA	NA
April	41,114	13,860	October	NA	NA
May	NA	NA	November	NA	NA
June	NA	NA	December	NA	NA

Additional Comments:

April 10th - 6,896,379 fish released into Columbia River.
April 13th - 4,288,392 fish released into Columbia River.

Prior to the April 10th release - this is the maximum number of fish on site. The month of March had the maximum food fed 29,788 pounds.

Solid Waste Disposal

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

Type of Solid Disposed	Date Disposed	Location Disposed
Fish mortalities	Entire rearing year	Digestion tank
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
NA	NA	NA	NA
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.

At no point this year were we in a state of non-compliance.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
		Our production and maintenance staff routinely inspect the wastewater treatment systems.
9/26/2019	2/11/2020	One of the sump (effluent) pumps was removed and rebuilt. It was installed in February 2020
5/20/2020	10/14/2020	Two lagoon pumps were removed to to be repaired. They are expected to be installed in spring.

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:		Generic Name:	
Reason for use:			
☐ Preventative/Prophylactic ☐ As-needed	Total quantity of formulated product per treatment (specify units):	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:			

Brand Name: Ovadine		Generic Name: Buffered Iodine	
Reason for use: Egg disinfection and soft shell preventative, disinfect bowls and collanders			
■ Preventative/Prophylactic ■ As-needed	Total quantity of formulated product per treatment: 2-30 gallons	Total quantity of formulated product used in past year (specify units): 480 gallons	
Date(s) of treatment: 9/14/20 - 10/20/20			Total number of treatments in past year: 24
Maximum daily volume of treated water: 22,500 gallons	Treatment concentration (specify units): 20 mg	Duration and frequency of treatment(s): 15 minutes, 3 times weekly till fish hatch	
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): Spawning room
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: 30 gallons added to the main hatchery water inlet, water diverted to (FFSB) afterward.			

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	12,592,586 Liters
Desired Static Bath Treatment Concentration	20,000 µg/L
Volume of Product Needed	1,537.5 Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: Aqua Des, 23% Hydogen peroxide, Active Ingredient: 5.3% Peroxyacetic acid Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	4,100,000 gallons Specify Units
Maximum % of Facility Discharge Treated	100 % of Total Discharge

Flow-Through Treatments	
Tank Volume	Liters
Calculated Flow Rate	Liters/Minute
Duration of Treatment	Minutes
Desired Flow-Through Treatment Concentration of Product	µg/L
Amount of Product to Add Initially	Liters Product
Amount of Product to Add During Treatment	mL/Minute
Total 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

Changes to the Facility or Operations

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

Hatchery operations are similar to last years annual report.

This year we waited a couple weeks so we could fill our filter beds with new oysters shells and used 20 ppm Aqua Des (23.0% Hydrogen Peroxide and 5.3% Peroxyacetic Acid) to disinfect the burrows ponds (adult holding ponds) and the filter-beds along with the pipe gallery making up the hatchery's re-use system. We wanted to make sure we properly disinfected. Next year we will go back to the normal 10 ppm Aqua Des disinfection.

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
David Carie	Spring Creek NFH Manager
Applicant Signature David Carie	Date Signed 1/7/21

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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