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## Central Valley Regional Water Quality Control Board

8 July 2022

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Gerald Hatler  
Environmental Program Manager  
Merced River Hatchery  
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Merced Irrigation District  
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**NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS; ORDER R5-2019-0079 (CAAP GENERAL ORDER, NPDES No. CAG135001); CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE AND MERCED IRRIGATION DISTRICT, MERCED RIVER FISH HATCHERY, MERCED COUNTY**

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) issued a Notice of Applicability (NOA) to California Department of Fish and Wildlife and Merced Irrigation District (collectively referred to as Discharger), on 20 January 2015 for coverage under the CAAP General Order for the Merced River Fish Hatchery (Facility).

On 5 December 2019, the Central Valley Water Board adopted Order R5-2019-0079 renewing the CAAP General Order. The Discharger submitted a Notice of Intent on 3 July 2019 to continue coverage for the Facility under the CAAP General Order. Effective 1 August 2022, this NOA provides continued coverage for the Facility under the CAAP General Order to discharge to the Merced River, superseding the previous NOA issued 20 January 2015. CAAP General Order R5-2019-0079-011 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 are assigned for the Facility. Please reference your CAAP General Order number **R5-2019-0079-011**, in all correspondence and submitted documents. The following attachments are included as part of this NOA:

1. Attachment A - Administrative Information
2. Attachment B - Location Map
3. Attachment C - Flow Schematic
4. Attachment D - Monitoring and Reporting Program
5. Attachment E - Approved Aquaculture Drugs and Chemicals Use

The enclosed [CAAP General Order](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders) ([http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders)) is also available online. You are urged to familiarize yourself with the entire contents of the enclosed

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MARK BRADFORD, CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

document. The Facility operations and discharges shall be managed in accordance with the requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger.

**I. FACILITY INFORMATION/DISCHARGE DESCRIPTION**

The Facility is at 4998 Robinson Road in Snelling, in Section 7, T5S, R15E, MDB&M, as shown in Attachment B, a part of this NOA. The Facility is operated by California Department of Fish and Wildlife on land owned by the Merced Irrigation District. The Facility is a flow through system that operates year-round; however, the normal period of discharge is from October through June. The annual production is approximately 25,000 pounds of Chinook salmon and 500 pounds of steelhead trout. The Facility raises Chinook salmon from eggs to fingerlings for mitigation and enhancement of the Merced River and other rivers in the region.

In the Notice of Intent, the Discharger reported the predicted 5-year maximum annual harvestable fish production (Table 1) and the maximum monthly feed use of 22,000 pounds for the Facility.

**Table 1. 5-Year Maximum Aquatic Animal Production**

<b>Species</b>	<b>5-Year Maximum Annual Harvestable Aquatic Animal Production (lbs)</b>
Chinook Salmon	25,000
Steelhead trout	500

The Facility diverts water from the Merced River at the Crocker-Hoffman Dam. The water is distributed through the Facility, which includes a hatchery building; two parallel, 500-foot concrete raceways; a spawning channel; 19 early rearing tanks; two 1,500-gallon self-contained rearing units; a fish ladder; and a full-flow-settling basin. The Facility's settling basin dimensions are 300 feet x 50 feet x 5 feet (561,000 gallons). Except during periods of fish release to the Merced River, all flow through the Facility passes through the settling basin before discharge to the river.

Wastewater is discharged from the Facility to the Merced River from Discharge Points 001 and 002, as shown in Attachment C, a part of this NOA, and as described below:

**Discharge Point 001** - Wastewater discharged from the 561,000-gallon settling basin to the Merced River. [Latitude: 37 degrees 30 minutes 55 seconds N; Longitude 120 degrees 22 minutes 20 seconds W]

**Discharge Point 002** - Wastewater discharged from the raceways, bypassing the settling basin, to the Merced River when the volitional salmon releases occur at the Facility. [Latitude: 37 degrees 30 minutes 58 seconds N; Longitude: 120 degrees 22 minutes 23 seconds W.]

The Discharger states in the 3 July 2019 Notice of Intent that the Facility discharges approximately 7 cubic feet per second (cfs) of wastewater, on average, from the settling

basin to the Merced River (Discharge Point 001). The Discharger also indicated approximately 6 cfs of wastewater, on average, is discharged from the raceways directly to the Merced River (Discharge Point 002) when volitional salmon releases occur.

## II. DISCHARGE PROHIBITIONS (CAAP GENERAL ORDER SECTION IV)

The Discharge Prohibitions contained in CAAP General Order Section IV are applicable to the Facility.

## III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS (CAAP GENERAL ORDER SECTION V)

### A. Effluent Limitations – Discharge Points 001 and 002

1. The following effluent limitations (Table 2) are applicable to this discharge and are contained in Section V.A of the CAAP General Order:

**Table 2: Effluent Limitations – Discharge Points 001 and 002**

Parameter	Units	Average Monthly Effluent Limitation	Maximum Daily Effluent Limitation
Formaldehyde	mg/L	0.65	1.3
Chlorine	mg/L	--	0.018

2. The Discharger shall minimize the discharge of Total Suspended Solids through the implementation of the best management practices established in Special Provision VII.C.3 of the CAAP General Order.

### B. Land Discharge Specifications (CAAP General Order Section V.C)

The Land Discharge Specifications contained in CAAP General Order Section V.C are applicable to the Facility.

## IV. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations (CAAP General Order Section VI.A)

The discharge to the Merced River is subject to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan), therefore, the receiving water limitations contained in the CAAP General Order based on the Basin Plan, as indicated below, are applicable to this discharge.

- Un-ionized Ammonia (VI.A.1) – Not Applicable
- Bacteria (VI.A.2);
- Biostimulatory Substances (VI.A.3);
- Chemical Constituents (VI.A.4);
- Color (VI.A.5);
- Dissolved Oxygen (VI.A.6.a.i, ii and VI.A.6.b) – Per CAAP General Order Section VI.A.6.b., the dissolved oxygen concentration in the Merced River shall not be reduced below 8.0 mg/l;
- Electrical Conductivity (VI.A.7) – Not Applicable;
- Floating Material (VI.A.8);

- Oil and Grease (VI.A.9);
- pH (VI.A.10);
- Pesticides ((VI.A.11.a, b, c, d, e, g);
- Radioactivity (VI.A.12);
- Suspended Sediments (VI.A.13);
- Settleable Substances (VI.A.14);
- Suspended Material (VI.A.15);
- Taste and Odors (VI.A.16);
- Temperature (VI.A.17);
- Total Dissolved Solids (VI.A.18) – Not Applicable;
- Toxicity (VI.A.19); and
- Turbidity (VI.A.20.a).

**B. Ground Water Limitations (CAAP General Order Section VI.B)**

The Groundwater Limitations contained in CAAP General Order Section VI.B are applicable to the Facility.

**V. PROVISIONS**

Provisions are contained in Section VII of the CAAP General Order, and the applicable provisions are referenced below.

**A. Standard Provisions. (CAAP General Order Section VII.A)**

The Standard Provisions contained in CAAP General Order Section VII.A are applicable to the Facility.

**B. Monitoring and Reporting Program Requirements. (CAAP General Order Section VII.B)**

Each Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment C, of the CAAP General Order and as specified in Attachment D of this NOA.

**C. Special Provisions. (CAAP General Order Section VII.C)**

Special Provisions are contained in Section VII.C of the CAAP General Order. Only the following Special Provision sections from the CAAP General Order specified in Table 2 below apply to the Facility:

**Table 3: Summary of Applicable Special Provisions**

<b>Special Provision</b>	<b>CAAP General Order Section Reference</b>
Reopener Provisions	Section VII.C.1
Drug and Other Chemical Use Reporting	Section VII.C.2
Best Management Practices and Pollution Prevention	Section VII.C.3
Waste Disposal	Section VII.C.4
Special Provisions for Municipal Facilities (POTWs Only).	Section VII.C.5 - Not Applicable

<b>Special Provision</b>	<b>CAAP General Order Section Reference</b>
Other Special Provisions.	Section VII.C.6 - Not Applicable
Compliance Schedules.	Section VII.C.7 – Not Applicable

## **VI. COMPLIANCE DETERMINATION (CAAP GENERAL ORDER SECTION VIII.A)**

### **A. Formaldehyde Effluent Limitations (Section V.A.1).**

Compliance with the effluent limitations for formaldehyde may be evaluated using an estimated effluent concentration in lieu of effluent monitoring data. The estimated effluent concentration shall be calculated as described in the CAAP General Order in Section IX.A of Attachment C, Monitoring and Reporting Program.

## **VII. OTHER REQUIREMENTS**

- A.** The discharge from the Facility shall not exceed a monthly average flow of 7.8 million gallons per day (mgd).
- B.** The CAAP General Order expires on **31 January 2025**. Only those CAAP facilities authorized to discharge under the expiring Order and who submit a Notice of Intent at least **one year** prior to the expiration date of the CAAP General Order (unless the Executive Officer grants permission for a later date) will remain authorized to discharge under administratively continued permit conditions.
- C.** Aquaculture activities defined in 40 C.F.R. 122.25(b) will be subject to the annual fee for general NPDES permits and de minimus discharges that are regulated by individual or general NPDES permits (California Code of Regulations Section 2200(b)(9) for Category 3 discharges).
- D.** In accordance with section VII.C.3.a of the CAAP General Order, the Discharger shall certify within 90 days from the issuance of this NOA that a Best Management Practices (BMP) Plan has been developed and is being implemented. To satisfy this requirement the Discharger shall submit a letter to the Central Valley Water Board certifying compliance with the BMP Plan requirements by 6 October 2022. The Discharger can develop a new BMP Plan, or an existing BMP Plan may be modified for use under this requirement. The Discharger shall develop and implement the BMP Plan to prevent or minimize the generation and discharge of wastes and pollutants to waters of the United States and waters of the State and ensure disposal or land application of wastes is in compliance with applicable solid waste disposal regulations. The BMP Plan shall include practices used during salt treatments at the Facility to minimize salinity discharges to the receiving water. The Discharger shall review the BMP Plan annually and must amend the BMP Plan whenever there is a change in the Facility or in the operation of the Facility which materially increases the generation of pollutants or their release or potential release to surface waters.

## **VIII. ENFORCEMENT**

Failure to comply with the CAAP General Order may result in enforcement actions, which could include civil liability. Effluent limitation violations are subject to a Mandatory

Minimum Penalty (MMP) of \$3,000 per violation, as well as discretionary penalties. In addition, late monitoring reports are subject to discretionary penalties and MMPs. When discharges do not occur during a quarterly monitoring report period, the Discharger must still submit a quarterly monitoring report indicating that no discharge occurred to avoid being subject to enforcement actions.

## IX. COMMUNICATION

All notification of non-compliance and questions regarding compliance and enforcement shall be directed to Hossein Aghazeynali of the Central Valley Water Board's NPDES Compliance and Enforcement Unit. Mr. Aghazeynali can be reached at (559) 445-6194 or by email at [Hossein.Aghazeynali@waterboards.ca.gov](mailto:Hossein.Aghazeynali@waterboards.ca.gov).

Questions regarding the permitting aspects of this Order, and written notification for termination of coverage under the CAAP General Order, shall be directed to Lovdeep Singh of the Central Valley Water Board's NPDES Permitting Unit. Mr. Singh can be reached at (559) 445-5130 or by email at [Lovdeep.Singh@waterboards.ca.gov](mailto:Lovdeep.Singh@waterboards.ca.gov).

The Central Valley Water Board is implementing a Paperless Office system to reduce our paper use, increase efficiency, and provide a more effective way for our staff, the public, and interested parties to view documents in electronic form. Therefore, the Discharger is required to submit all self-monitoring, technical, and progress reports required by this NOA via CIWQS submittal. In general, if any monitoring data for a monitoring location can be submitted using a computable document format (CDF) file upload, then it should be submitted as a CDF file upload. However, certain parameters that cannot be uploaded to the CIWQS data tables, such as the BMP Plan, should be uploaded as a Portable Document Format (PDF), Microsoft Word, or Microsoft Excel file attachment. Also, please upload or enter a cover letter summarizing the content of the report to the submittal tab of the CIWQS module for each submittal.

All other documents not required to be submitted via CIWQS shall be converted to a searchable PDF and submitted by email to the Central Valley Water Board email ([centralvalleyfresno@waterboards.ca.gov](mailto:centralvalleyfresno@waterboards.ca.gov)) with the following information:

- Attention: NPDES Compliance and Enforcement Section
- Discharger: California Department of Fish and Wildlife
- Facility: Merced River Fish Hatchery
- County: Merced County
- CIWQS Place ID: 240374

Documents that are 50 megabytes or larger must be transferred to a DVD or flash drive, and mailed to our office, attention "ECM Mailroom-NPDES".

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this NOA, except that if the thirtieth day following the date of this NOA falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. [Links to the laws and regulations applicable to filling petitions](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) ([http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)) may be found on the internet or will be provided upon request.

*Original Signed by Clay L. Rodgers for:*  
Patrick Pulupa  
Executive Officer

Attachments: Attachment A – Administrative Information  
Attachment B – Location Map  
Attachment C – Flow Schematic  
Attachment D – Monitoring and Reporting Program  
Attachment E – Approved Aquaculture Drug and Chemical Use

Enclosure: CAAP General Order R5-2019-0079 (Discharger only)

cc's: Elizabeth Sablad, USEPA, Region IX, San Francisco (via email only)  
Peter Kozelka, USEPA, Region IX, San Francisco (via email only)  
Prasad Gullapalli, U.S. EPA Region IX, San Francisco (email only)  
Division of Water Quality, State Water Resources Control Board, Sacramento  
(via email only)  
Terry Jackson, California Department of Fish and Wildlife, Fresno, CA (via email only)  
Mary Serr, Merced River Fish Hatchery, Fresno, CA (via email only)

**ATTACHMENT A - ADMINISTRATIVE INFORMATION**

<b>Waste Discharge ID:</b>	5C240804001
<b>CIWQS Facility Place ID:</b>	240374
<b>General Order NOA Enrollee Number:</b>	R5-2019-0079-011
<b>Discharger:</b>	California Department of Fish and Wildlife
<b>Name of Facility:</b>	Merced River Fish Hatchery
<b>Facility Address:</b>	4998 Robinson Road
<b>Facility City, State Zip:</b>	Snelling, CA 95369
<b>Facility County:</b>	Merced County
<b>Facility Contact and Phone Number:</b>	Mary Serr (209) 563 – 6410
<b>Landowner</b>	Merced Irrigation District
<b>Landowner Address:</b>	744 W 20 <sup>th</sup> Street
<b>Landowner City, State Zip:</b>	Merced, CA 95340
<b>Landowner Contact</b>	Brian Kelly (209) 722-5761
<b>Authorized Person to Sign and Submit Reports:</b>	Mary Serr and Eric Jones
<b>Mailing Address:</b>	1234 East Shaw Ave. Fresno, CA 93710
<b>Billing Address:</b>	1234 East Shaw Ave. Fresno, CA 93710
<b>Total Weight Produced Per Year:</b>	25,500 pounds
<b>Type of Facility:</b>	Cold Water Concentrated Aquatic Animal Production Facility, SIC Code 0921
<b>Major or Minor Facility:</b>	Minor
<b>Threat to Water Quality:</b>	2
<b>Complexity:</b>	B
<b>Pretreatment Program:</b>	No
<b>Recycling Requirements:</b>	No
<b>Facility Permitted Flow:</b>	7.8 million gallons per day
<b>Watershed:</b>	San Joaquin River Basin
<b>Receiving Water:</b>	Merced River
<b>Receiving Water Type:</b>	Inland surface water

**ATTACHMENT B – LOCATION MAP**

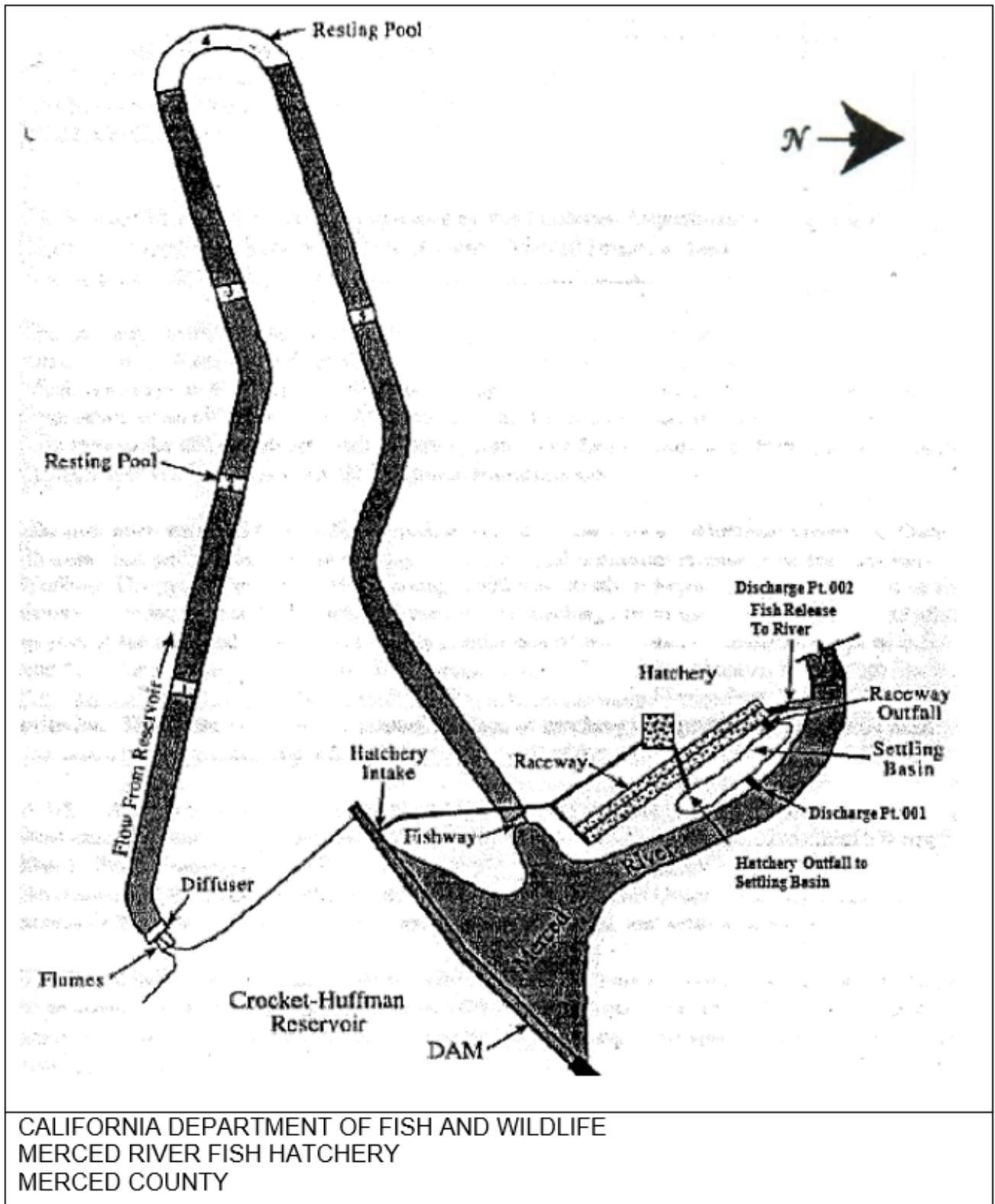


SITE LOCATION MAP

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
MERCED RIVER FISH HATCHERY  
MERCED COUNTY



**ATTACHMENT C – FLOW SCHEMATIC**



**ATTACHMENT D – MONITORING AND REPORTING PROGRAM**

The Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C of the CAAP General Order, as specified in this NOA Attachment D.

This Facility is the category of production of less than 100,000 pounds of aquatic animals produced per year. Tables D-2, D-3, and D-4 below are based on the monitoring in the CAAP General Order, Attachment C for facilities producing less than 100,000 pounds of aquatic animals produced per year (Attachment C - Sections III.B, IV.A.2, and VIII.D).

**I. GENERAL MONITORING PROVISIONS**

The Discharger shall comply with the General Monitoring Provisions specified in the CAAP General Order, Attachment C, Section I.

**II. MONITORING LOCATIONS**

The monitoring locations are defined as follows in Table D-1 below, and a flow schematic showing the site-specific monitoring locations is provided in Attachment C of this NOA.

**Table D-1. Monitoring Locations**

<b>Discharge Point Name</b>	<b>Monitoring Location Name</b>	<b>Monitoring Location Description</b>
001	EFF-001	Effluent wastewater flow from the settling basin prior to discharge to the Merced River.
002	EFF-002	Effluent wastewater flow from the two raceways when discharging directly to the Merced River.
	RSW-001 and INF-001	At the entrance of the intake pipe on the Crocker-Hoffman Dam in the Merced River.
	RSW-002	Approximately 50 feet downstream from Discharge Point 002 in the Merced River.

**III. INFLUENT MONITORING REQUIREMENTS (INF-001)**

**A.** The Discharger shall monitor the source water supply to the Facility at Monitoring Location INF-001 as specified in Table D-2 below. Samples shall be collected at approximately the same time as effluent and receiving water samples.

**Table D-2. Influent Monitoring**

<b>Parameter</b>	<b>Units</b>	<b>Sample Type</b>	<b>Minimum Sampling Frequency</b>
Flow	mgd	Flow Measurement Device	1/week
pH	S.U.	Grab	1/quarter

Attachment D – Monitoring and Reporting Program  
Merced River Fish Hatchery

Parameter	Units	Sample Type	Minimum Sampling Frequency
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/quarter
Copper, Total Recoverable	µg/L	Grab	1/quarter during CuSO <sub>4</sub> use
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/quarter during CuSO <sub>4</sub> use
Total Suspended Solids	mg/L	Grab	1/year

**B. Table D-2 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-2.

1. Influent flow shall be monitored weekly using either a flow measurement device or method as required by CAAP General Order, Attachment C, Section I.D.
2. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
3. Hardness and copper samples shall be collected approximately at the same time as effluent samples.
4. Constituents shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).

**C. Influent Monitoring for Facilities with Intake Water Credits.** Not applicable

**IV. EFFLUENT MONITORING REQUIREMENTS (EFF-001 AND EFF-002)**

**A.** The Discharger shall monitor the effluent at Monitoring Location EFF-001 and EFF-002 as specified in Table D-3 below. Effluent samples shall be representative of the volume and quality of the discharge. Effluent samples shall be collected during or immediately following raceway cleaning or administration of drug or chemical treatments and must be representative of the volume and quality of the discharge at the time when representative levels of solids, drugs, chemicals, or other pollutants are present in the discharge. Time of collection of samples shall be recorded.

**Table D-3. Effluent Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	mgd	Flow Measurement Device	1/week
Total Suspended Solids (TSS)	mg/L	Grab	1/year
Net TSS (effluent minus influent)	mg/L	Net Calculation	1/year
Turbidity	NTU	Grab	1/quarter
pH	S.U.	Grab	1/quarter

Attachment D – Monitoring and Reporting Program  
 Merced River Fish Hatchery

Parameter	Units	Sample Type	Minimum Sampling Frequency
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/quarter
Copper, Total Recoverable	µg/L	Grab	1/quarter during CuSO <sub>4</sub> use
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/quarter during CuSO <sub>4</sub> use
Formaldehyde	mg/L	Grab	1/quarter during Formaldehyde use
Chlorine	mg/L	Grab	1/quarter during chlorine use

**B. Table D-3 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-3.

1. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. Electrical conductivity samples shall be collected quarterly. If sodium chloride is used, the quarterly monitoring of electrical conductivity shall be conducted during treatment.
3. Pollutants shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).
4. Estimated concentrations of formaldehyde may be reported in lieu of analytical monitoring during formaldehyde use. If calculations are reported then formaldehyde concentrations should be reported daily to match the concentrations reported in the Monthly Chemical Use Report (Attachment F). See Section IX.A for calculation procedures. If analytical monitoring is conducted, when Formaldehyde is added to the waters of the facility, formaldehyde concentration shall be measured during time of peak discharge of Formaldehyde, at least one hour after start of treatment.
5. Total chlorine residual must be monitored with a method sensitive to and accurate at the permitted level of 0.018 mg/L.
6. Per Section IX.A, the discharger shall report all aquaculture drug and chemical use as part of the Monthly Drug and Chemical Use Report that is submitted on a quarterly basis.
7. Effluent flow shall be monitored weekly using either a flow measurement device or method as required by the CAAP General Order, Attachment C, Section I.D. The Discharger may use the corresponding weekly recorded influent flow to determine the effluent flow from the Facility to the Merced River.

8. Total Suspended Solids (TSS) samples shall be collected during the expected month of highest feeding.

**C. Effluent Monitoring for Facilities with Intake Water Credits.** Not applicable

**V. LAND DISCHARGE MONITORING REQUIREMENTS**

**A. Septic Tank/Leachfields.** The monitoring requirements contained in CAAP General Order, Attachment C, Section VI.A are applicable.

**B. Sewage Lagoons.** Not applicable.

**VI. RECEIVING WATER MONITORING REQUIREMENTS**

**A. Sampling Locations.** Receiving water samples shall be collected from Monitoring Locations RSW-001 and RSW-002 as specified below.

**B. Receiving Water Observations.** In conducting the receiving water sampling, a log shall be kept of the receiving water conditions. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life
- e. Visible films, sheens, or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

**C. Receiving Water Monitoring.** The Discharger shall monitor the receiving water at Monitoring Locations RSW-001 and RSW-002 as follows:

**Table D-4. Receiving Water Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Dissolved Oxygen	mg/L	Grab	1/quarter
Temperature	Degrees C	Grab	1/quarter
Turbidity	NTU	Grab	1/quarter
pH	S.U.	Grab	1/quarter
Electrical Conductivity @ 25 degrees Celsius	µmhos/cm	Grab	1/quarter
Hardness (as CaCO <sub>3</sub> )	mg/L	Grab	1/quarter during CuSO <sub>4</sub> use

**Table D-4 Testing Requirements.** The Discharger shall comply with the following testing requirements when monitoring for the parameters described in Table D-4.

Attachment D – Monitoring and Reporting Program  
Merced River Fish Hatchery

1. Parameters shall be analyzed using the analytical methods described in 40 C.F.R. Part 136 or by methods approved by the Central Valley Water Board or the State Water Board.
2. When copper sulfate is added to waters of the facility, hardness (as CaCO<sub>3</sub>) shall be measured quarterly during treatment.

## VII. OTHER MONITORING REQUIREMENTS

- A. Monthly Drug and Chemical Use Report.** The Discharger shall develop a monthly drug and chemical use report in accordance with CAAP General Order, Attachment C, Section IX.A describing all aquaculture drugs or chemicals used at the Facility. The report shall be submitted with the quarterly self-monitoring reports.
- B. Priority Pollutant Metals Monitoring.** In accordance with CAAP General Order, Attachment C, Section IX.B., the Discharger shall monitor the effluent (Monitoring Location EFF-001 and EFF-002) and the upstream receiving water (Monitoring Location RSW-001) for the metals listed in Table G-1 of the CAAP General Order once during the term of the CAAP General Order. **The monitoring shall occur no later than 1 January 2023.** The Discharger shall electronically submit the priority pollutants metals monitoring results using the State Water Board's [California Integrated Water Quality System](http://www.waterboards.ca.gov/water_issues/programs/ciwqs) (CIWQS) Program Web site ([http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs](http://www.waterboards.ca.gov/water_issues/programs/ciwqs)) **within 60 days of the final sampling event.** Refer to CAAP General Order, Attachment G for the specific monitoring requirements. Constituents shall be monitored using analytical methods with sufficiently sensitive reporting levels consistent with the SSM Rule specified in 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv).
- C. Annual Feeding and Production Report.** The Discharger shall develop an annual feeding and production report in accordance with CAAP General Order, Attachment C, Section IX.C. The annual report shall be submitted on **1 February, annually**, and include the following information:
1. Monthly food usage in pounds for each calendar month.
  2. Annual production of aquatic animals in pounds per year.

## VIII. REPORTING REQUIREMENTS

- A. General Monitoring and Reporting Requirements.** The Discharger shall comply with the General Monitoring and Reporting Requirements specified in the CAAP General Order, Attachment C, Section X.A.
- B. Self-Monitoring Reports (SMRs).** The Discharger shall comply with the Self-Monitoring Report requirements specified in the CAAP General Order, Attachment C, Section X.B. Monitoring in accordance with the renewed CAAP General Order is required to begin on the effective date of 1 August 2022. SMRs are required to be submitted quarterly and annually. The Discharger shall comply with the reporting requirements specified in CAAP General Order, Attachment C, Section X. The first SMR required under the renewed CAAP General Order is due 1 November 2022 and shall include monitoring conducted from 1 August through 30 September. Table D-5, below, summarizes the SMR due dates required under the CAAP General Order.

Quarterly monitoring reports must be submitted until your coverage is formally terminated in accordance with the CAAP General Order, even if there is no discharge during the reporting quarter.

**Table D-5. SMRs required in the MRP (Attachment C, CAAP General Order)**

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
1/month	1 August 2022	First day of calendar month through last day of calendar month	1 May (1 Jan – 31 Mar) 1 Aug (1 Apr – 30 Jun) 1 Nov (1 Jul – 30 Sep) 1 Feb of following year (1 Oct – 31 Dec)
1/quarter	1 August 2022	1 January through 31 March 1 April through 30 June 1 July through 30 September 1 October through 31 December	1 May 1 Aug 1 Nov 1 Feb of following year
1/year	1 August 2022	January 1 through December 31	1 Feb of following year

**C. Other Reports**

**1. Analytical Methods Report.** The Discharger shall complete and submit an Analytical Methods Report by 6 September 2022. The Analytical Methods Report shall include the following for each constituent to be monitored in accordance with this Order: 1) applicable water quality objective, 2) reporting level (RL), 3) method detection limit (MDL), and 4) analytical method. The analytical methods shall be sufficiently sensitive with RLs consistent with the SSM Rule per 40 C.F.R. 122.21(e)(3) and 122.44(i)(1)(iv), and with the Minimum Levels (MLs) in the SIP, Appendix 4. The “Reporting Level or RL” is synonymous with the “Method Minimum Level” described in the SSM Rule. If an RL is not less than or equal to the applicable objective for a constituent, the Discharger shall explain how the proposed analytical method complies with the SSM Rule. Central Valley Water Board staff will provide a tool with the NOA to assist the Discharger in completing this requirement. The tool will include the constituents and associated applicable water quality objectives to be included in the Analytical Methods Report.

**2. Analytical Methods Report Certification.** Prior to beginning the Priority Pollutant Metals Monitoring, the Discharger shall provide a certification acknowledging the scheduled start date of the Priority Pollutant Metals Monitoring and confirming that samples will be collected and analyzed as described in the previously submitted Analytical Methods Report. If there are changes to the previously submitted Analytical Methods Report, the Discharger shall outline those changes. A one-page certification form will be provided by Central Valley Water Board staff with the NOA that the Discharger can use to satisfy this requirement. Central Valley Water Board staff will provide a tool with the NOA to assist the Discharger in completing this requirement. The tool will include the Analytical Methods Report Certification form, which will acknowledge the scheduled start date of the Effluent and Receiving Water Characterization monitoring and certifies that samples will be taken and

Attachment D – Monitoring and Reporting Program  
Merced River Fish Hatchery

analyzed as described in the previously submitted and approved Analytical Methods Report. If there are changes to the approved Analytical Methods Report, the Discharger shall outline those requested changes in the form and not commence characterization monitoring until the requested changes have been reviewed and approved by Central Valley Water Board staff.

**ATTACHMENT E – APPROVED AQUACULTURE DRUGS AND CHEMICALS USE**

A. The following drugs and chemicals are used at the Facility to treat fish for parasites, fungi, and bacteria, as well as to clean rearing raceways to reduce the spread of disease among the confined fish population.

**Table E-1. Approved Aquaculture Drugs and Chemicals Use**

<b>Drug or Chemical</b>	<b>Maximum Daily Amount Used</b>	<b>Method of Application</b>	<b>Maximum Amount in Effluent</b>
Acetic Acid	500 – 1,000 ppm	Dip in container	Not discharged
Amoxicillin trihydrate	40 mg/kg of fish	Injected	Negligible
Carbon dioxide gas	variable	Injected into tank	Not discharged
Chloramine T	20 ppm/1 hr/raceway	Drip	2.65 ppm EFF 001, 28.3 cfs
Chorulon® - Chorionic Gonadotropin	50-1816 IU/lb	Intramuscular injection	Not discharged
Epsom Salt (Magnesium Sulfate)	100 mg/kg	Feed	Negligible
Erythromycin	40 mg/kg of fish	Injected	Negligible
Enteric Redmouth (ERM) Vaccine		Dip	Not discharged
Florfenicol	15 mg/kg of feed	In feed	Negligible
Formalin (37% formaldehyde solution)	50-250 ppm	Bath	1.3 ppm EFF 001, 28.3 cfs
Hydrogen peroxide (35%)	100 ppm /1 hr/raceway	Flush, bath or eggs	13.25 ppm with no breakdown of chemical
Ivermectin	0.1 mg/kg	Injected Intramuscularly	None/ND
Ovaplant® Salmon Gonadotropin-releasing hormone analogue (sGnRHa)	10-75 ug/kg	Dorsal injection pellet-implant	None/ND
Oxytetracycline dehydrate (Terramycin® 200 for Fish)	3.75 g/100 lbs of fish	Additive to fish	Not discharged

Attachment E – Approved Aquaculture Drugs and Chemicals Use  
 Merced River Fish Hatchery

<b>Drug or Chemical</b>	<b>Maximum Daily Amount Used</b>	<b>Method of Application</b>	<b>Maximum Amount in Effluent</b>
Oxytetracycline HCL	100 ppm	Bath in tanks	0.06 ppm
Penicillin G Potassium	150 IU/mL	Bath	0.09 IU/mL
PVP Iodine	100 ppm	Egg bath in container	Not discharged
Potassium permanganate	2 ppm/1 hr/raceway	Drip	0.265 ppm
Romet-30	50 mg/kg of feed	In feed	Negligible
Sodium Bicarbonate	Variable (142 – 642 mg/L for 5 mins)	Bath in tank	Unknown
Sodium Chloride	3%	Added directly to head	65 ppm
SLICE (emamectin benzoate)	50 ug/kg	In feed	Negligible
Tricaine methanesulfonate (MS-222)	40 ppm	In container	Not discharged
Vibrio Vaccine		Dip	Not discharged