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Central Valley Regional Water Quality Control Board

24 September 2012

CERTIFIED MAIL
70112970000327615238

Greg Kollenborn,
Senior Hatchery Supervisor
California Department of Fish and Game
1234 East Shaw Ave
Fresno, CA 93710

NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2010-0018-01 (CAAP GENERAL ORDER); CALIFORNIA DEPARTMENT OF FISH AND GAME, SAN JOAQUIN FISH HATCHERY, FRESNO COUNTY

Our office received a Report of Waste Discharge on 9 February 2009 and a Notice of Intent on 19 July 2012, with supplemental information, for coverage under the CAAP General Order for the San Joaquin Fish Hatchery (Facility) from the California Department of Fish and Game (Discharger). California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff has determined that the discharge from the Facility meets the required conditions for approval under the CAAP General Order. The Discharger has been assigned CAAP General Order R5-2010-0018-021 and National Pollutant Discharge Elimination System (NPDES) Permit CAG135001. Administrative information for the Facility is provided in Attachment A, a location map is provided in Attachment B, and a flow schematic is provided in Attachment C, which are included as part of this Notice of Applicability (NOA). Please reference CAAP General Order **R5-2010-0018-021** in all your correspondence and submitted documents.

The CAAP General Order is enclosed and may also be viewed at the following web address:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2010-0018-01.pdf

You are urged to familiarize yourself with the contents of the entire CAAP General Order. Facility operations and discharge shall be managed in accordance with the requirements contained in the CAAP General Order, this NOA, and with the information submitted by the Discharger. Attachment C of the CAAP General Order prescribes mandatory monitoring and reporting requirements.

CAAP General Order R5-2010-0018-021 shall become effective when the existing individual NPDES permit for the Facility, Order R5-2004-0118 (NPDES No. CA0004812), is rescinded by a separate action of the Central Valley Water Board, which is scheduled for **4/5 October 2012**.

FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Facility, which is owned and operated by the Discharger, is approximately 20 miles northeast of Fresno in Section 7, T11S, R21E, MDB&M, as shown in Attachment B. The Facility is a cold-water flow-through hatchery that includes an intake structure at the Friant Dam, multiple incubator trays, 124 aluminum and fiberglass rearing troughs, eight 600-foot long trout rearing ponds, two 400-foot concrete raceways, and a spawning house. Water from Millerton Lake at the Friant Dam is conveyed to the hatchery via a 44-inch pipeline. There are two intake valves used to deliver water to the Facility. A high valve located at the Friant/Kern Canal and a low valve at the base of the Friant Dam are both used to regulate the Facility's flow through water temperature, typically between 47°F and 56°F. The average daily flow through the hatchery is approximately 23 million gallons per day (mgd). Water is delivered to the Facility via an underground pipe and passes through an aerator tower to dispel noxious gases and to increase dissolved oxygen concentrations.

The Discharger indicated that a worm farm, operated by a private entity, operates in two of the settling ponds at the Facility. The worm farm business is operated by John Weigand. According to Mr. Weigand, the worm farm raises a subspecies of tubiflex called *Limbriculuis veragatis* at the Facility. The worms feed on the waste in the Facility's effluent; however, additional feed is periodically required. Mr. Weigand estimates that the worm farm uses a maximum of 1,000 pounds of catfish sinking pellets during the calendar month of maximum feeding. According to the Discharger and Mr. Weigand, no chemicals are used at the worm farm. Mr. Weigand also indicated that the worm farm harvests about 4,000 pounds of worms monthly. The effluent from the worm farm is discharged to the constructed wetlands and combines with the remainder of the Facility's effluent in the final settling pond before being discharged to the San Joaquin River. At this time, the worm farm does not meet the criteria to be considered a CAAP facility (per section 122.24 of Title 40 of Code of Federal Regulations) in and of itself. However, monitoring at EFF-001 will monitor the final discharge of both the Facility and the worm farm to the San Joaquin River.

The Discharger raises approximately 530,000 pounds of rainbow trout, 5,000 pounds of Kokanee salmon, and 3,000 pounds of brook trout annually. The Facility uses approximately 75,000 pounds of food during the calendar month of maximum feeding (April) and approximately 650,000 pounds of feed annually. Prior to discharge to the San Joaquin River, the Facility's effluent is either sent to the worm farm ponds or to one of two main settling ponds. Wastewater from the settling ponds and worm farm is merged into a final settling pond and is discharged to the San Joaquin River immediately upstream of Lost Lake Park at Discharge Point-001: Latitude 36° 59' 50" S, Longitude 119° 43' 08" E.

The Discharger indicated the use of the following drugs and chemicals at the Facility to treat fish for parasites, fungi, and bacteria, as well as to clean rearing raceways in order to reduce the spread of disease among the confined fish population: potassium permanganate, hydrogen peroxide, PVP iodine, sodium chloride (salt), florfenicol, oxytetracycline HCL, penicillin G, amoxicillin trihydrate, erythromycin, Romet-30, tricaine methanesulfonate (MS-222), carbon dioxide gas, sodium bicarbonate, acetic acid, chloramine-T, and SLICE (emamectin benzoate).

On 4 September 2012, the Discharger submitted an addendum to the original 19 July 2012 Notice of Intent. The addendum included information regarding the construction of the San Joaquin Salmon Conservation and Research Facility currently under development. While the Discharger develops the full-scale facility, an interim rearing facility (Interim Facility) currently exists at the Facility and will continue to be used for experimental rearing of fall-run Chinook salmon in preparation of bringing in spring-run Chinook salmon.

The Interim Facility currently houses approximately 200 fall-run Chinook salmon. The Discharger estimates 500 juvenile salmon will be added each year. The Interim Facility consists of approximately

14 circular tanks with diameters between 3 and 20 feet, with a total surface area of about 1,360 square feet. The Interim Facility currently uses less than one pound of feed per day. The Discharger estimates that the Interim Facility will not exceed 25 pounds of feed per day (9,000 pounds per year) within the next two years. The feed consists of a standard commercial salmon feed, as well as frozen krill product for larger fish. The Discharger indicated the use of the following drugs and chemicals at the Interim Facility to treat Chinook salmon for parasites, fungi, and bacteria, as well as to clean tanks and surfaces: PVP iodine, tricaine methanesulfonate (MS-222), sodium chloride, chlorine, and sodium thiosulfate.

The water supply for the Interim Facility is rerouted from the San Joaquin Hatchery water supply at a rate of approximately 40 gallons per minute. The Interim Facility connects to the main water supply at the aeration tower. The water is delivered from the aeration tower to the Interim Facility via a 1,200-foot long pipe. The wastewater from the Interim Facility is discharged through a 12-inch pipe to one of the main settling ponds where it is combined with the Facility's effluent.

INTAKE WATER CREDITS

The Discharger submitted a request for intake water credits for copper and lead in the 19 July 2012 Notice of Intent. The influent monitoring data for copper and lead exceed the screening levels specified in Attachment H of the CAAP General Order. However, the effluent monitoring data for copper and lead from June 2008 to June 2012 do not exceed the applicable screening levels except for a sample taken in February 2009. The February 2009 sample result indicated lead and copper were detected over the applicable screening levels; however, the laboratory reported a significant detection of both copper and lead in the method blank. Consequently, in accordance with Section 1.2 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, the Central Valley Water Board considers the copper and lead detection in the February 2009 sample unrepresentative of the effluent and concludes these data should not be used for making permitting decisions.

After further discussion with the Discharger, Central Valley Water Board staff and the Discharger agreed that it was not necessary to include intake water credits for lead. There were no reported lead detections in the effluent besides the unrepresentative detection in the February 2009 sample. Hence, intake credits for lead are not granted in this NOA.

The effluent monitoring data show copper did not exceed the copper screening level, but there were reported detections close to the screening level. The Discharger has demonstrated that the discharge from the Facility meets the conditions for granting intake water credits for copper. The source of the pollutant is the intake from the receiving water (San Joaquin River), which is the same water body that the Facility discharges to. The reported effluent copper concentrations do not exceed the intake concentrations, and the Discharger does not add copper in the process. Therefore, the water quality-based effluent limitations for copper have been established considering intake water credits.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATION of the CAAP General Order. **Effective upon the date that Order R5-2004-0118 (NPDES No. CA004812) is rescinded**, the following effluent limitations are applicable to this discharge and are contained in Sections V.A and V.B of the CAAP General Order:

1. **Total Suspended Solids, Settleable Solids, Formaldehyde, and Chlorine** – The Discharger shall comply with the effluent limitations required in Section V.A.1 (Table 1) for total suspended solids, settleable solids, formaldehyde, and chlorine.

2. **pH** – The Discharger shall comply with the effluent limitations required in Section V.B.1.a for pH.
3. **Total Recoverable Copper** – The Discharger shall comply with the effluent limitations required in Section V.B.3.c for total recoverable copper. An intake water credit has been granted for copper; therefore, compliance with this limitation shall be in accordance with the application of intake water credits in Section V.B.3.d.

MONITORING REQUIREMENTS

The CAAP General Order requires that discharges comply with the Monitoring and Reporting Program that is incorporated as Attachment C to the CAAP General Order. Influent, effluent, and receiving water monitoring requirements are based on the pounds of aquatic animals produced. This Facility is in the production category of more than 100,000 pounds produced per year.

Site-specific monitoring locations for the influent, effluent, and receiving water monitoring are shown in either Attachment B (Location Map) or Attachment C (Facility Flow Schematic) to this NOA, and as described in the following table:

Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	Location where representative samples of the Facility's influent can be obtained prior to entering the Facility.
001	EFF-001	Location where representative samples of the Facility's effluent can be obtained prior to discharge to the San Joaquin River at Discharge Point-001
--	RSW-001	Approximately 100 feet upstream from Discharge Point-001 in the San Joaquin River
--	RSW-002	Approximately 300 feet downstream from Discharge Point-001 in the San Joaquin River

Effective upon the date that Order R5-2004-0118 (NPDES No. CA004812) is rescinded, the Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C to the CAAP General Order for facilities with production greater than 100,000 pounds per year. A summary of the monitoring requirements is provided below:

1. **Influent Monitoring** – The Discharger shall monitor the influent (INF-001) in accordance with Table C-2 of the CAAP General Order for total suspended solids, settleable solids, pH, electrical conductivity @ 25°C, copper (total recoverable), and hardness.

The Discharger has been granted intake water credits for copper (total recoverable). Therefore, in accordance with CAAP General Order, Attachment C, Section III.C (Influent Monitoring for Facilities with Intake Water Credits), influent monitoring is required for flow and copper (total recoverable). Influent copper (total recoverable) shall be monitored as required in Table C-2. Samples for copper (total recoverable) must be taken simultaneously from the influent and effluent or phased to account for the time that it takes water to travel from the water intake to the

discharge point. For every influent sample taken, an effluent sample must be taken. In addition, influent flow shall be monitored **weekly** using either a flow measurement device or method as required by CAAP General Order, Attachment C, Section I.E.

2. **Effluent Monitoring** – The Discharger shall monitor the effluent in accordance with Attachment C, Section IV.A and Table C-4 of the CAAP General Order for flow, total suspended solids, net total suspended solids, settleable solids, net settleable solids, turbidity, pH, electrical conductivity @ 25°C, copper (total recoverable), hardness, formaldehyde, and chlorine.

The Discharger has been granted intake water credits for copper (total recoverable). Therefore, in accordance with CAAP General Order, Attachment C, Section IV.3 (Effluent Monitoring for Facilities with Intake Water Credits) the Discharger shall also monitor the effluent for flow and copper (total recoverable). Effluent copper (total recoverable) shall be monitored as required in Table C-4. Samples for copper (total recoverable) must be taken simultaneously from the influent and effluent or phased to account for the time that it takes water to travel from the water intake to the discharge point. For every effluent sample taken, an influent sample must be taken. In addition, effluent flow shall be monitored **weekly** using either a flow measurement device or method as required by CAAP General Order, Attachment C, Section I.E. The Discharger may use the corresponding weekly-recorded influent flow to determine the effluent flow from the Facility to the San Joaquin River since the Facility is a flow-through hatchery.

3. **Receiving Water Monitoring** – The Discharger shall monitor the receiving water in accordance with CAAP General Order, Attachment C, Section VIII.A, Section VIII.B (receiving water observations), Section VIII.E, and Table C-6 for receiving water conditions, dissolved oxygen, temperature, turbidity, pH, electrical conductivity @ 25°C, and hardness.
4. **Land Discharge Monitoring Requirements** – The Discharger shall conduct septic tank maintenance inspections at least once per year and submit the results in the annual report in accordance with CAAP General Order, Attachment C, Section VI.A. The Discharger shall also conduct leachfield inspections and submit the results in the monthly monitoring report in accordance with CAAP General Order, Attachment C, Section VI.A.
5. **Other Monitoring Requirements** – The Discharger shall submit a Monthly Drug and Chemical Use Report (Section IX.A) and conduct Priority Pollutant Metals Monitoring (Section IX.B) in accordance with Attachment C of the CAAP General Order. CAAP General Order, Attachment C, Section IX.B requires the Discharger to collect samples for priority pollutant metals at the upstream receiving water and effluent monitoring location. Since intake water credits have been granted for copper, the Discharger shall also collect an influent copper sample when conducting the priority pollutant metals monitoring. Samples for copper (total recoverable) must be taken simultaneously from the influent and effluent or phased to account for the time that it takes water to travel from the water intake to the discharge point.

The first self-monitoring report (SMR) required under the CAAP General Order is the October 2012 SMR, which shall be submitted by 1 December 2012, if the existing individual NPDES permit for the Facility is rescinded in the October 2012 Central Valley Water Board Meeting. Until then, the Discharger shall continue submitting SMRs required by Order R5-2004-0118.

SATISFACTION OF ANTI-BACKSLIDING REQUIREMENTS

The effluent limitations in this NOA are at least as stringent as the effluent limitations in the previous individual NPDES permit, Order R5-2004-0118, with the exception of effluent limitations for copper (total recoverable).

Copper (total recoverable) – The previous Order included daily maximum and monthly average effluent limits for copper (total recoverable) that varied with the hardness of the discharge. The Discharger no longer uses copper sulfate at the Facility, and based on intake and effluent copper data, the operations do not increase the concentrations of copper to the San Joaquin River. Based on new information provided by the Discharger, an intake water credit has been granted for copper. The effluent limits for copper are as stringent as in the previous Order; however, the intake water credit results in a potentially less stringent requirement for copper.

The less stringent requirement for copper (total recoverable) is consistent with the federal anti-backsliding regulations, because there is new information that was not available at the time the previous Order was adopted and the discharge is in compliance with state and federal Antidegradation requirements. The less stringent copper effluent limit is consistent with state and federal anti-backsliding requirements. Any impact on existing water quality will be insignificant.

NOTICE OF APPLICABILITY REQUIREMENTS

The Discharger is hereby authorized to discharge to the San Joaquin River at Discharge Point-001 under the terms and conditions of the CAAP General Order. In addition to the requirements contained in the CAAP General Order, the following shall also apply:

1. The discharge from the Facility shall not exceed a monthly average flow of 24 mgd during the effective period of the CAAP General Order.
2. The Discharger shall continue to submit Self-Monitoring Reports (SMRs) electronically using the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) Program website (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide directions for SMR submittal in the event there will be service interruption for electronic submittal.
3. The State Water Resources Control Board (State Water Board) has determined that individual or general permits for aquaculture activities defined in 40 CFR 122.25(b) will be subject to the same annual fee, which currently is \$1,943 (State Water Board Resolution 2011-0042), but may be subject to change.
4. The CAAP General Order expires on **1 January 2015**, and enrollees will continue to be authorized to discharge until coverage becomes effective under a reissued Order or until Central Valley Water Board staff formally terminates your coverage. Only those CAAP facilities authorized to discharge and who submit a Notice of Intent at least **180 days** prior to the expiration date of Order R5-2010-0018-01 will remain authorized to discharge under administratively continued permit conditions.
5. Provision VII.C.3.a of the CAAP General Order requires that each Discharger must certify within 90 days of the issuance of the NOA that a Best Management Practices (BMPs) plan has been developed and is being implemented as required by Title 40, Code of Federal Regulations, Part 451. Provision VII.C.3.a lists the minimum BMPs that must be included in the BMP plan. By **24 December 2012**, the Discharger shall submit a written certification to the Central Valley Water Board, Fresno Office that satisfies Provision VII.C.3.a of the CAAP General Order.

ENFORCEMENT

Failure to comply with the CAAP General Order and/or this NOA may result in enforcement actions, which could include administrative civil liability. Effluent limitation violations and some late reporting

violations are subject to Mandatory Minimum Penalties (MMPs) of \$3,000 per violation [California Water Code Sections 13385(h) and (i)]. If you have no discharge during a monitoring period, you must submit a monthly self-monitoring report indicating that no discharge occurred. You must notify the Central Valley Water Board staff within 24 hours of noncompliance or anticipated noncompliance.

COMMUNICATION

All monitoring reports submittals, notification of non-compliance, and questions regarding compliance and enforcement shall be directed to Jill Walsh of the Central Valley Water Board's Compliance and Enforcement Unit. Jill Walsh can be reached at (559) 445-5130 or at jwalsh@waterboards.ca.gov.

Questions regarding the permitting aspects of your CAAP General Order, and written notification for termination of coverage under the Order, shall be directed to Alexander Mushegan at (559) 488-4397 or at amushegan@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control 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 Resources Control 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 Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet or will be provided upon request. The Internet address is:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality.

Original Signed by Clay L. Rodgers for

Pamela C. Creedon
Executive Officer

Attachments (3): 1) Attachment A – Facility Administrative Information
2) Attachment B – Location Map
3) Attachment C – Facility Schematic

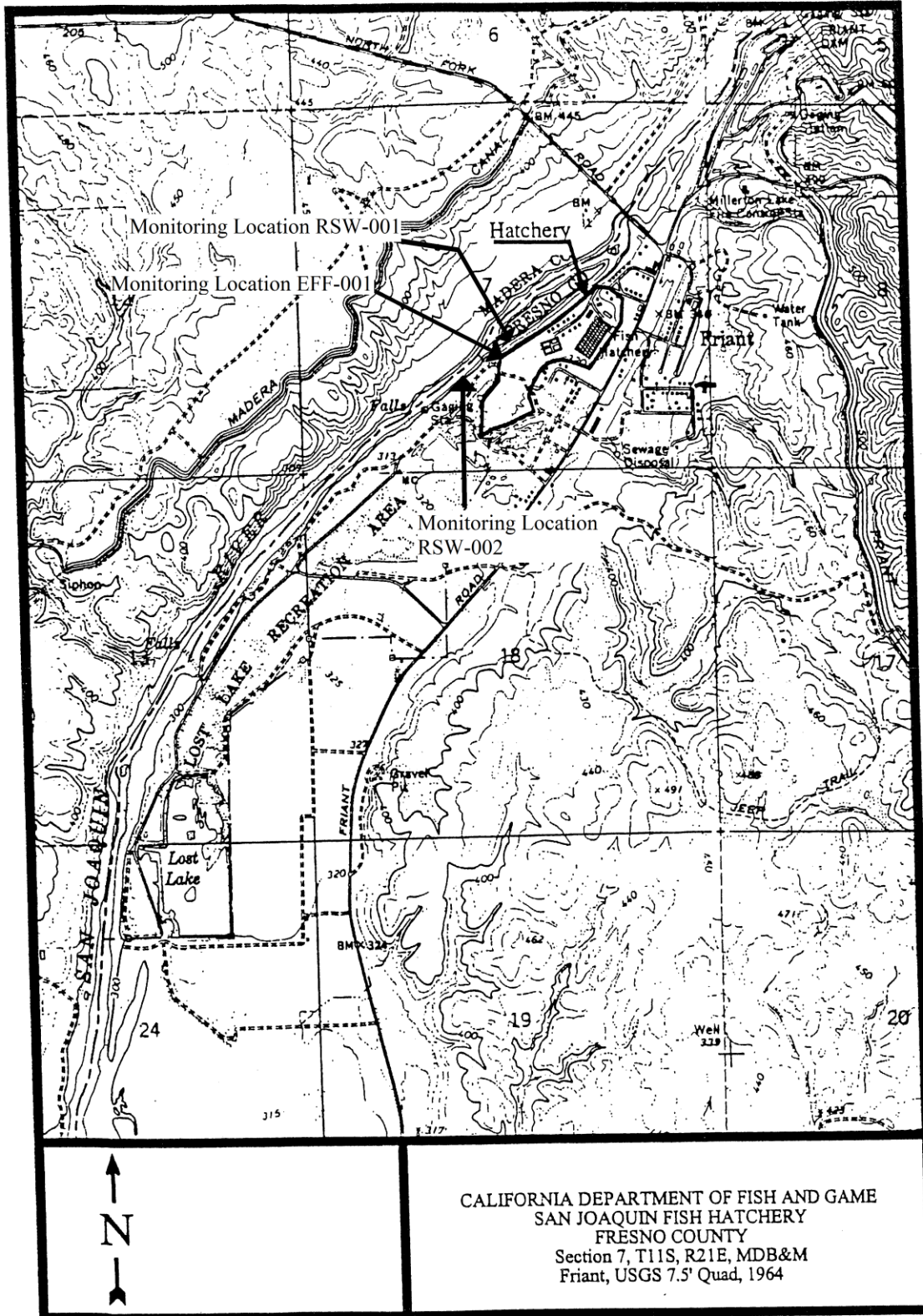
Enclosures (1): 1) CAAP General Order R5-2010-0018-01 (Discharger only)

cc: David Smith, U.S. EPA, Region IV, San Francisco
Terry Jackson, Fisheries Branch, California Department of Fish and Game, Sacramento, CA
Greg Paape, San Joaquin Fish Hatchery, Friant, CA
Philip Isorena, State Water Resources Control Board, Sacramento, CA

ATTACHMENT A – FACILITY ADMINISTRATIVE INFORMATION

Name of Facility	San Joaquin Fish Hatchery
Type of Facility	Cold Water Aquaculture Facility, SIC Code 0921
WDID	5D100804002
General Order NOA Enrollee Number	R5-2010-0018-021
Discharger	California Department of Fish and Game
Facility Address	13372 Brooktrout Drive Friant, CA 93626
Land Owner (Address)	California Department of Fish and Game 1234 East Shaw Ave. Fresno, CA 93710
Facility Contact, Title and Phone	Greg Kollenborn, Senior Fish Hatchery Supervisor 559-243-4014 ext. 257
Authorized Person to Sign and Submit Reports	Greg Kollenborn, Senior Fish Hatchery Supervisor Greg Paape, Hatchery Manager II
Mailing Address	1234 East Shaw Ave. Fresno, CA 93710 (Contact: Greg Kollenborn)
Billing Address	1234 East Shaw Ave. Fresno, CA 93710 (Contact: Greg Kollenborn)
Total Weight Produced (Annual)	539,000 lbs
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Facility Permitted Flow	24 million gallons per day (mgd)
Watershed	San Joaquin River Basin
Receiving Water	San Joaquin River
Receiving Water Type	Inland surface water

ATTACHMENT B – LOCATION MAP



ATTACHMENT C – FACILITY FLOW SCHEMATIC

