California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

Linda S. Adams
Secretary for
Environmental Protection

415 Knollcrest Drive, Suite 100, Redding, California 96002
(530) 224-4845 • Fax (530) 224-4857
http://www.waterboards.ca.gov/centralvalley

Arnold Schwarzenegger
Governor

31 August 2010

CERTIFIED MAIL
7009 2250 0002 9885 3514

Scott Hamelberg
U.S. Fish and Wildlife Service
Coleman National Fish Hatchery
24411 Coleman Fish Hatchery Road
Anderson, CA 96007

NOTICE OF APPLICABILITY; WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS; U.S. DEPARTMENT OF INTERIOR, FISH AND WILDLIFE SERVICE, COLEMAN NATIONAL FISH HATCHERY, SHASTA COUNTY

The U. S. Department of Interior, Fish and Wildlife Service (hereafter Discharger), owns and operates the Coleman National Fish Hatchery (hereafter Facility). The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has reviewed the Report of Waste Discharge (ROWD) dated 30 October 2009 for renewal of existing Order No. R5-2004-0123 (NPDES No. CA0004201) for the Facility. The ROWD was deemed complete on 30 November 2009.

On 29 January 2010, General Order No. R5-2010-0018, (NPDES No. CAG135001), Waste Discharge Requirements for Cold Water Concentrated Aquatic Animal Production Facility Discharges to Surface Waters (General Order) was adopted by the Central Valley Water Board. The General Order regulates the discharge of pollutants from Cold Water Concentrated Aquatic Animal Production facilities (CAAP facilities) to surface waters in the Central Valley Region. The Facility discharge meets the conditions for coverage under the General Order. The Central Valley Water Board has determined that discharges from your CAAP facility are more appropriately regulated under the General Order than by the existing individual permit. Therefore, the existing Order No. R5-2004-0123 (NPDES No. CA0004201) is scheduled for rescission by a separate action of the Central Valley Water Board at a future regularly scheduled Board meeting.

The Discharger has been assigned an enrollee number of R5-2010-0018-002. Administrative information for the Facility is provided in Attachment A, a part of this Notice of Applicability (NOA).

The CAAP facility operations and discharge shall be managed in accordance with the requirements contained in the General Order, this NOA, and with the information submitted by the Discharger. The General Order (enclosed) may also be viewed at the following web address:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2010-0018_npdes.pdf.

You are urged to familiarize yourself with the contents of the entire document. Mandatory monitoring requirements are prescribed in Attachment C of the General Order.

FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Facility is located along the north bank of Battle Creek in Section 1, T29N, R3W, MDB&M, as shown on Attachment A, a part of this NOA. The Facility is located within the Ash Creek Hydrologic Subarea (HAS) No. 507.21. The property is owned by the Discharger and is on Assessor's Parcel Nos. 057-540-03 and 057-540-04. The Facility raises salmon and steelhead for release to mitigate for the loss of historical spawning areas where access was blocked by the construction of Shasta Dam on the Sacramento River. Based on information in the ROWD the maximum annual production of the Facility is approximately 355,000 pounds (lbs).

The Facility consists of an administration building, five residences, spawning and maintenance buildings, an ozone treatment facility, 58 raceways, and seven adult holding ponds. The Discharger has a water right to divert 109 cubic feet per second (cfs) [70.48 million gallons per day (mgd)] for use in the Facility, plus 13 cfs (8.4 mgd) for downstream water users. Therefore the maximum water intake for the Facility is 78.9 mgd. The Facility has the ability to divert intake water from Battle Creek from three separate intake structures. The entire 122 cfs inflow to the Facility is diverted at Intake No. 1 from the Coleman Powerhouse Tailrace. Intakes Nos. 2 and 3 divert water from the water supply canal and are only used as a backup source when Intake No. 1 is not supplying water.

To remove silt, sediment, and bacteria the intake water is treated with at least one of the following prior to distribution through the Facility:

- **Settling Basins:** A portion of the intake water (50 cfs) is treated in two asphalt lined settling basins, each with a capacity of 1.2 million gallons and a retention time of approximately 1.5 to 2 hours. The additional inflow is either routed to the adult holding ponds or routed to the sand/anthracite filters. The settling basins are dewatered and cleaned annually (generally during the summer) to remove accumulated sediment.

- **Sand/Anthracite Filters.** There are four sand/anthracite filter basins with a total retention time of 15 to 30 minutes and a flow rate of 45,000 gallons per minute (gpm) [65 mgd]. The dual media filters are used year round and filter cleaning backwash cycles are automated, with cleaning frequency dependent on turbidity. All backwash water is piped to the pollution abatement pond. In addition, the dual media filters are cleaned with hypochlorite once or twice a year. The hypochlorite is retained for 48 to 96 hours prior to discharge to the pollution abatement pond.

- **Ozone Treatment Facility.** A portion of the treated water from the sand/anthracite filters is routed to the ozone treatment facility. The ozone remains in contact with the water for 15 minutes which is sufficient time to kill all viral, bacterial, and protozoan organisms that could affect fish reared at the Facility. The ozone treatment facility has a maximum design capacity of 30,000 gpm (43.2 mgd). The entire process is automated and computer controlled.

Treated intake water is routed throughout the Facility and wastewater is discharged back to Battle Creek at four discharge locations, as shown in Attachment C (Facility Schematic), a part of this NOA. Wastewater is discharged to the four discharge locations as described below:

- **Discharge Point 001** - In the event of a power loss a minimum flow is required through the Facility to prevent stagnant conditions. Overspill water is routed through the untreated water canal and discharged to Battle Creek at Discharge Point 001. Since no wastes are introduced into the waste stream from this process, the water quality of this discharge is similar to the water quality of Battle Creek. Flow rates from Discharge Point 001 have not been quantified.

- **Discharge Point 002** - Single pass flow through water from the raceways and the hatchery building, when chemicals are not being used, is discharged to Battle Creek at Discharge Point 002. However, because oxytetracycline is added to feed, and fish are fed in the raceways, oxytetracycline has the potential to be introduced to the Discharge Point 002 waste stream. Maximum daily and 30-day average flow rates at Discharge Point 002 are 33.5 mgd and 31.9 mgd, respectively.

- **Discharge Point 003** - Waters from the raceways and hatchery building during any cleaning operations, medication application, or chemical use is routed to the pollution abatement pond prior to discharge to Battle Creek (Discharge Point 003). The 4-acre unlined, earthen embankment abatement pond has a retention time of approximately 12 hours to several days depending on the volume of water discharged during cleaning operations. Maximum daily and 30-day average flow rates at Discharge Point 003 are 3.3 mgd and 2.3 mgd, respectively.

- **Discharge Point 004** - Single pass flow through water from the spawning building adult holding ponds is discharged to Battle Creek through the fish ladder (Discharge Point 004). The source of water in the adult holding ponds is overspill water, and continuous flow-through water from the raceways and the pre-release pond. The pre-release pond is currently used to hold steelhead trout after spawning. Mature fish swim upstream through the fish ladder against the discharge flow and are collected in the adult holding ponds to be harvested for eggs and milt. No feed or medication is applied in the adult holding ponds. The fish ladder is only used during October to February during spawning. The Discharger estimates approximately 14,000 gpm of untreated water and 10,000 gpm of raceway/pre-release pond water is routed to the adult spawning ponds. Water from the raceways and pre-release ponds is used only when no medication or cleaning is being conducted in the raceways or pre-release pond. Flow rates from Discharge Point 004 have not been quantified.

During the spawning season, wash water from the spawning building, which generally contains eggs and blood, is pumped to a 0.5-acre evaporation/percolation pond on the east side of the Facility. There is no direct discharge from the evaporation/percolation pond to surface water.

Based on information in the ROWD, chemicals currently used at the Facility are summarized in the table below.

Chemical	Month(s) of Use	Application
Formalin	October to July (peak October to December)	Applied in hatchery building to prevent fungus in eggs and infection in fingerlings.
Iodophor	Year round (peak October to February)	Disinfect eggs prior to incubation. Disinfect raceway cleaning equipment (brooms, boots).
Enteric Redmouth Bacterin (vaccine)	April to June	Vaccinate Juvenile late fall Chinook Salmon and steelehead.
Sodium Chloride	January to July	Used to reduce stress during medicating or moving fish. Applied in the raceways.
Hypochlorite (chlorine)	May and June	Annual 48 to 96 hour static bath to remove bacteria and algae from sand/anthracite filter beds.
Oxytetracycline as TM-200	April to August	Applied in raceways with fish feed to control columnaris disease.
Florfenicol	April to June	Antibiotic used as Investigational New Animal Drug (INAD).
MS-222	Year round (peak October to February)	Applied in raceways as an anesthetic when handling fish during tagging and inventory.
Carbon Dioxide	March to April and during spawning	Used as an anesthetic during monitoring activities at barrier weir on Battle Creek and in the spawning building during spawning.

Based on information in the ROWD the Discharger has not used Chloramine-T since 1997. However, the Discharger states Chloramine-T would be used in the event of an outbreak of bacterial gill disease at the Facility. Additional chemicals, antibiotics and other therapeutic drugs listed in the General Permit may be used during periods of disease outbreaks.

Potable water is supplied by an on-site domestic well and disinfected using ultraviolet light. The Facility discharges domestic wastes to a septic tank/leachfield system. In addition, each of the five residences has its own septic tank which discharges to a common leachfield system.

Returning excess adult salmon that are not needed for egg take are provided to a seafood processing company and/or to the Bureau of Indian Affairs to be distributed to Native Americans. All other carcasses and dead eggs are sent to a rendering company for processing.

The Facility has backup power capability of 2500 kilowatts (KW), requiring fuel storage in three tanks with a total capacity of 9,000 gallons (gals) of diesel fuel. In addition, the Facility has one gasoline tank (500 gals) and one waste oil tank (500 gals). All tanks have double walls,

with tertiary containment. Waste oil from equipment oil changes is periodically collected by an outside vendor. The current Spill Prevention Control and Countermeasure (SPCC) Plan was prepared by a registered engineer in August 2006. Formaldehyde is stored in a 110 gallon stainless steel pressure tank within a containment tank.

MONITORING REQUIREMENTS

The General Order requires that dischargers comply with the Monitoring and Reporting Program that is incorporated as Attachment C to the General Order. Influent, effluent, and receiving water monitoring requirements are based on the pounds of fish produced. This Facility is in the category of production greater than 100,000 lbs of fish.

The Discharger conducted priority pollutant metals monitoring on 14 October 2009. The data show that there is no reasonable potential for priority pollutant metals to cause or contribute to an exceedance of water quality objectives. The Discharger reports that the Facility does not use copper sulfate or chelated copper compounds. The receiving waters are not listed under the Clean Water Act 303(d) List of impaired water bodies; therefore, no additional monitoring requirements will be required.

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

Monitoring Location Descriptions

Point Name	Monitoring Location Name	Monitoring Location Description
Intake No. 1	INF-001	At a location where a representative sample can be obtained at Intake No. 1 of the raw water supply from the Coleman Powerhouse Tailrace.
Intake No. 2	INF-002	At a location where a representative sample can be obtained of the raw water supply when water is being diverted at Intake No. 2.
Intake No. 3	INF-003	At a location where a representative sample can be obtained of the raw water supply when water is being diverted at Intake No. 3.
Discharge Point 001	EFF-001	At a location where a representative sample can be obtained of the discharge from Discharge Point 001 prior to entering Battle Creek.
Discharge Point 002	EFF-002	At a location where a representative sample can be obtained of the discharge from Discharge Point 002 prior to entering Battle Creek.
Discharge Point 003	EFF-003	At a location where a representative sample of the discharge from Discharge Point 003 can be obtained prior to entering Battle Creek.

Point Name	Monitoring Location Name	Monitoring Location Description
Discharge Point 004	EFF-004	At a location where a representative sample can be obtained of the discharge from Discharge Point 004 prior to entering Battle Creek.
Receiving Water Upstream	RSW-001	Located 25 feet upstream from the point where Discharge Point 001 flows into Battle Creek.
Receiving Water Downstream	RSW-002	Located 25 feet downstream from the point where Discharge Point 002 flows into Battle Creek.
Receiving Water Downstream	RSW-003	Located 25 feet downstream from the point where Discharge Point 003 flows into Battle Creek.

NOTICE OF APPLICABILITY REQUIREMENTS

Based on the information provided in the ROWD, the Discharger is hereby authorized to discharge to Battle Creek under the terms and conditions of General Order No. R5-2010-0018. In addition to the requirements contained in the General Order, the following shall also apply:

1. The discharge from the Facility shall not exceed 78.9 mgd during the effective period of the General Order.

2. The Discharger is required to comply with all the Monitoring and Reporting Requirements contained in Attachment C to the General Order for facilities with production greater than 100,000 pounds of fish.

3. The Discharger shall electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program website (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS website will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

4. 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 $1,000 (State Water Board Resolution 2002-0150), but may be subject to change.

5. The 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 General Order No. R5-2010-0018 will remain authorized to discharge under administratively continued permit conditions.

Failure to comply with the General Order and this NOA may result in enforcement actions, which could include administrative civil liability. Effluent limitation violations and some late reporting violations are subject to a Mandatory Minimum Penalty (MMP) 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 report indicating that no discharge occurred. You must notify the Central Valley Water Board staff within 24 hours of noncompliance or anticipated noncompliance.

Please reference your enrollee number, R5-2010-0018-002, in your correspondence and submitted documents.

If you have any questions regarding this NOA, monitoring reports submittals, discharge notifications, compliance and enforcement; please contact, Kevin Kratzke at (530) 224-4850, or kkratzke@waterboards.ca.gov.

Original Signed by Robert A. Crandall

(for) PAMELA C. CREEDON
Executive Officer

KEK: knr

NOA Attachments: Attachment A - Administrative Information
Attachment B – Location Map
Attachment C – Facility Schematic

Enclosure: General Order No. R5-2010-0018 (Discharger only)

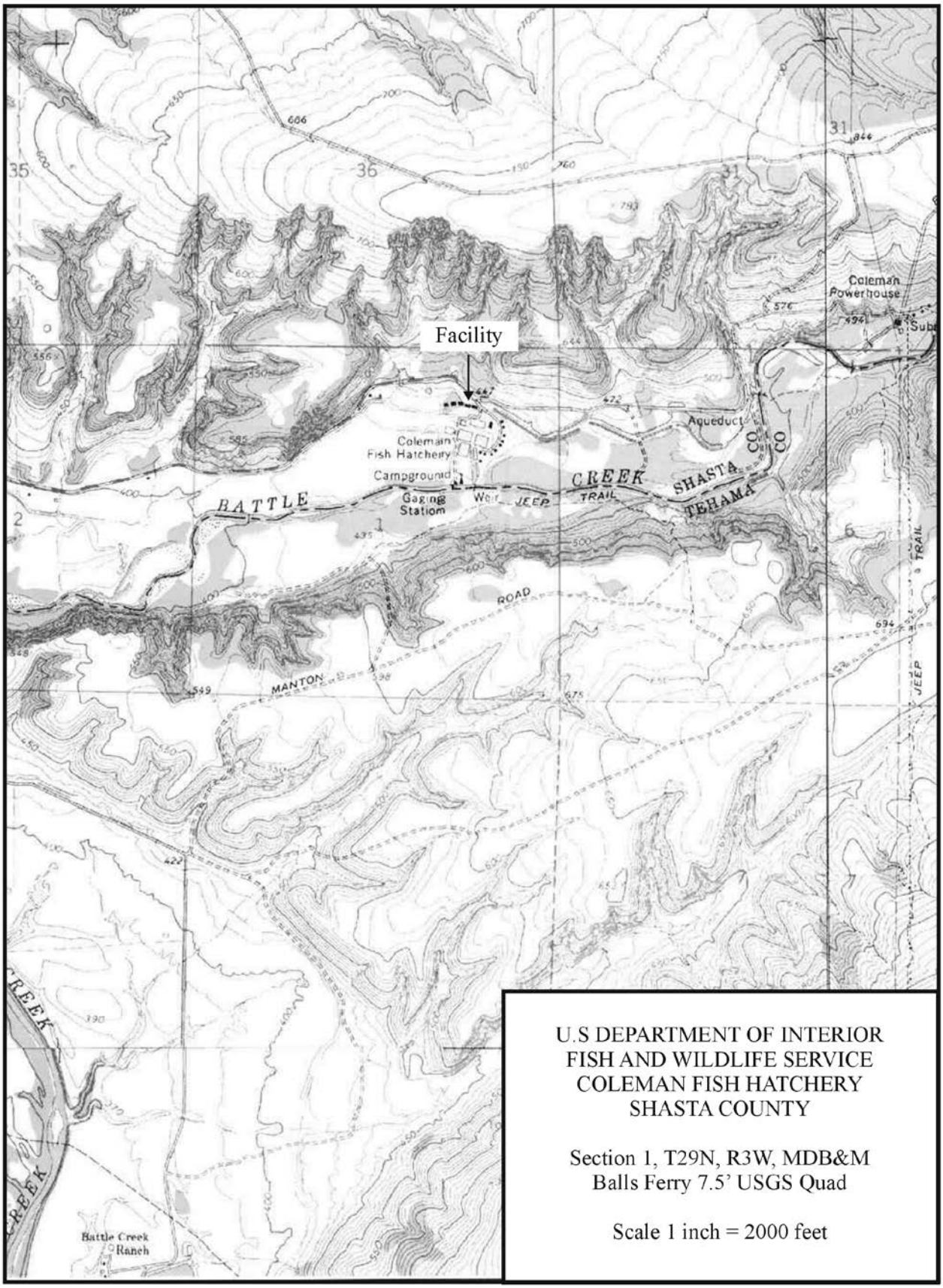
Distribution List: Mr. David Smith, U.S. EPA, Region IX, San Francisco
Mr. Phil Isorena, State Water Resources Control Board, Sacramento
Mr. Mike Keeler, U.S. Fish and Wildlife Service, Anderson

U:\Clerical\North\KKratzke\2010\Coleman Notice of Applicability 002 Final Draft.doc

ATTACHMENT A – FACILITY ADMINISTRATIVE INFORMATION

Name of Facility	Coleman National Fish Hatchery
Type of Facility	Cold Water Aquaculture Facility, SIC Code 0921
WDID	5A450707001
General Order NOA Enrollee Number	R5-2010-0018-002
Discharger	U.S. Fish and Wildlife Service (Operator and Facility Owner)
Facility Address	24411 Coleman Fish Hatchery Road Anderson, CA 96007
Land Owner (Address)	24411 Coleman Fish Hatchery Road Anderson, CA 96007
Facility Contact, Title and Phone	Mike Keeler, (530) 365-8622
Authorized Person to Sign and Submit Reports	Scott Hamelberg, Project Leader (530) 365-8622
Mailing Address	24411 Coleman Fish Hatchery Road Anderson, CA 96007
Billing Address	24411 Coleman Fish Hatchery Road Anderson, CA 96007
Total Weight Produced (Annual)	355,000 lbs
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Facility Permitted Flow	78.9 mgd
Watershed	Sacramento River Basin
Receiving Water	Battle Creek
Receiving Water Type	Inland surface water

ATTACHMENT B – LOCATION MAP



ATTACHMENT C – FACILITY SCHEMATIC