2 May 2012

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NOTICE OF APPLICABILITY; GENERAL WASTE DISCHARGE REQUIREMENTS FOR COLD WATER CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY DISCHARGES TO SURFACE WATERS, ORDER R5-2010-0018-01 (CAAP GENERAL ORDER); STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME, NIMBUS SALMON AND STEELHEAD HATCHERY AND AMERICAN RIVER TROUT HATCHERY, SACRAMENTO COUNTY

Our office received Reports of Waste Discharge dated 16 April 2012, and supplemental information dated 19 April 2012, from State of California Department of Fish and Game (Discharger), for the Nimbus Salmon and Steelhead (Nimbus) Hatchery and American River Trout (American River) Hatchery. California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff has determined that the Nimbus and American River Hatcheries meet the required conditions for approval under the CAAP General Order. The Nimbus and American River Hatcheries are separate hatcheries, but are both operated by the Discharger and share the same outfalls. Therefore, this Notice of Applicability (NOA) provides coverage under the CAAP General Order and assigns CAAP General Order R5-2010-0018-019 and National Pollutant Discharge Elimination System (NPDES) Permit No. CAG135001 to both the Nimbus and American River Hatcheries. Administrative information for the hatcheries is provided in Enclosure A, a location map is provided in Enclosure B, and a flow schematic is provided in Enclosure C, which are included as part of this NOA. Please reference your CAAP General Order **R5-2010-0018-019**, 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. The CAAP 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 General Order prescribes mandatory monitoring and reporting requirements.

CAAP General Order R5-2010-0018-019 shall become effective when the existing individual NPDES permit for the Nimbus and American River Hatcheries, Order R5-2005-0057 (NPDES No.

CA0004774), is rescinded by a separate action of the Central Valley Water Board, which is scheduled for **7/8 June 2012**.

FACILITY INFORMATION/DISCHARGE DESCRIPTION

The Nimbus and American River Hatcheries are located on the south bank of the American River, downstream from Hazel Avenue and Lake Natoma in Rancho Cordova, Sacramento County (T9N, R7E, MDB&M, latitude N 38° 38' 04"/longitude W 121° 13' 40" and latitude N 38° 38' 02.92"/longitude W 121° 13' 36.30", respectively), as shown in Enclosure B, a part of this NOA. The Nimbus and American River Hatcheries are owned by the United States Bureau of Reclamation and the Discharger, respectively. Both the Nimbus and American River Hatcheries are located on property owned by the United States Bureau of Reclamation.

The Nimbus Hatchery produces juvenile Chinook salmon and steelhead to mitigate the loss of anadromous fisheries resources due to the operation of Folsom and Nimbus dams. It traps adult fish, collects, incubates, and hatches fish eggs, and rears juvenile fish. The fish are reared for up to a year and trucked to several California water bodies for release. The fish rearing occurs in concrete raceways utilizing a flow-through, single-pass water system. The Nimbus Hatchery consists of a fish ladder for adult salmon and steelhead, four holding ponds for adult fish, 80 fiberglass tanks (20 ft. long by 4 ft. wide and 30 in. deep) for rearing eggs and fry, two hatchery buildings, six 10 ft. by 400 ft. raceways for rearing, a percolating pond (108 ft. wide by 219 ft. long), and other ancillary operations.

The American River Hatchery obtains fish eggs or fingerling fish from other hatcheries, or collects fish eggs at remote sites. The eggs are incubated and hatched, and fish are reared to various sizes to accommodate various management strategies. Most of the fish are reared for almost a year to reach "catchable size" (1/2 pound) and trucked to several California water bodies for release. The American River Hatchery receives fertilized trout eggs for hatching and raises fish in ten 10 ft. by 600 ft. raceways, four 10 ft. by 150 ft. nursery tanks, and sixteen 3 ft. by 16 ft. rearing troughs. A small number of inland salmon are also raised at the American River Hatchery.

The Discharger utilizes two parallel settling ponds for the disposal of wastewater from raceways and rearing ponds, the incubator building, the fish disease lab, and local surface drainage. Intake water from Lake Natoma, upstream from Nimbus Dam, is conveyed to the hatcheries via a common 60-inch line. Lake Natoma is part of the American River system which flows into the Sacramento River. Combined water intake for both hatcheries was reported by the Discharger as approximately 60 to 70 million gallons per day (mgd). All water is used on a flow-through basis, and the process wastewater is discharged to the American River through multiple outfalls.

In the Reports of Waste Discharge, the Discharger reported the following 5-year annual average harvestable fish weights and its annual feed of floating and sinking dry food pellets for the hatcheries:

Hatchery	Harvestable Fish Weight	Annual Feed
Nimbus Hatchery	Steelhead - 130,000 lbs Salmon - 70,000 lbs	120,000 lbs
American River Hatchery	Rainbow Trout - 430,000 lbs Kokanee Salmon - 2,010 lbs Brown Trout - 4,800 lbs	750,000 lbs

The Discharger also indicated in its Reports of Waste Discharge 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 to reduce the spread of disease among the confined fish population: sodium chloride (salt), hydrogen peroxide, potassium permanganate, oxytetracycline as a feed additive, penicillin G., iodine, tricaine methanesulfonate (MS-222), florfenicol, carbon dioxide, sodium bicarbonate, ERM vaccine, and SLICE (emamectin benzoate).

Wastewater is discharged from the hatcheries through three outfalls (001, 002, and 004) as shown in Attachment C, a part of this NOA, and as described below:

Outfall 001 – Overflows from the Nimbus Hatchery holding ponds and the fish ladder. Discharge is seasonal, with flow typically from November to April when the fish ladder is open. The estimated flow from this outfall is19 mgd.

Outfall 002 – Wastewater discharges seasonally from the Nimbus Hatchery buildings, during egg incubation (November through July). The estimated flow from this outfall is 3 mgd.

Outfall 003 – Capped. Currently no discharge from this outfall.

Outfall 004 – Overflows from the two settling ponds. The settling ponds receive wastewater from the following sources: the Nimbus Hatchery raceways and spawning deck, and the American River Hatchery rearing ponds, hatchery building, nursery ponds, and fish disease laboratory.

Outfall 005 – All wastewater flows prior to discharge to the settling pond.

All domestic wastewater is discharged to an on-site septic system, which is regulated by the County of Sacramento.

INTAKE WATER CREDITS

The maximum effluent concentrations for copper and zinc exceed the screening levels specified in Table H-1 of the CAAP General Order. The Discharger, however, has demonstrated that the discharge from the Nimbus and American River Hatcheries meets the conditions for granting intake water credits for copper and zinc. The source of the pollutants is the intake from the receiving water, which is the same water body that the Nimbus and American River Hatcheries discharge. Based on the Discharger's priority pollutant sampling data collected on 9 November 2009, the screening levels for copper and zinc were exceeded in the intake water. However, the effluent concentrations did not exceed the intake concentrations and the Discharger does not add copper or zinc in the process. Therefore, the water quality-based effluent limitations for copper and zinc have been established considering intake water credits.

EFFLUENT LIMITATIONS

Effluent limitations are specified in Section V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS of the CAAP General Order. **Effective 7 June 2012**, the following effluent limitations are applicable to this discharge and are contained in Section V. A and 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. ***Total Recoverable Zinc*** – An intake water credit has been granted for zinc. In accordance with Section V.A.2, the monthly average total recoverable zinc concentration and mass in the effluent shall not exceed the corresponding monthly average concentration and mass as measured in the influent.

3. ***pH*** – The Discharger shall comply with the effluent limitations required in Section V.B.1.a for pH.

4. ***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 the Dischargers 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 category of production of more than 100,000 pounds of fish produced per year.

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

Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
--	INF-001	**Lake Natoma Intake.** Location where influent sample can be collected prior to entering the Nimbus and American River Hatcheries.
Outfall 001	EFF-001	Effluent wastewater flow from the **Nimbus Fish Ladder** and **Holding Ponds** prior to discharge to the American River
Outfall 002	EFF-002	Effluent wastewater flow from the **Nimbus Hatchery Buildings** (November through July) prior to discharge to the American River
Outfall 003	EFF-003	Capped and currently no discharge from this outfall
Outfall 004	EFF-004	Effluent wastewater overflow flow from two **Settling Ponds** prior to discharge to the American River
Outfall 005	EFF-005	All wastewater flow prior to discharge to the **Settling Ponds**
--	RSW-001	100 feet **upstream** from Discharge Point No. 001 in the American River
--	RSW-002	100 feet **downstream** of seepage from Settling Ponds in the American River

Effective 7 June 2012, 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 of fish per year. A summary of the monitoring requirements is provided below:

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

   The Discharger has been granted intake water credits for copper (total recoverable) and zinc (total recoverable). Therefore, in accordance with Section III.C (Influent Monitoring for

Facilities with Intake Water Credits), influent monitoring is required for flow, copper (total recoverable), and zinc (total recoverable). Influent copper (total recoverable) shall be monitored as required in Table C-2, and quarterly influent grab samples shall be collected for zinc (total recoverable). Samples for copper (total recoverable) and zinc (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 continuously.

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

   The Discharger has been granted intake water credits for copper (total recoverable) and zinc (total recoverable). Therefore, in accordance with Section IV.3 (Effluent Monitoring for Facilities with Intake Water Credits), effluent monitoring is required for flow, copper (total recoverable), and zinc (total recoverable). Effluent copper (total recoverable) shall be monitored as required in Table C-4, and quarterly effluent grab samples shall be collected for zinc (total recoverable). Samples for copper (total recoverable) and zinc (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 continuously.

3. ***Receiving Water Monitoring*** – The Discharger shall monitor the receiving water in accordance with Section VIII. B (receiving water observations) and Table C-6 of the CAAP General Order for dissolved oxygen, temperature, turbidity, pH, electrical conductivity @25ºC, and hardness.

4. ***Land Discharge Monitoring Requirements*** – The Discharger shall conduct septic tank and leachfield inspections annually with annual reports submitted in accordance with 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 the CAAP General Order.

The first self-monitoring report (SMR) required under the CAAP General Order is the June 2012 SMR, which shall be submitted by 1 August 2012. Until then, the Discharger shall continue submitting SMRs required by Order R5-2005-0057.

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 R5-2005-0057, with the exception of effluent limitations for copper (total recoverable), dissolved oxygen (DO), turbidity and total dissolved solids (TDS).

DO, Turbidity, and TDS – The previous Order included effluent limits for DO, turbidity, and TDS. Based on the last five years of the Discharger's monthly effluent monitoring data for DO, turbidity and TDS, the discharge does not demonstrate reasonable potential to cause or contribute to an instream excursion of the applicable water quality objectives in the receiving water. Therefore, the effluent limits for DO, turbidity, and TDS have been removed.

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 Nimbus and American River Hatcheries, and based on intake and effluent copper data, the operations do not increase the concentrations of copper to the American 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 less stringent requirement for copper.

The less stringent requirements for DO, turbidity, TDS, and copper (total recoverable) are consistent with the federal antibacksliding 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 effluent limits are consistent with state and federal antibacksliding requirements. Any impact on existing water quality will be insignificant.

NOTICE OF APPLICABILITY REQUIREMENTS

The Discharger is hereby authorized to discharge to the American River 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 Nimbus and American River Hatcheries shall not exceed a daily average flow of 70 mgd during the effective period of the CAAP General Order.

2. The Discharger shall continue to electronically submit Self-Monitoring Reports (SMRs) 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 $1,000 (State Water Board Resolution 2002-0150), 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.

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 Michael Fischer of the Central Valley Water Board's NPDES

Compliance and Enforcement Unit. Mr. Fischer can be reached at (916)-464-1181, or mfischer@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 Anand Mamidi at (916) 464-4853 or at amamidi@waterboards.ca.gov.

Any person aggrieved by this action of the Central Valley Water Board may petition the 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 Order 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. 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 Ken Landau for

Pamela C. Creedon
Executive Officer

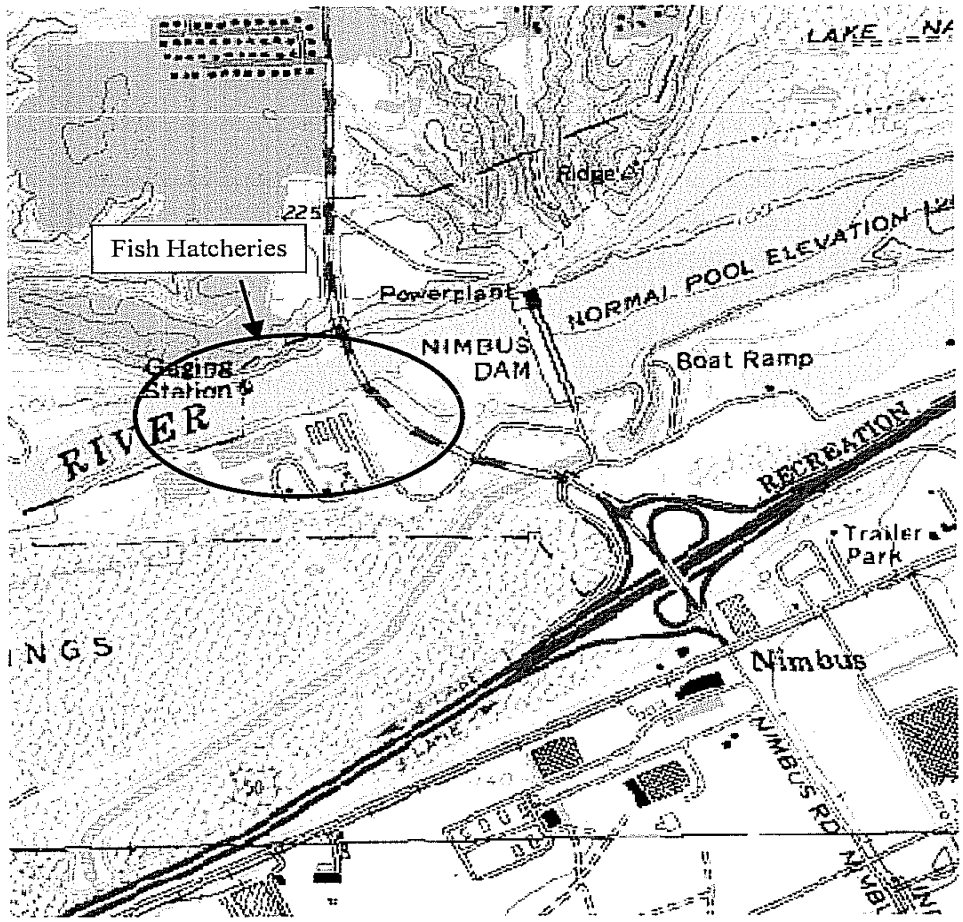
Enclosures (4):
1) Enclosure A – Administrative Information
2) Enclosure B – Location Map
3) Enclosure C – Flow Schematic
4) CAAP General Order R5-2010-0018-01 (Discharger only)

cc: David Smith, U.S. EPA, Region IX, San Francisco
Phil Isorena, State Water Resources Control Board, Sacramento
Michael R. Finnegan, US Bureau of Reclamation, 7794 Folsom Dam Road, CA 95630-1799

ENCLOSURE A – ADMINISTRATIVE INFORMATION

Name of Facility	Nimbus Salmon and Steelhead Hatchery and American River Trout Hatchery
Type of Facility	Cold Water Concentrated Aquatic Animal Production Facility, SIC Code 0921
WDID	5A340801001
General Order NOA Enrollee Number	R5-2010-0018-019
Discharger	California Department of Fish and Game
Facility Address	2001 Nimbus Road Rancho Cordova, CA 95670
Land Owner (Address)	US Bureau of Reclamation 7794 Folsom dam Road (CC413) Folsom, CA 95630 (Contact Person: Mike Finnegan) (916-989-7173)
Facility Contact, Title and Phone	Paula Hoover (Nimbus Operator/Manager) 916-358-2821, or Laird Marshall Jr./Dale Burkett (American River Fish Hatchery Operators/Managers) 916-358-2865
Authorized Person to Sign and Submit Reports	Laird Marshall Jr., American River Fish Hatchery Manager II/Acting Senior Hatchery Supervisor
Mailing Address	2001 Nimbus Road Rancho Cordova, CA 95670
Billing Address	2001 Nimbus Road. Rancho Cordova, CA 95670
Total Weight Produced (Annual)	640,000 lbs (both hatcheries combined)
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	B
Facility Permitted Flow	70 million gallons per day (mgd)
Watershed	Sacramento River Basin
Receiving Water	American River
Receiving Water Type	Inland surface water

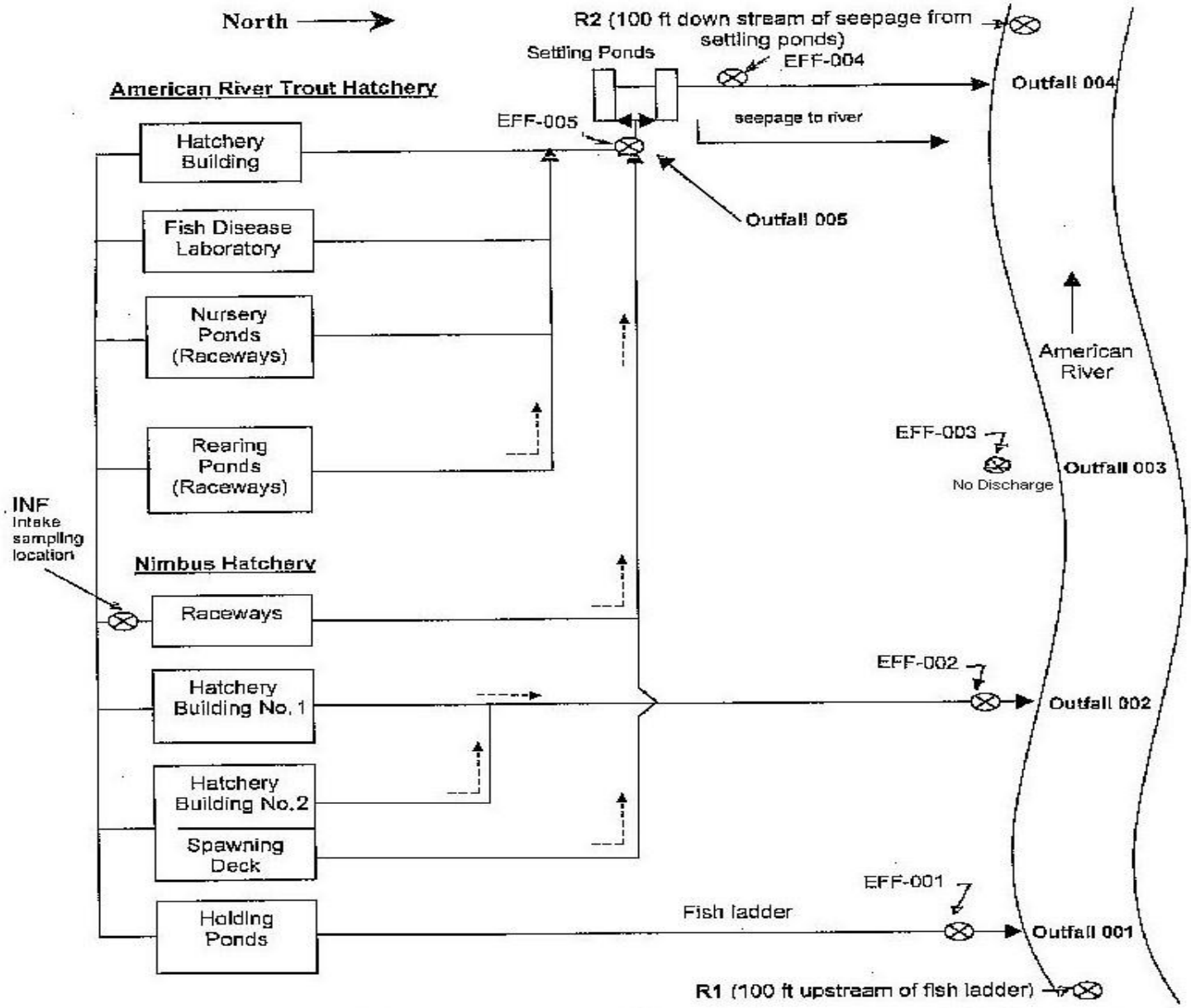
ENCLOSURE B – LOCATION MAP



Drawing Reference:	**SITE LOCATION MAP** Nimbus Salmon & Steelhead Hatchery and American River Trout Hatchery 2001 Nimbus Road, Rancho Cordova, California Sacramento County T9N, R7E, MDB&M Latitude: N38° 38' 04'' Longitude: W121° 13' 40''	N W E S approx. scale 1 in. = ¼ mile.
U.S.G.S TOPOGRAPHIC MAPS 7.5 MINUTE QUADRANGLE		

ENCLOSURE C – FLOW SCHEMATIC

Water Flow Schematic and Outfall Summary for
Nimbus Salmon & Steelhead Hatchery and American River Trout Hatchery



⊗ = Sampling Location (not to scale)

Outfall Summary

001 – Nimbus Fish Ladder (holding pond overflow ; fresh water, if needed)

002 – Nimbus Hatchery Buildings (water used for egg hatching and incubation, November through July)

003 - No Discharge

004 – Settling Pond Overflow (ARTH rearing ponds; ARTH nursery ponds; Nimbus raceways; fish disease control lab; ARTH hatchery building)

005 – Discharge to Settling Pond – All ARTH rearing pond flow is diverted to settling ponds during cleaning or chemical treatment and Spawning Deck (water used during egg removal) .