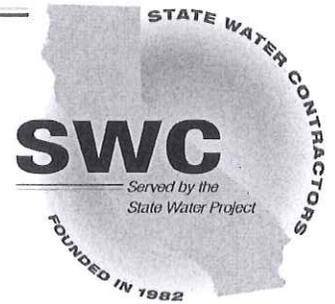


December 10, 2010



DIRECTORS

Stephen Arakawa
President

Metropolitan Water District
of Southern California

Curtis Creel
Vice President

Kern County Water Agency

Joan Maher
Secretary-Treasurer
Santa Clara Valley Water
District

Russell Fuller
Antelope Valley-East Kern
Water Agency

Thomas Hurlbutt
Tulare Lake Basin Water
Storage District

Dan Masnada
Castaic Lake Water Agency

David Okita
Solano County Water Agency

Steven Robbins
Coachella Valley Water
District

Ray Stokes
Central Coast Water
Authority

General Manager
Terry Erlewine

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
Division of Water Rights
P. O. Box 100
Sacramento, CA 95812-0100
Via email:
commentletters@waterboards.ca.gov

Re: **Comments on December 6, 2010 Revised Draft Water Quality Certification for the Oroville Facilities, FERC No. P-2100**

Dear Ms. Townsend:

The State Water Contractors (SWC) submit the following comments to the revised draft Section 401 Water Quality Certification (draft certification) issued by the State Water Resources Control Board (State Water Board) on December 6, 2010. These comments are supplemental to all prior comments that previously have been submitted. These comments should not be understood to waive prior objections raised by the SWC to the previous draft certifications. Rather, as the SWC understands the notice for this hearing, the State Water Board does not want comments submitted that address matters other than the most recent amendments.

The SWC appreciates the willingness of the State Water Board to work with the SWC and DWR to develop a water quality certification that will best serve the Feather River and that will not cause a termination of the Settlement Agreement entered into by some 70 parties to the FERC relicensing. We also very much appreciate the opportunity to present additional comments at the next hearing on the draft certification.

The draft certification sets forth four options regarding the Habitat Expansion Agreement (HEA) for the Board to consider.¹ The four options continue to raise significant concerns regarding what the SWC has concluded is the certain assertion of jurisdiction by the Federal Energy Regulatory Commission (FERC) over this "island" project. There is also a significant, but likely unintentional, possibility that the draft certification could require the Department of Water Resources (DWR) to perform both the HEA and fish passage. While the SWC would prefer that the State Water Board not seek to assert jurisdiction over the HEA or fish passage, by way of compromise, the SWC will support Option 4 provided it is amended as set forth below.

The State Water Board proposed the following language for Option 4:

The State Water Board reserves the authority, delegated to the Deputy Director, to require fish passage or other measures if the final habitat expansion plan developed through the Habitat Expansion Agreement is not implemented.

The difficulties with the above language are that (1) “fish passage” is not limited to the fish passage program that might be required by the National Marine Fisheries Services (NMFS) or the Department of the Interior (DOI), and could require DWR to undertake more than one fish passage project, (2) the “other measures” language could require DWR to do some other form of off-site project similar to the HEA while NMFS and/or DOI seek fish passage, and (3) the “other measures” language is without definition or limitation, nor necessarily related to the Feather River. However, the SWC is amenable to a “reservation” consistent with the language set forth below, which is similar to the reservation agreed to by NMFS and DOI.²

In the event the National Marine Fisheries Service or the Department of the Interior seek to compel fish passage pursuant to Section 18 of the Federal Power Act as provided in Section A109 of the Settlement Agreement, authority is reserved for the State Water Board, pursuant to applicable legal authority, to also seek the construction, operation, and maintenance of fishways at the Oroville Project, No. 2100. If the NMFS and/or DOI seek to compel fish passage, the State Water Board will not seek to require fish passage in a manner different than that of NMFS and/or DOI, or implementation of an off-site habitat expansion plan.

The Options 1, 2, and 3 proposed as alternatives in the draft certification all suffer from the problem of creating a situation where DWR will be subject to FERC jurisdiction for this “island” project, as was explained in prior comments of the SWC. As the SWC previously commented, this will create additional needless hurdles for development of the HEA. The State Water Board apparently is concerned that if it does not include the HEA (or as in Option 3 the off-site project equivalent to the HEA) that the HEA will not be undertaken. This concern is unfounded as the HEA is enforceable by any signatory to it. These signatories include NMFS, DOI, U.S. Forest Service, California Department of Fish and Game (DFG), DWR, SWC, and American Rivers. Given these signatories, lack of enforcement is highly improbable. However, the State Water Board can ensure that the HEA will be implemented or that its alternative can be pursued in the event of lack of implementation. That insurance is the ability of NMFS and DOI to seek fish passage pursuant to Section 18 of the Federal

¹ The SWC does not waive any objection to or legal right regarding the State Water Board’s such assertion of jurisdiction over the development of an off-site project or fish passage. However, the SWC also does not believe this issue needs to be resolved at this time.

² The NMFS/DOI reservation set forth in the Settlement Agreement for inclusion in the FERC license reads as follows: **Article A109. Reservation of Section 18 Authority.** Authority is reserved for the National Marine Fisheries Service and the Department of the Interior to prescribe the construction, operation, and maintenance of fishways at the Oroville Project, No. 2100, including measures to determine, ensure, or improve the effectiveness of such prescribed fishways, pursuant to Section 18 of the Federal Power Act, as amended, during the term of the project license, as provided in the Habitat Expansion Agreement (2006).

Power Act and the inclusion of the SWC's version of Option 4. We believe that the State Water Board's concern regarding enforcement is well protected by the same reservation that was agreed to by the federal agencies.

A further problem is that Options 1, 2, and 3 expose DWR to potential double jeopardy, as was discussed above. This possibility is remedied by the inclusion of the last sentence included in the revised language provided by the SWC and DWR.

If the State Water Board feels absolutely certain that it must have a stronger enforcement mechanism in the final 401 certification, then with some amendments, Option 2 would be the SWC's least-objectionable next alternative. However, the SWC wants to make it clear that this option is vastly inferior to the pure reservation in the amended Option 4. The SWC amendments to Option 2 would have the State Water Board's jurisdiction sunset after NMFS approves the Habitat Expansion Plan (HEP) pursuant to the HEA. As is explained below, Option 2 as drafted by the State Water Board is unacceptable for several reasons.

If any off-site program or project is included in the final 401 certification, it will become part of the FERC license. Under the Federal Power Act (FPA), FERC has exclusive authority over licensing and regulation of the hydropower project.³ Thus, all provisions within a FERC license are enforceable by FERC, including the 401 provisions which are included in the FERC license.⁴ FERC may not pick and choose among the state-imposed conditions it enforces;⁵ in fact, a FERC order issuing a hydroelectric license need not expressly adopt the terms and conditions of such certification because they become terms and conditions of the license as a matter of law.⁶ Hence, any thought that FERC would not enforce the HEA or that third parties might not be able to avail themselves of FERC procedures is unfounded.

The difficulties with FERC's jurisdiction over an island project are several. We explained those issues in our prior comments. To summarize those comments, it is unprecedented at FERC to have four licenses apply to a single project. Such would be the case here. Recall that PG&E is a party to the HEA and that the HEP will be developed by both DWR and PG&E. In turn, PG&E's licenses for its three hydropower projects on the Feather River will include the federal fish passage reservation and, presumably, the State Water Board's 401 certification condition. The HEA is challenging enough

³ See *California v. FERC*, 495 U.S. 490, 499 (1990) ("By directing FERC to consider the recommendations of state wildlife and other regulatory agencies while providing FERC with final authority to establish license conditions ... Congress has amended the FPA to elaborate and reaffirm ... that the [Federal Power Act] establishes a broad and paramount federal regulatory role."); *Pacific Gas & Electric Co. v. FERC*, 720 F.2d 78, 83 (D.C. Cir. 1983) (the Federal Power Act "was designed to insure that the licenses granted by FERC promote secure licensee expectations.").

⁴ Section 401(d) of the Clean Water Act (CWA) itself states that any certification provided under section 401 "shall become a condition on any Federal license" for the activity in question. 33 U.S.C. § 1341(d).

⁵ *American Rivers, Inc. v. FERC*, 129 F.3d 99, 108, 111 (1997) (FERC "does not possess a roving mandate to decide that substantive aspects of state-imposed conditions are inconsistent with the terms of § 401").

⁶ See, e.g., *Ridgewood Maine Hydro Partners, L.P.*, 105 FERC ¶62,137, at P 10 (2003) (explaining that "[t]he provisions of [license] Article 401 are included for the purpose of adding basic requirements that enable the Commission to enforce the [section 401 water quality certification] requirements as license requirements.").

without adding in jurisdictional complexities. Further, the HEA becomes considerably more difficult to implement if third parties on a river where the project is to be developed would be subject to FERC's jurisdiction due to the island that is created by the HEP.

As currently included in the draft certification as Option 2, the State Water Board's sunset provision occurs too late in the process to achieve the desired result. If the requirement to include the HEA is extinguished only after the goals of the HEP have been met, a standard which we submit is vague and without definition, DWR, and hence the SWC, will suffer all of the detriment of having FERC jurisdiction and the difficulties associated therewith. Rather, the State Water Board's authority should terminate at such time as NMFS accepts the proposed HEP pursuant to Section 4(B)(vii) of the HEA. In this way, the licensees will be able to represent to the host river where the HEP will be developed that FERC's jurisdiction will end "pre-construction" or "pre-implementation" rather than at some later uncertain time. Sunsetting the provision upon the acceptance by NMFS of the HEP sets forth a clear delineation as to when the obligation of DWR and PG&E commences. By reserving the right to seek fish passage, the State Water Board will ensure that either the HEP is actually developed or that the State Water Board has the opportunity to seek fish passage to the upper Feather River.

The SWC's edits to Option 2 are set forth below.

Within two years of license issuance, the Licensee shall complete identification, evaluation and recommendation of habitat expansion action(s) to expand spawning, rearing and adult holding habitat to accommodate a net increase of 2,000 to 3,000 spring-run Chinook salmon for spawning. If the final habitat expansion plan developed through the Habitat Expansion Agreement (HEA) includes a schedule for completion of the recommended actions, is submitted to the Deputy Director for review, modification as appropriate, and approval within two years of license issuance, and is timely and appropriately implemented, the Licensee shall be deemed to have met the requirement for habitat expansion. For the purposes of this condition, if the Deputy Director does not either act on the Licensees' request for approval of the plan or identify the need for additional information or actions within 60 days of submission, the plan shall be deemed approved. This term is extinguished when the Deputy Director determines, upon advice from is advised by the National Marine Fisheries Service, that the goals of it has approved a Habitat Expansion Plan pursuant to the HEA have been achieved.

In the event the National Marine Fisheries Service or the Department of the Interior seek to compel fish passage pursuant to Section 18 of the Federal Power Act as provided in Section A109 of the Settlement Agreement, authority is reserved for the State Water Board, pursuant to applicable legal authority, to also seek the construction, operation, and maintenance of fishways at the Oroville Project, No. 2100. If the NMFS and/or DOI seek to compel fish passage, the State Water Board will not seek to require fish passage in a manner different than that of NMFS and/or DOI, or implementation of an off-site habitat expansion plan.

The State Water Board reserves the authority, delegated to the Deputy Director, to modify this condition if the goals of the habitat expansion plan are not met within the timelines in the plan, or if the Licensee withdraws from the HEA before the approved, final habitat expansion plan is fully implemented. If Pacific Gas and Electric Company (PG&E) does not agree to the plan, or refuses to implement the HEA, and the Licensee so

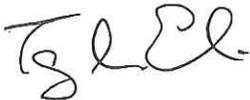
Ms. Jeanine Townsend
December 10, 2010
Page 5

~~requests, the Deputy Director will modify this condition as necessary to provide that the Licensee's responsibility is consistent with only the Licensee's share of the loss of habitat attributable to both PG&E's upstream facilities and the Project.~~

At the hearing, the SWC will provide the State Water Board with some background on the HEA and how it works in concert with the fish enhancement program on the Feather River. The attached PowerPoint will provide the basis for that discussion. Also attached are the CVs for Curtis Creel and Dr. Charles Hanson, PhD, both of whom will testify at the hearing.

Thank you for this opportunity to provide our comments. We look forward to a robust discussion of the draft 401 certification at the hearing to be held on December 15, 2010.

Sincerely,

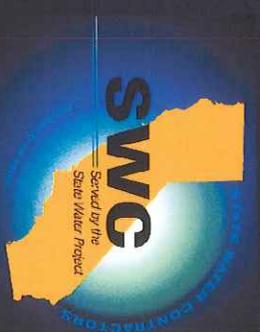
A handwritten signature in black ink, appearing to read 'TLE', with a stylized flourish at the end.

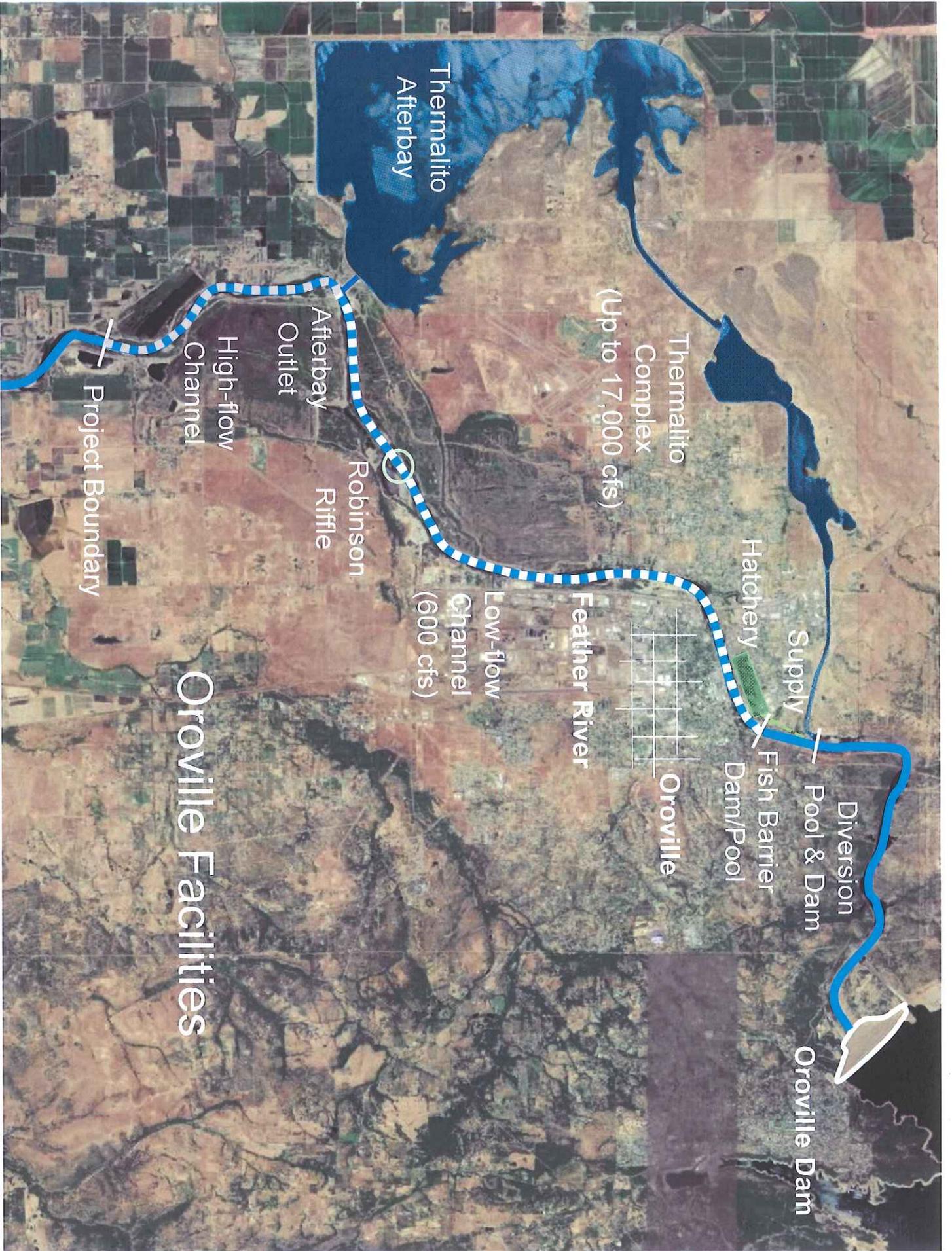
Terry L. Erlewine
General Manager

Oroville Facilities (P-2100)

State Water Resources Control Board

December 15, 2010





Thermalito
Afterbay

Thermalito
Complex
(Up to 17,000 cfs)

Hatchery
Supply

Diversion
Pool & Dam
Fish Barrier
Dam/Pool

Oroville Dam

Oroville

Feather River

Low-flow
Channel
(600 cfs)

Robinson
Riffle

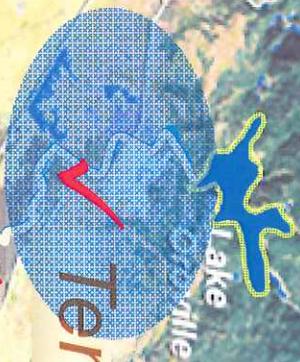
Afterbay
Outlet

High-flow
Channel

Project Boundary

Oroville Facilities

Salmon Returns (March through October)



Temperature



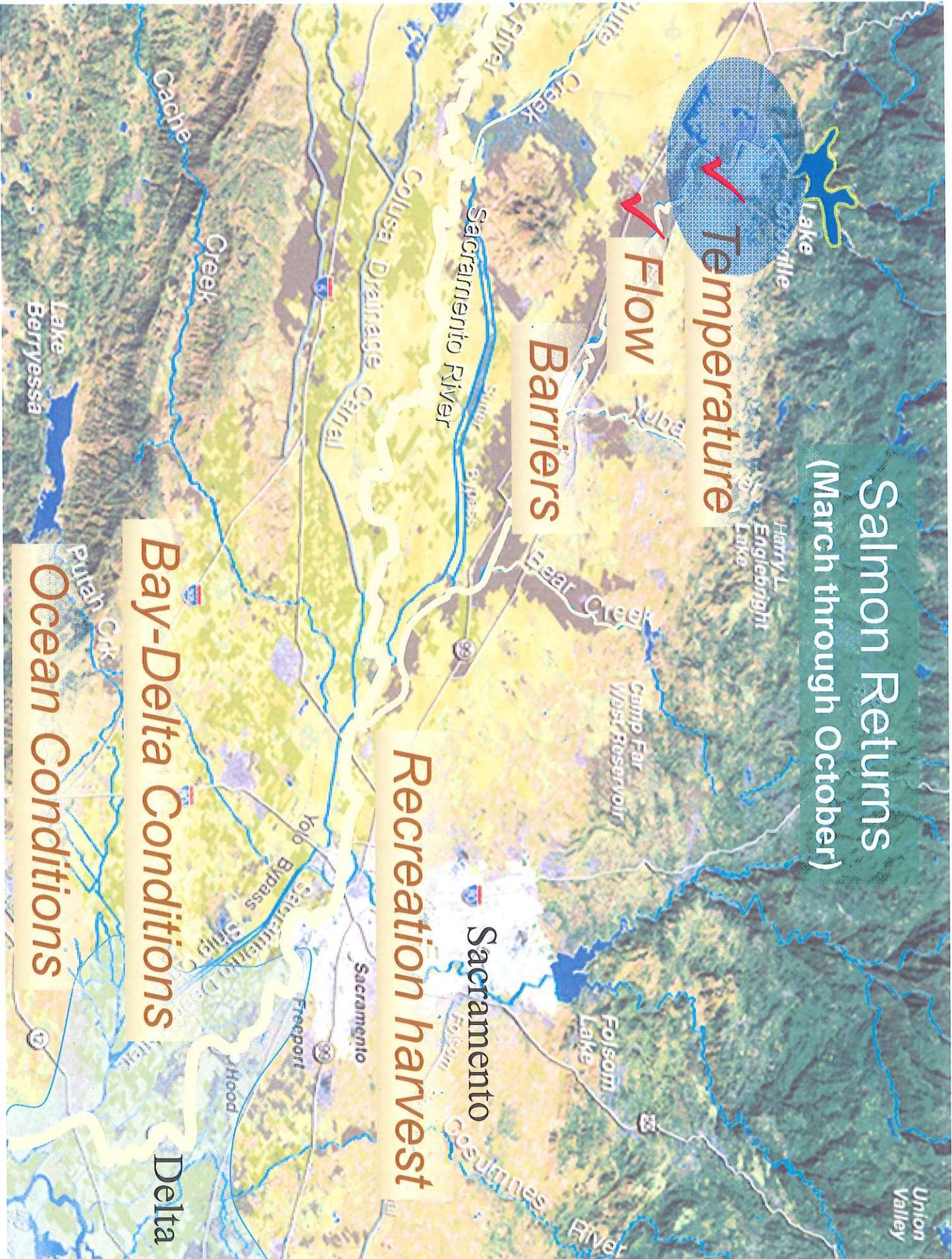
Flow

Barriers

Recreation harvest

Bay-Delta Conditions

Ocean Conditions



Delta

Habitat

Diversity

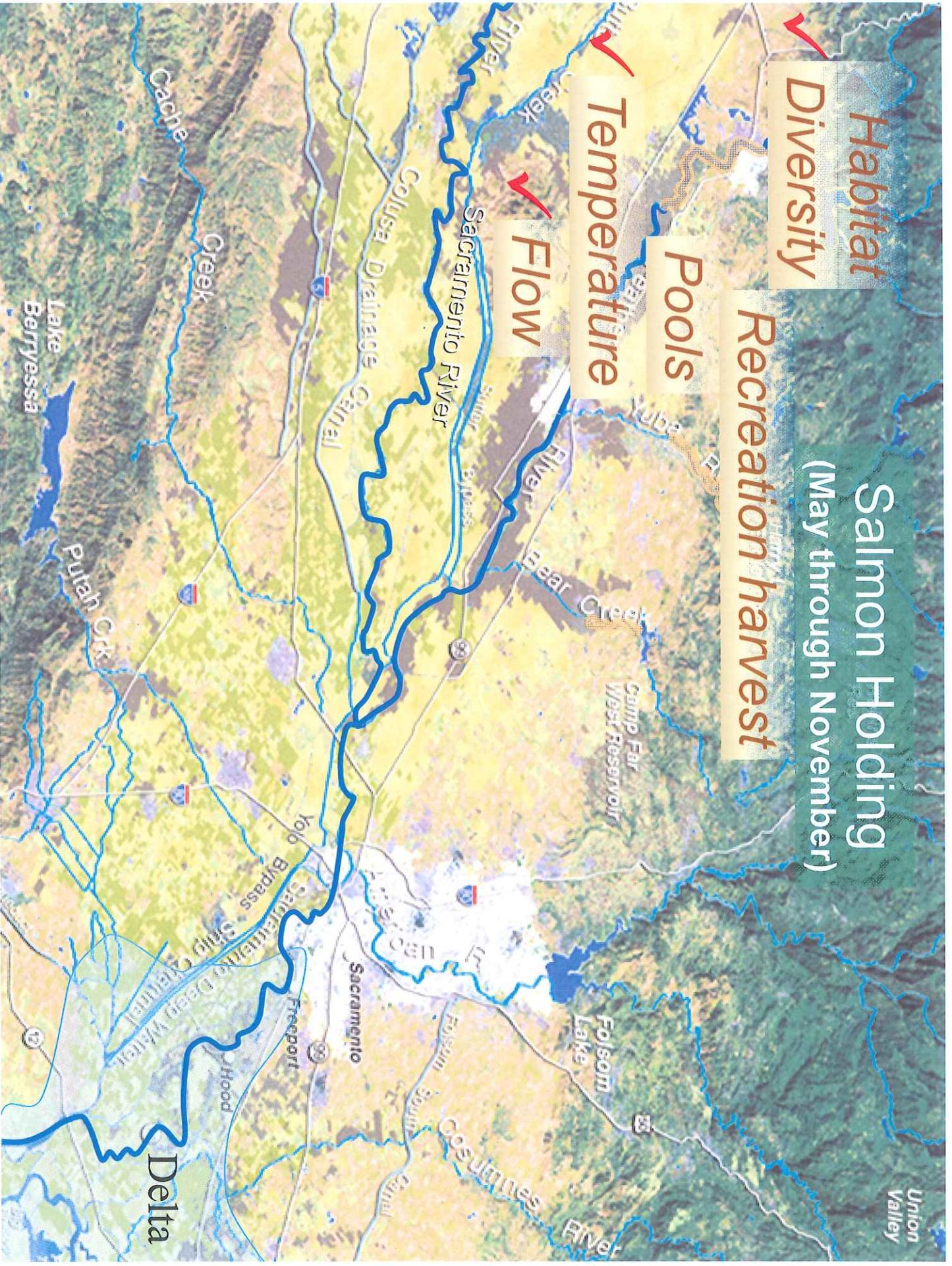
Pools

Temperature

FLOW

Recreation harvest

Salmon Holding
(May through November)



Delta

Union Valley

Salmon Spawning (September through December)

✓ **FLOW**

Riffles/

Gravel

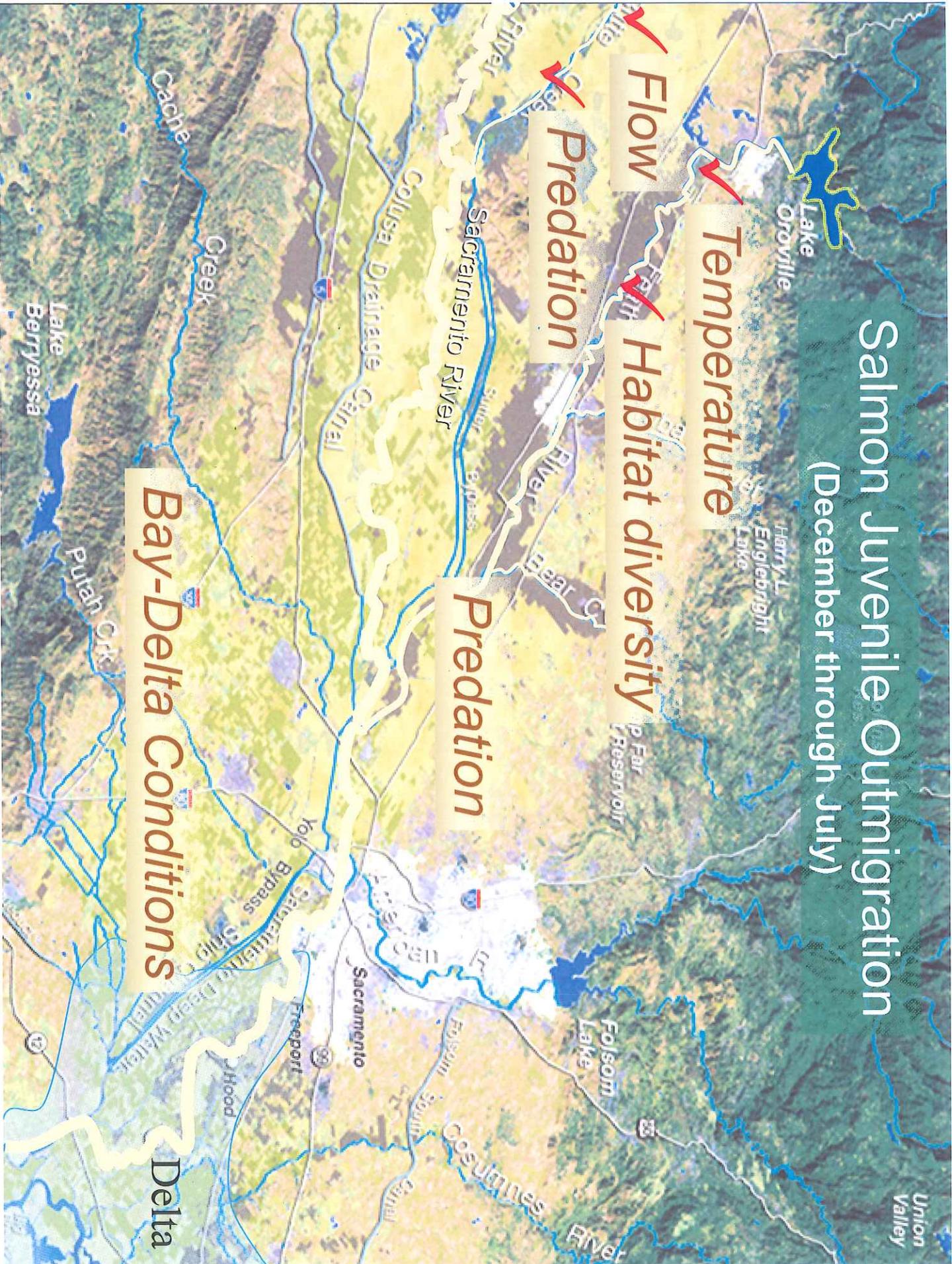
✓ **Habitat diversity**

Recreation harvest

✓ **Temperature**



Salmon Juvenile Outmigration (December through July)



Bay-Delta Conditions

Delta



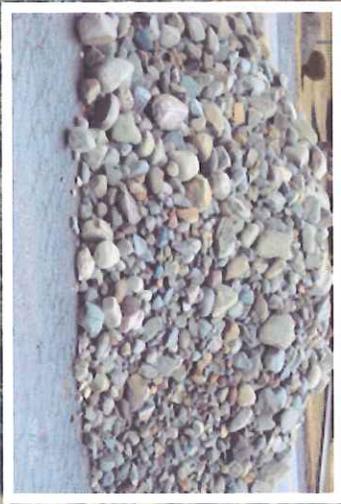
Settlement Solution

- Initial replenishment
- Monitor
- 5-year O&M review

Current Condition

Dam blocks gravel movement

Scouring flows every 5-10 years



Gravel Replenishment

(spawning, rearing: habitat diversity)

Settlement Solution

- Improve 2 existing and 4 new channels
- 5-year O&M review

Dam alters natural hydrology, flows

Current Condition

Flow condition not conducive to side-channel development



Side-Channel Development for Steelhead Trout

(holding, spawning, rearing; habitat diversity, predation)

Settlement Solution

- Initial placement
- Monitor
- 5-year O&M review

Current Condition

Dam blocks
woody debris, boulder
movement

Scouring flows every 5-10 years



Structural Habitat
Supplementation
(spawning, rearing: habitat diversity)





May

Spring-run Salmon

Spawning: August thru
early October

August

The image is an aerial photograph of a river system, likely in a rural or agricultural area. A blue line represents the river, which flows from the top right towards the bottom left. A white outline of a fish is positioned at the top right end of the river. A yellow line follows the river's path, with a red dashed line branching off to the left. A white circle is marked on the river. Text labels and arrows indicate various stages and interventions along the river's course.

Egg super-imposition

Spring-run holding

September

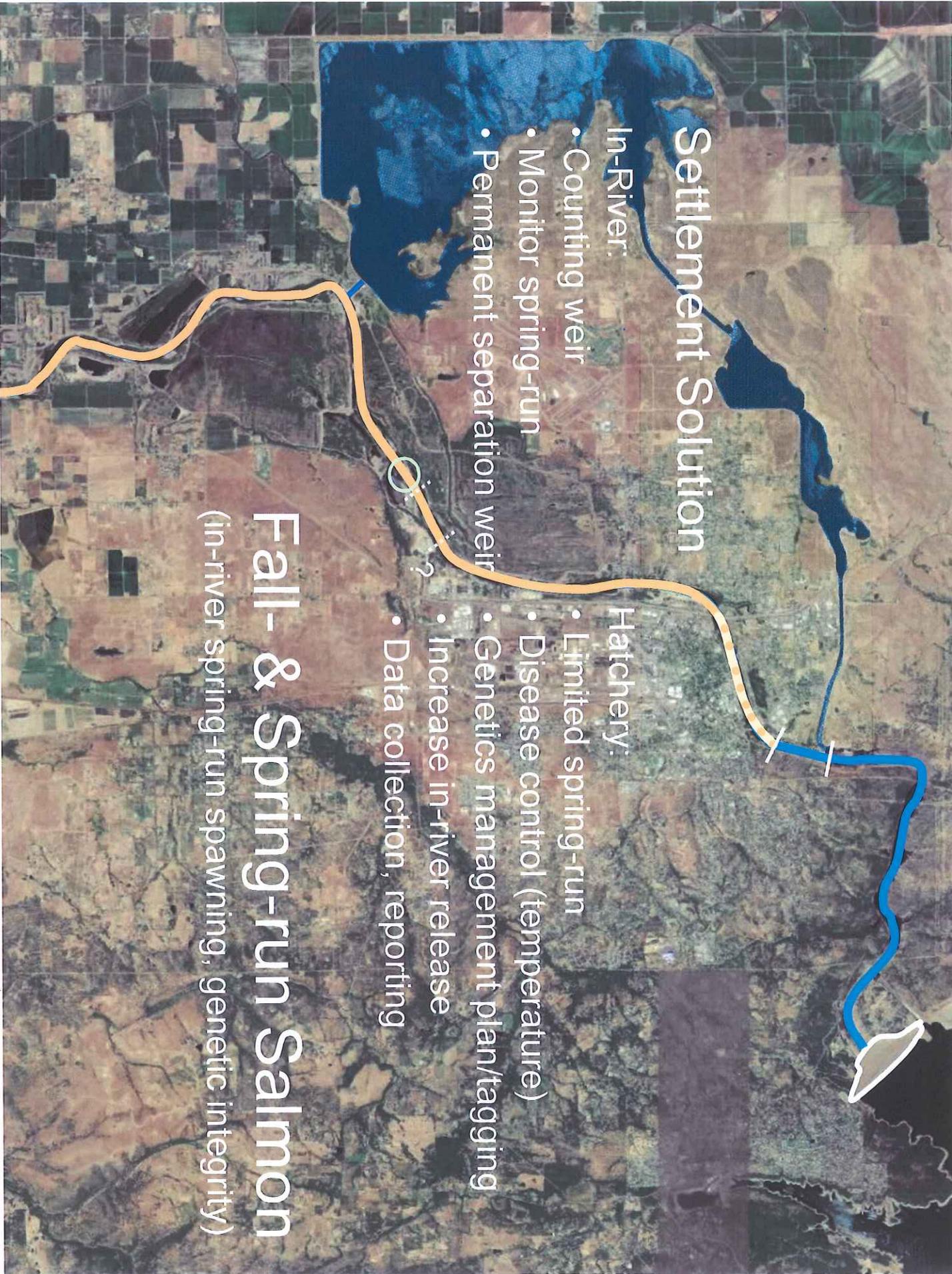
Past Solutions

- Hatch/rear spring-run in hatchery
- Truck to Bay area
- Genetic integrity concerns

Spawning: mid September thru December

Fall- & Spring-run Salmon
(in-river spring-run spawning, genetic integrity)

August



Settlement Solution

In-River:

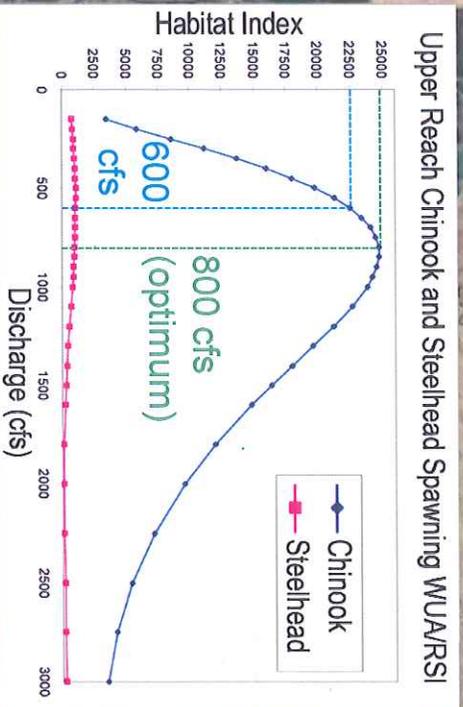
- Counting weir
- Monitor spring-run
- Permanent separation weir

Hatchery:

- Limited spring-run
- Disease control (temperature)
- Genetics management plan/tagging
- Increase in-river release
- Data collection, reporting

Fall- & Spring-run Salmon

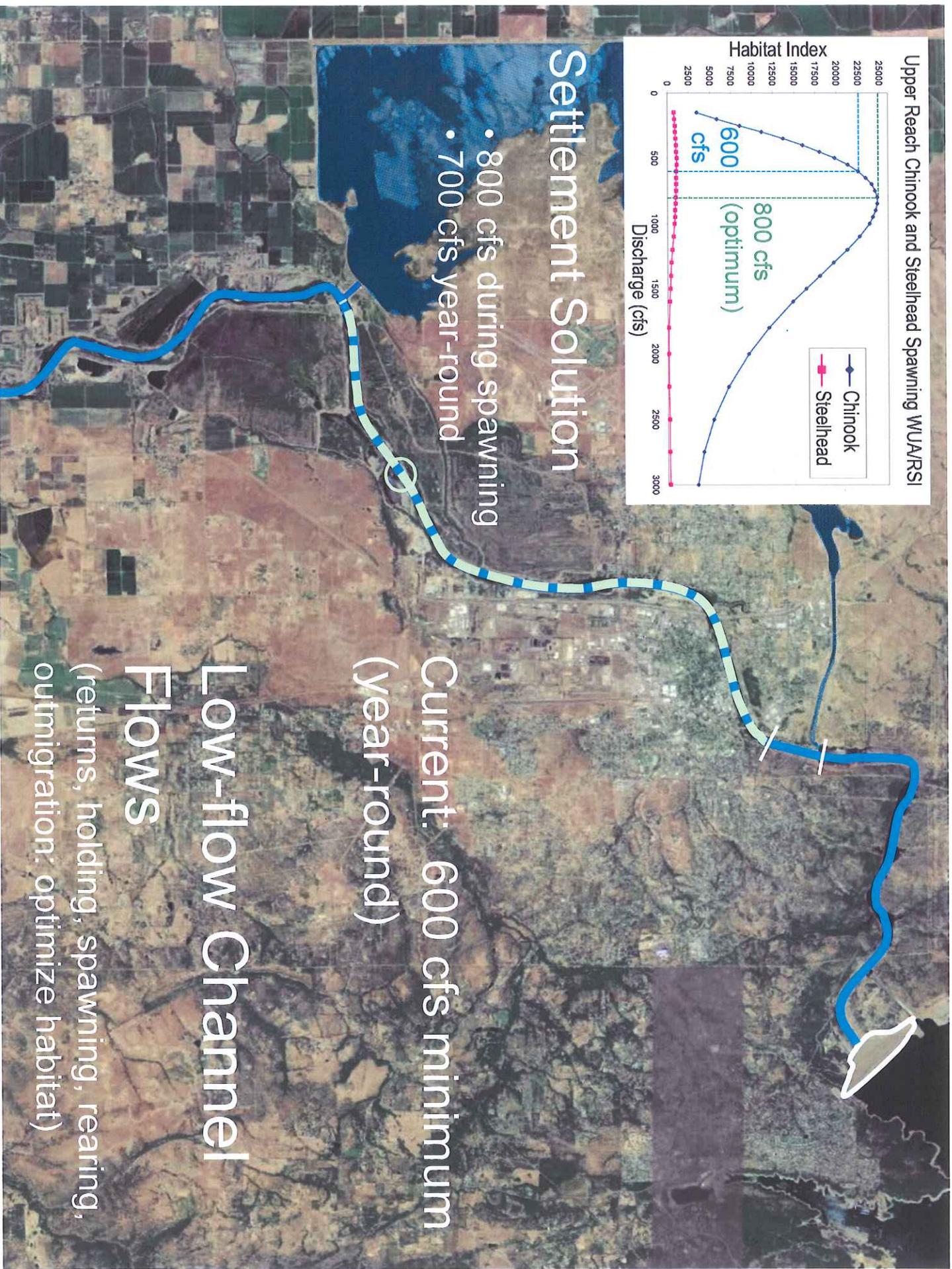
(in-river spring-run spawning, genetic integrity)



Upper Reach Chinook and Steelhead Spawning WUARSI

Settlement Solution

- 800 cfs during spawning
- 700 cfs year-round



Current: 600 cfs minimum
(year-round)

Low-flow Channel

Flows

(returns, holding, spawning, rearing, outmigration: optimize habitat)



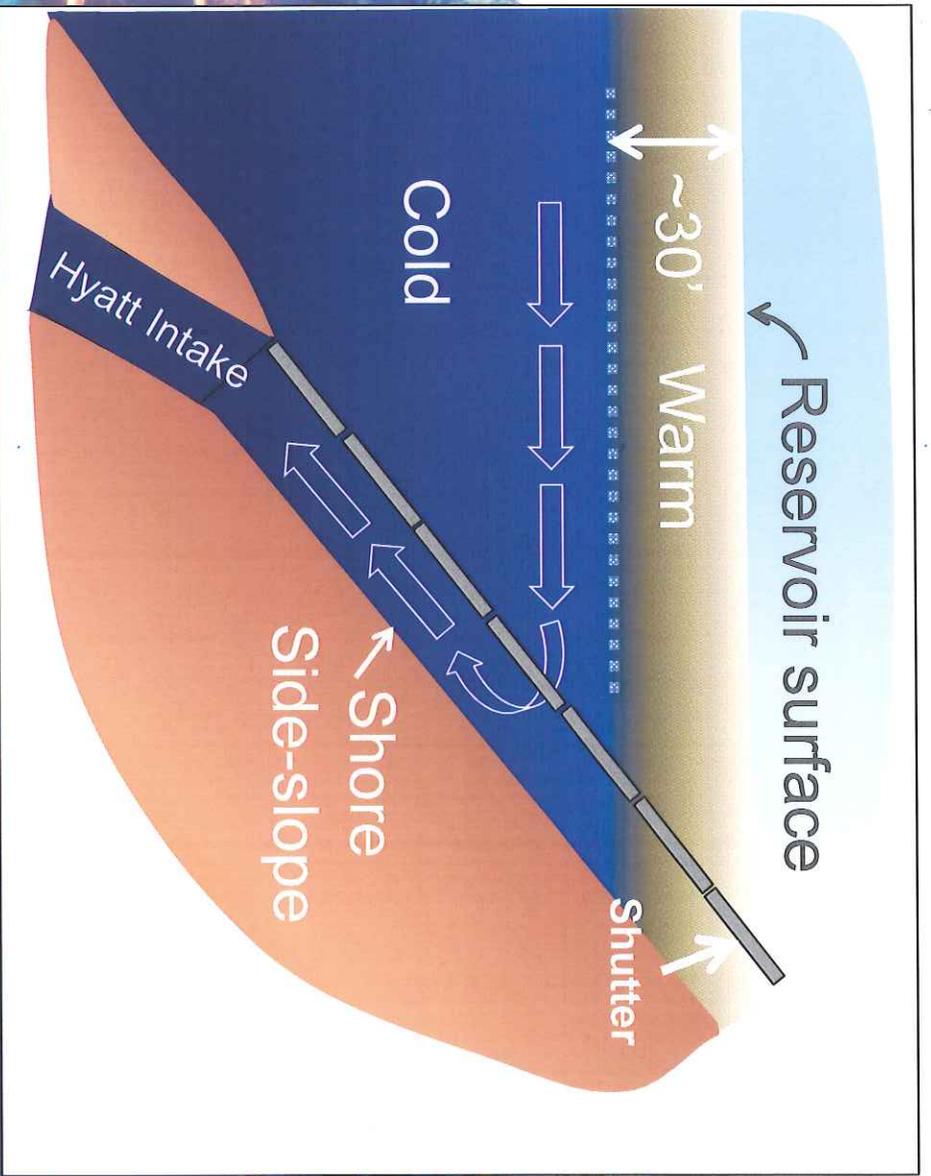
Hyatt
Intake

Influencing factors

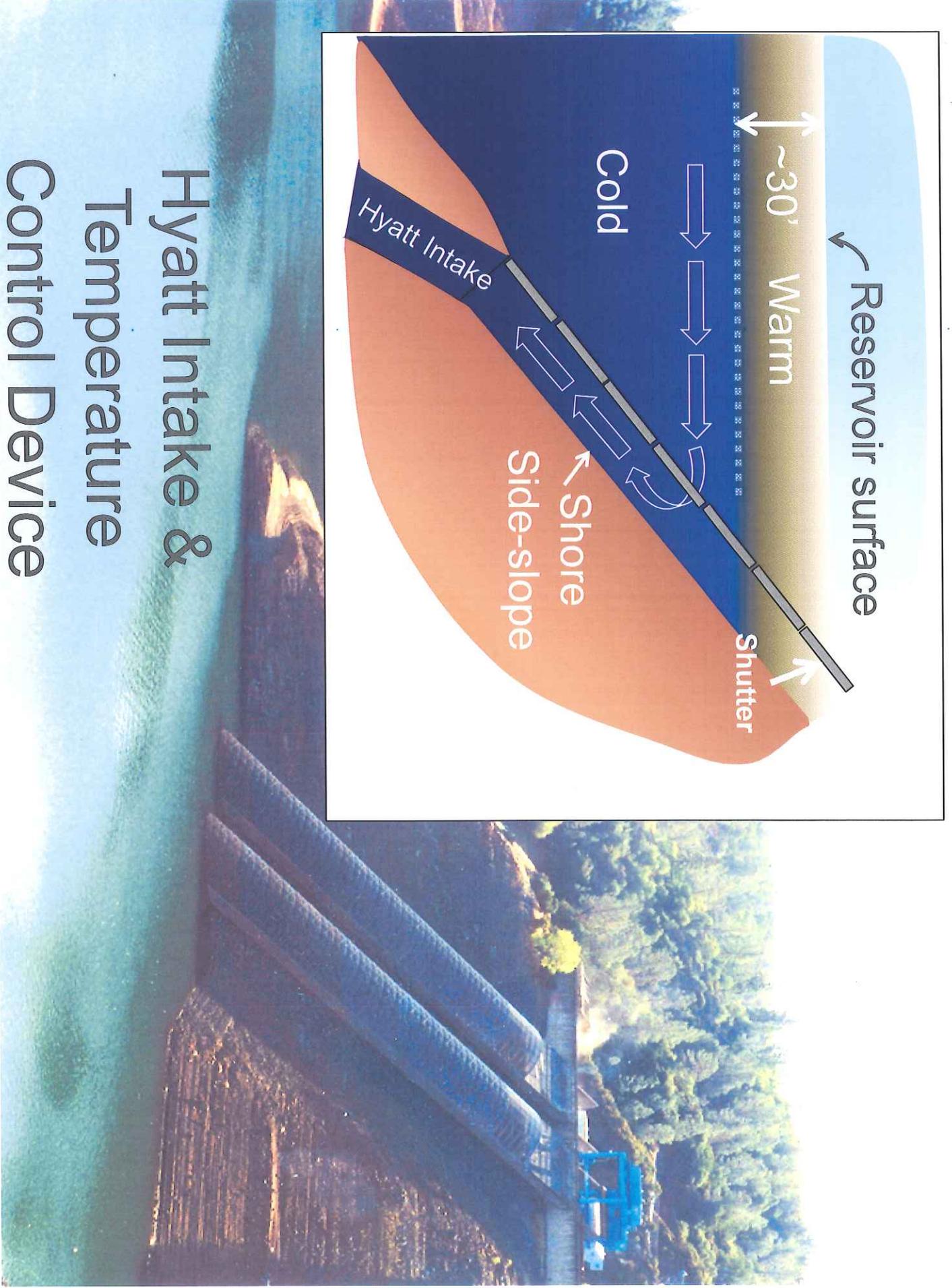
- Source temperature

Cold Water Access

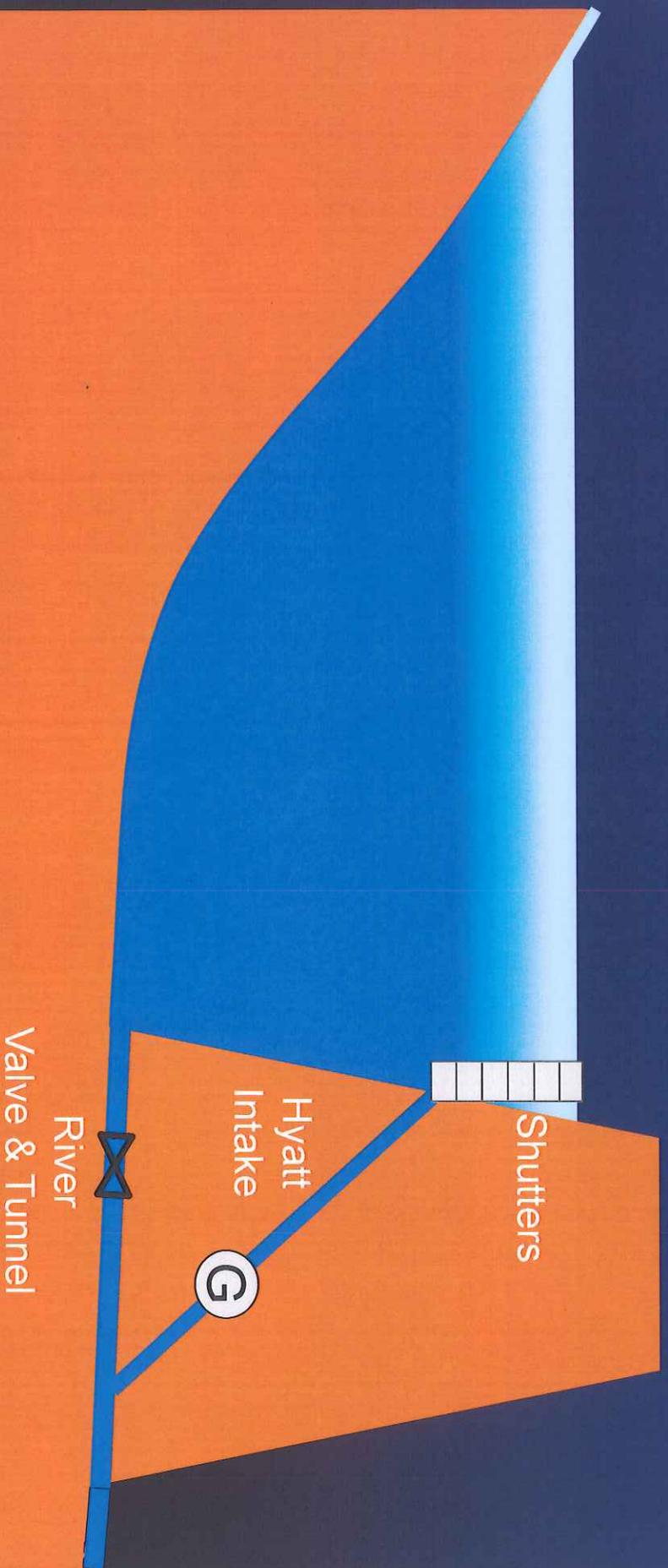
(returns, holding, spawning, rearing,
outmigration: temperature, predation)



Hyatt Intake & Temperature Control Device



Oroville Dam Water Access

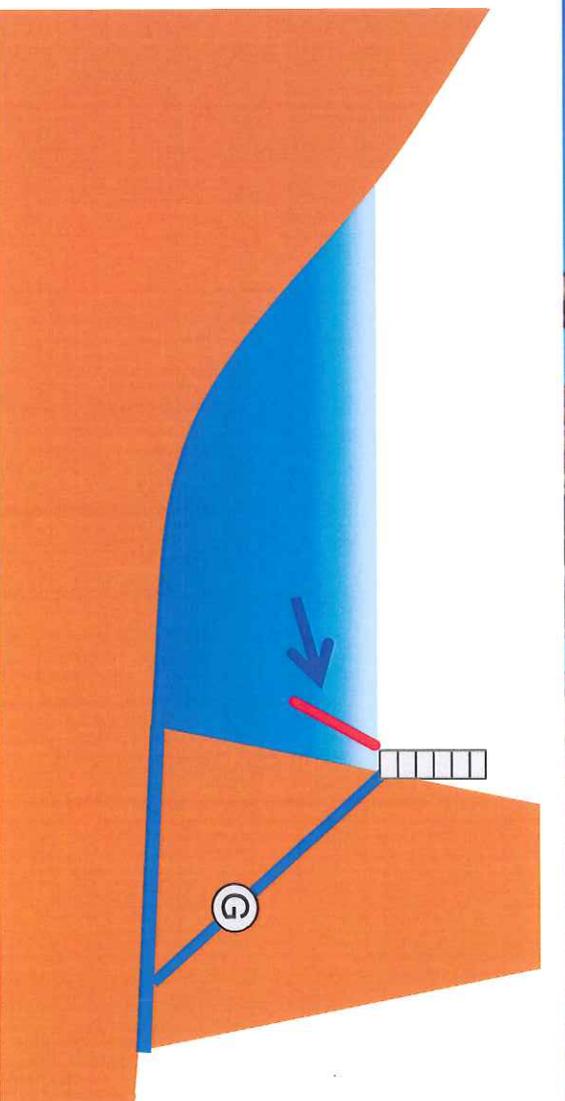


Water Temperature Management



Settlement: Recon Study

- “Elephant trunk”
- 8-15 Month River Release Curtailment
- River valve re-design
- Deep Water Construction Environment



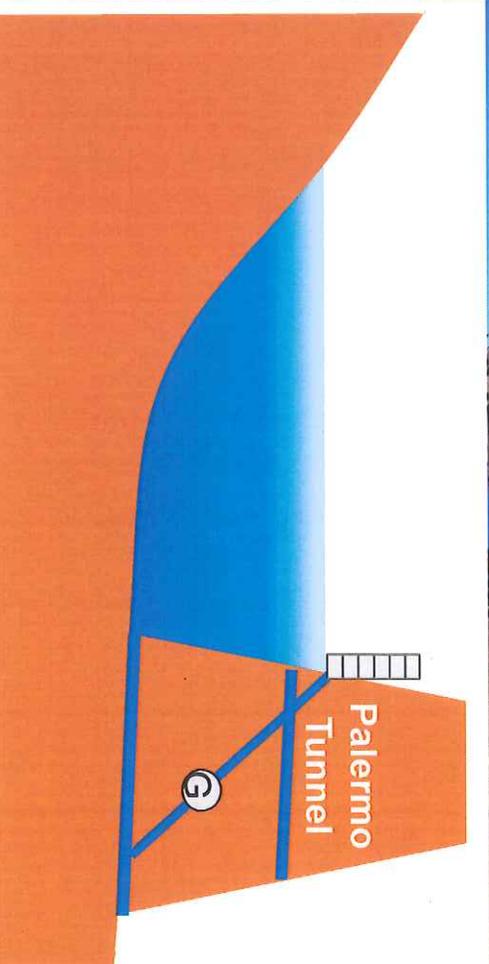
Influencing factors

- Source temperature
- Weather
- Water velocity/flow

Water Temperature Management

Settlement: Recon Study

- “Elephant trunk”
- 8-15 Month River Release Curtailment
- River valve re-design
- Deep Water Construction Environment
- Palermo tunnel
- Conduit Alignment

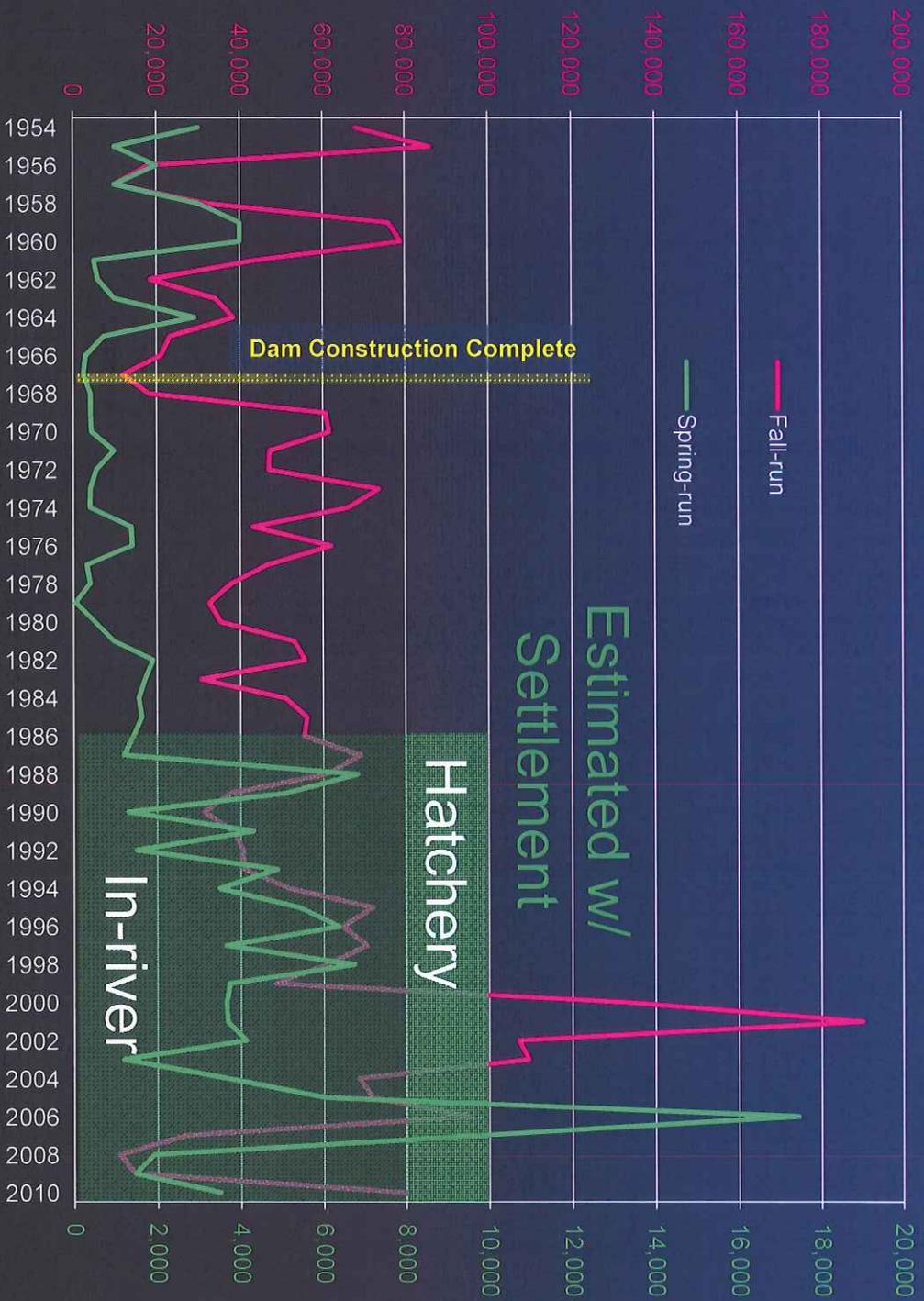


New Conduit
Ex. 25 cfs (irrigation)

Influencing factors

- Source temperature
- Weather
- Water velocity/flow

Salmon Returns



Questions?

Curtis Creel

Professional experience

March 2005 – Present
Kern County Water Agency
Water Resources Manager

- Direct administration of contracts for imported water supplies, which includes local participation in the State Water Project.
- Direct the operations and administration of a variety of water management programs to provide for groundwater banking and development of additional surface water supplies for Kern County water districts.
- Direct Water Management Activities of the Agency including participation in Integrated Regional Water Management Planning efforts.

January 2005 – February 2005
California Department of Water Resources
Chief, Office of Water User Efficiency and Transfers

- Directed water user efficiency and water transfer activities for the Department.

January 2000 – December 2004
California Department of Water Resources
Chief, Project Operations Planning Branch

- Directed and coordinated scheduling of State Water Project operations, monitoring of SWP Delta environmental compliance, SWP operations reporting and record keeping, and special operations studies.
- Performed duties as the Resource Area Manager of Operations for FERC Relicensing Program which included overseeing the development of analysis tools and operational models that could be used to assess alternative operations of the Oroville Facilities.

June 1997 – December 1999
California Department of Water Resources
Engineering Assistant to Chief Deputy Director

- Provide technical consultation and advice on policy matters regarding the day-to-day operations of the Department.
- Communicate policy directives to Department staff.
- Act as the Chief Deputy Director's representative to other State and federal agencies.
- Act as the Department's Information Security Officer

July 1995 – May 1997
California Department of Water Resources
Chief, Delta Environmental Compliance Section

- Directed the review of Delta water quality, operations, and biological data.
- Recommended operational strategies to meet specific water quality, biological, and hydrodynamic objectives.

June 1992 – June 1995

California Department of Water Resources

Chief, Compliance Monitoring Section

- Reviewed Delta water quality and operations.
- Recommended operational strategies to meet specific water quality objectives.
- Inspected SWP facilities for compliance with hazardous materials storage and recycling.
- Facilitated inspections of SWP facilities by Federal Energy Regulatory Commission.

March 1986 – May 1992

California Department of Water Resources

Junior Civil Engineer/Assistant Engineer, Water Resources/Associate Engineer, Water Resources

- Developed complex mathematical models of hydrologic, hydraulic, and electrical features of the SWP.
- Assisted in special studies of SWP operations.
- Tested and analyzed modeling techniques for proper application of engineering principles.

Consulting Experience

April 5, 1991 to April 13, 1991

Korean Water Company, South Korea

As an expert in the application of mathematical modeling to water resources management, presented various aspects of environmental systems modeling. The presentation included optimization techniques, simulation techniques, and model representation of power contracts related to operation of a multi-reservoir system.

Education

March 1986

Humboldt State University, Arcata, California

Bachelors of Science – Environmental Resources Engineering

Professional License

Civil Engineer

Issued July 17, 1989, California Registration Number: C 044683

Publications

Sabet, M. Hossein, Creel, Curtis, L. "Network Flow Modelling of Oroville Complex", J. Water Resour. Planning and Mgmt., ASCE, 3(2), 1991.

Sabet, M. Hossein, Creel, Curtis, L. "Model Aggregation for the California State Water Project", J. Water Resour. Planning and Mgmt., ASCE, 117(5), 1991.

Charles H. Hanson
Senior Fishery Biologist

Education

Ph.D. Ecology and Fisheries Biology, University of California, Davis, 1980
M.S. Fisheries Biology, University of Washington, 1973
B.S. Fisheries Biology, University of Washington, 1972

Certification

Certified Fisheries Biologist
American Fisheries Society

Experience

Dr. Hanson has more than 31 years of experience in freshwater, estuarine, and marine biological studies. Dr. Hanson has contributed to the study design, analysis, and interpretation of fisheries, stream habitat, and stream flow (hydraulic) data used to develop habitat restoration strategies, Habitat Conservation Plans, Endangered Species Act consultations, and environmental analyses. Dr. Hanson has conducted evaluations of the effectiveness of various water diversion fish screening systems, assisted in fish screen design and permitting, and developed operational modifications to reduce organism losses while maintaining operational reliability of the water projects and hydroelectric systems. He has directed numerous investigations and environmental impact analyses for projects sited in freshwater, estuarine, and marine environments of the San Francisco Bay/Delta, the central and northern California Coast, Puget Sound, Hudson River, and Chesapeake Bay. Dr. Hanson has participated as an expert witness on fisheries and water quality issues in numerous public hearings and superior court litigation. Dr. Hanson has been extensively involved in incidental take monitoring and investigations of endangered species, development of recovery plans, consultations, listing decisions and identification of critical habitat, and preparation of aquatic Habitat Conservation Plans. Dr. Hanson served as a member of the USFWS Native Delta Fish Recovery Team, Central Valley Technical Recovery Team, 2007 USFWS Delta Smelt Recovery Team, numerous technical advisory committees, and as science advisor to settlement negotiations. Dr. Hanson has directed studies on the effects of selenium on waterbird reproduction and designed compensation wetland habitat. Dr. Hanson has also participated in the development of adaptive management programs including real-time monitoring, management of power plant cooling water and other diversion operations, and the San Joaquin River Vernalis Adaptive Management Plan (VAMP). Dr. Hanson has authored more than 75 technical and scientific reports.

1991-Present *Senior Biologist/Principal, Hanson Environmental, Inc.*

Provides services in the design, execution, and interpretation of biological monitoring, fishery sampling, and regulatory compliance programs. Prepares technical compliance reports and exhibits for submittal to regulatory agencies, public hearings, and litigation. Presents findings to the public and press and presents expert witness testimony in litigation and regulatory hearings. Develops the design, implementation, and performance monitoring of habitat enhancement and mitigation projects to benefit fish and wildlife.

- 1982-1991** ***Senior Biologist, Vice President, TENERA, L.P***
Provided services related to the collection, analysis, and interpretation of biological and engineering data, preparation of documents submitted to regulatory agencies, presentation of findings to the public and press, and presentation of expert testimony in regulatory hearings.
- 1978-1982** ***Senior Scientist, Ecological Analysts, Inc.***
Responsible for the collection, analysis, and interpretation of data on the abundance, distribution, and dynamics of various fisheries and invertebrate populations for use in evaluating the impact of power plant operations on aquatic populations for more than ten coastal and estuarine power plant sites in California. Prepared various regulatory environmental exhibits, technical reports, and generic and site-specific analyses of biological and engineering information for the applicability of alternative cooling water intake technologies.
- 1975-1978** ***Research Assistant, University of California, Davis***
Conducted extensive investigations into behaviorally selected and energetically optimal swimming speeds of juvenile fish in relationship to selected microhabitats to help in establishing a data base and methodology for determining instream flow criteria. Conducted laboratory studies on the swimming performance and behavioral responses of fish to hydraulic gradients to develop biological design criteria for water intake systems.
- 1973-1975** ***Research Scientist, The Johns Hopkins University***
Conducted fishery and zooplankton surveys in freshwater and marine environments along the Atlantic coast. Evaluated the acute and chronic effects of exposure to elevated water temperatures on freshwater and marine fish and invertebrates. Developed onsite and mobile bioassay laboratory facilities.
- 1969-1973** ***Research Assistant, University of Washington***
Conducted bioassays to determine the synergism between elevated water temperature and duration of exposure on the toxicity of chlorine to two species of salmon. Determined the effectiveness of various techniques, including use of chlorine and thermal shock treatment in minimizing colonization by marine fouling organisms. Evaluated the acute and chronic effects of exposure to elevated water temperature on freshwater and marine fish and invertebrates. Participated in the evaluation of the behavioral attraction and avoidance of response of juvenile fish to thermal and chemical gradients.

Professional Associations

American Fisheries Society (Life Member)
American Institute of Fisheries Research Biologists (past Program Committee Chairman)
Pacific Fisheries Biologists (past Program Chairman)
Who's Who in the West
San Francisco Bay and Estuarine Society (past President)

Technical Advisory Committees

State Water Resources Control Board Striped Bass Workshop
American River Technical Advisory Committee
Mokelumne River Technical Advisory Committee
Santa Ynez River Technical Advisory Committee
Bay-Delta Oversight Committee (BDOC) Aquatic Resources
USFWS Delta Native Fish Recovery Team
CVPIA Striped Bass Technical Team

Publications:

- Davies, R.M., C.H. Hanson, and L.D. Jensen. 1976. Entrainment of zooplankton into a mid-Atlantic power plant - delayed and sublethal effects in Thermal Ecology II (G.W. Esch and R.W. McFarlane, eds.), pp. 349-357. U.S. Energy Res. and Develop. Admin., Report No. CONF-750425.
- Davis, D.E., C.H. Hanson, R.B. Hansen. 2007. Constructed Wetland Habitat for American Avocet and Black-necked Stilt Foraging and Nesting. *Journal of Wildlife Management*. In publication.
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