

# **Nimbus Hatchery Fish Passage Project**

**Public Scoping Meetings to prepare the  
Environmental Impact Statement/  
Environmental Impact Report (EIS/EIR)**

**Thursday, April 30, 2009**

Nimbus Hatchery Fish Passage Project

# Project is a Joint Effort by:



Bureau of Reclamation  
Central California Area Office

- Area Manager – Michael R. Finnegan
- Project Manager – David Robinson



California Department of Fish and Game  
North Central Region

- Regional Manager – Sandra Morey
- Project Manager – Joe Johnson

# Other Interested Agencies

- California State Parks
- California Department of Boating and Waterways
- National Marine Fisheries Service

# What's New?

Name Change

CEQA Partner



# Purpose

- To create and maintain a reliable system of collecting adult fish for use in the Hatchery



# Need for Project

- Damage and deterioration of weir structure
- Operational impacts to sensitive species
- Public and worker safety concerns

# Deterioration of Weir Structure

- Erodible foundation



# Repairs and Modifications Schedule

- Reconstruct four piers (1963)
- Rebuild the fish ladder (1965)
- Fill voids in foundation (1982, 1986, 1999)
- Install angular rock upstream (1999)

# Impacts to Sensitive Fish

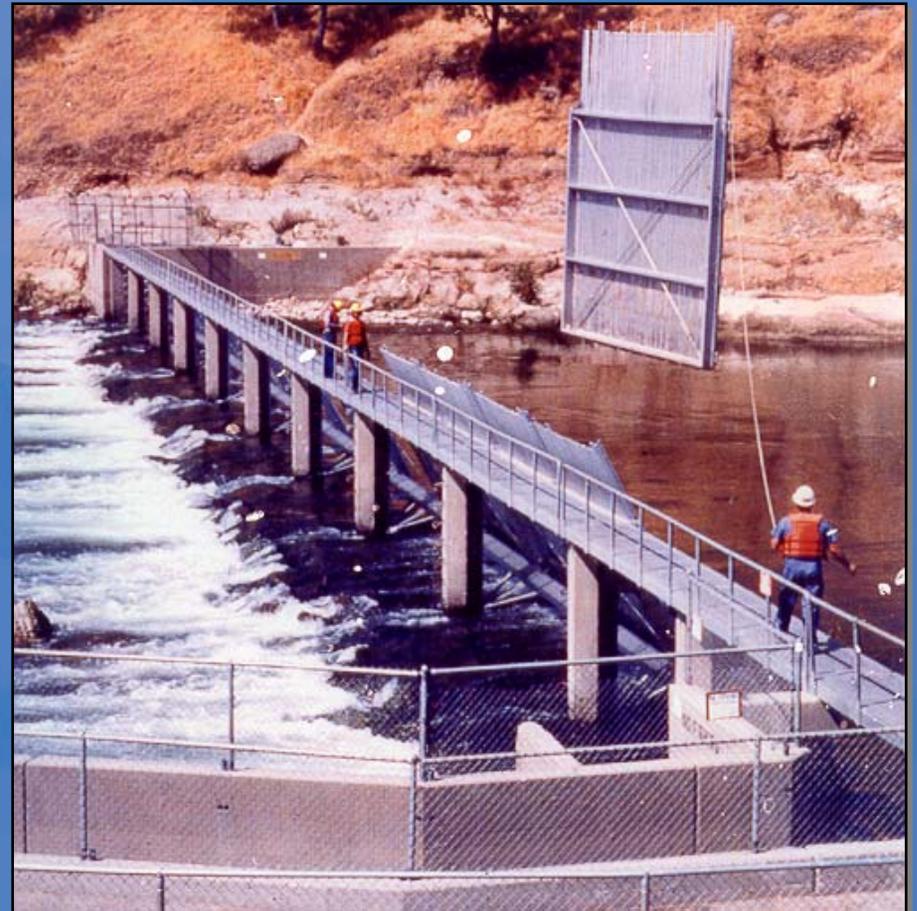
- Central Valley steelhead was listed as federally threatened March 19, 1998.
- National Marine Fisheries Service (NMFS) requested long-term solution to minimize flow fluctuations.



Photo © J.Hannon

# Safety

- Installation and removal of weir
- Debris accumulation
- Boating hazard

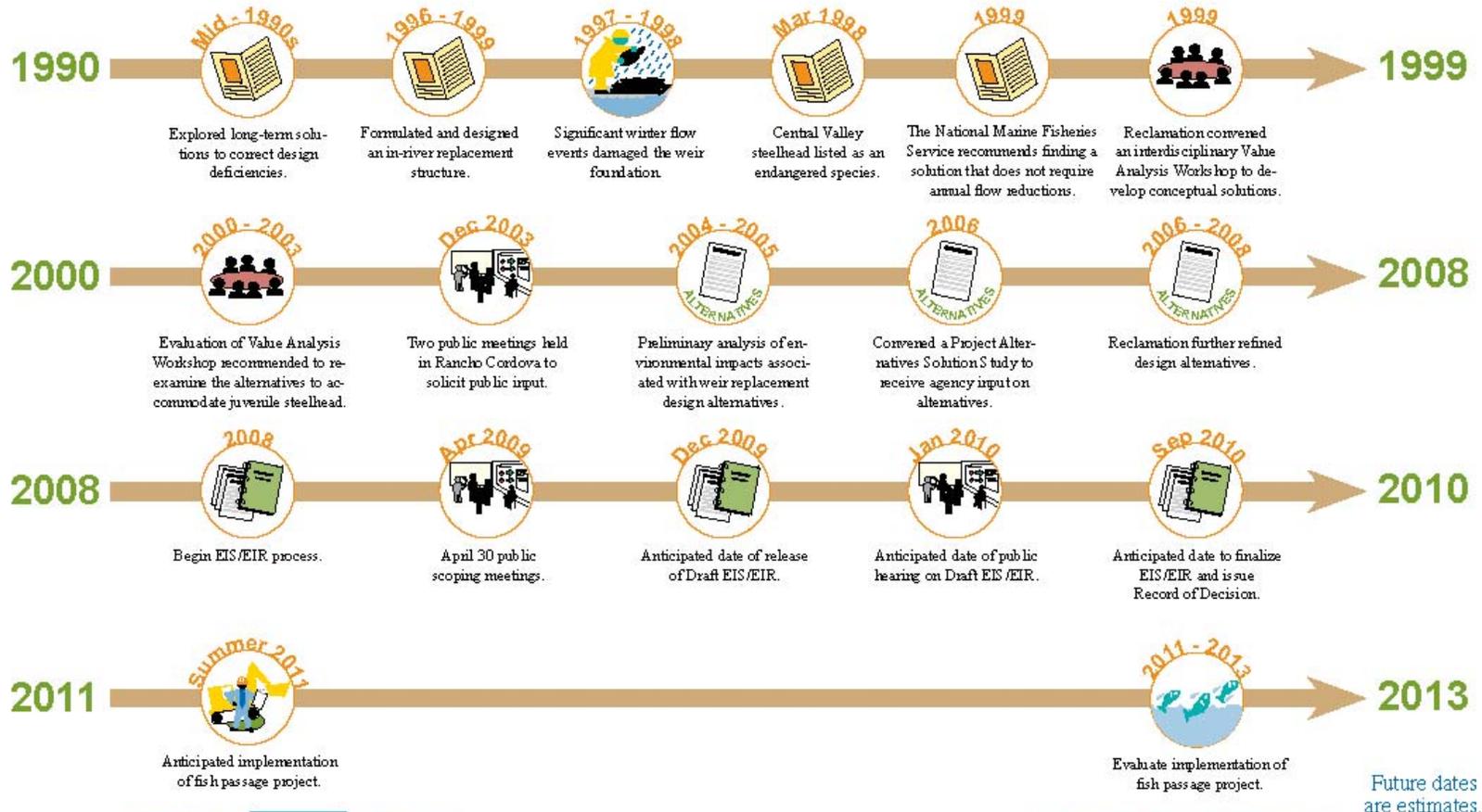


# Finding a Solution

- Feasibility and planning studies beginning in the early 1990's
- Project Alternatives Solutions Study (PASS)



# Nimbus Hatchery Fish Passage Project Schedule Milestones



# Alternatives Under Consideration

- No Action
- Replace the Fish Weir
- Extend the Ladder to Nimbus Dam and remove the Fish Weir

# No Action Alternative

- Annual flow reductions
- Periodic significant repairs
- Replacement of superstructure
- No change to fishing regulations
- No change in recreational opportunities

# Replace the Fish Weir Alternative

- Permanent structure upstream from existing weir
- Bypass to allow maintenance without lowering river flow
- Increase in O & M activities and cost
- Limited fish passage
- No change in fishing regulations
- No change in recreational opportunities

# Extended Ladder Alternative

- Existing weir no longer needed
- No need to lower river flows
- Small increase in O & M cost and effort
- Open fish passage
- Changes in visitor experience and future use opportunities
- Change in fishing regulations

# Extended Ladder Alternative

- Low gradient flume section
- Ladder section
- Rock-lined channel fishway
- Supplemental attraction flow
- Construct fishway in first 10-12 months
- Monitor performance 1-2 years
- Remove weir structure from river in year 3 or 4

# Feather River Hatchery Ladder



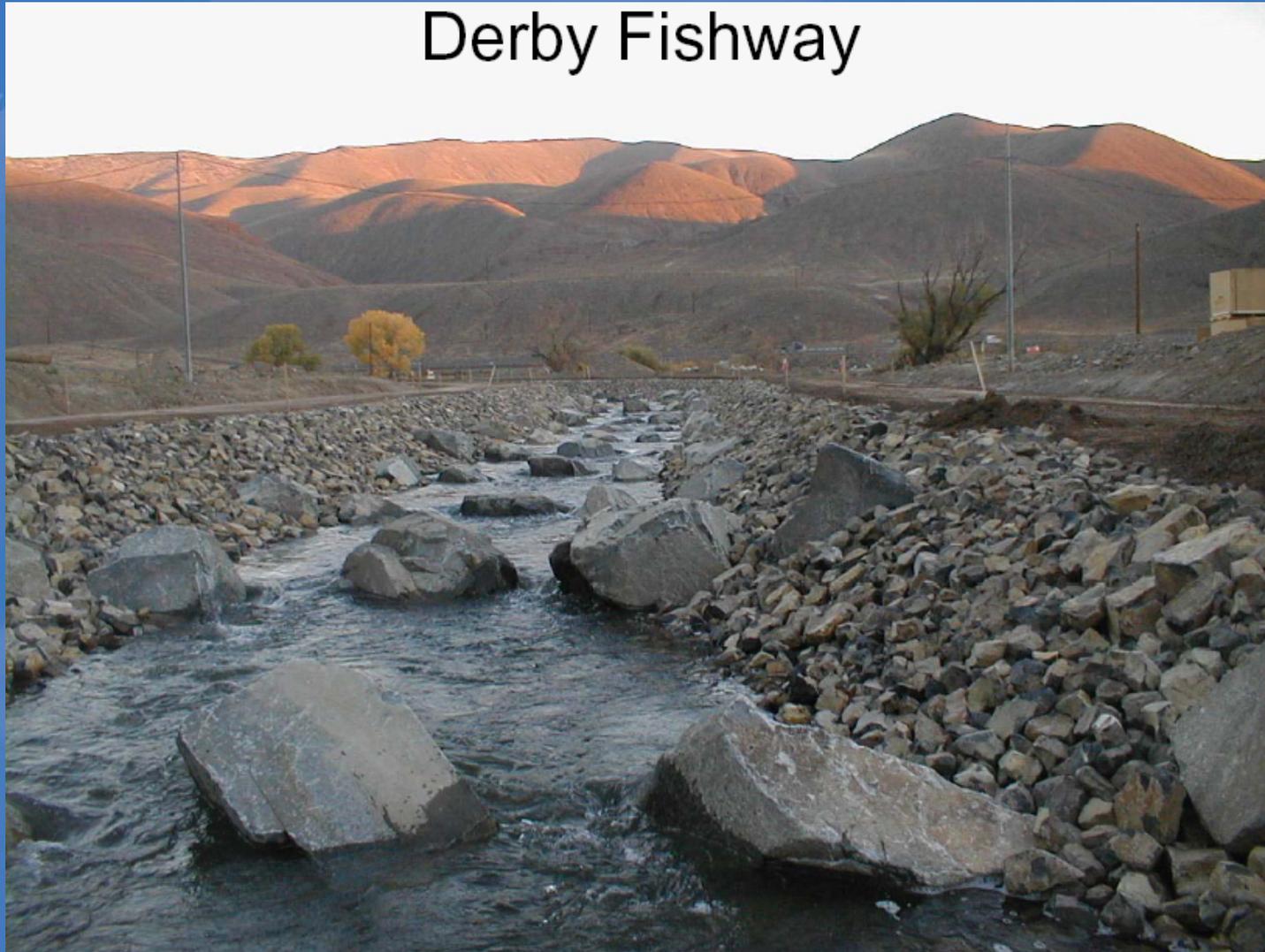
Low-gradient flume



Underwater fish viewing

# Rock Lined Fishway

## Derby Fishway



# Alternative Features

<b>Replace Weir</b>	<b>Extend Ladder</b>
No flow reductions	No flow reductions
Limited fish passage	Open fish passage
Increased O&M	Small increase in O&M
No change in fishing regulations	Change in fishing regulations
No change in recreation opportunities	Change in recreation opportunities
Estimated cost <sup>1</sup> = \$ 9.5 million	Estimated cost <sup>1</sup> = \$ 4.7 million

<sup>1</sup> Estimated Costs from 2006 PASS

# Potential Impacts and Areas of Interest

## Construction Impacts

- Noise
- Traffic
- Lighting
- Access
- Dust



# Potential Impacts and Areas of Interest



Changes to Hatchery Visitation Opportunities

# Potential Impacts and Areas of Interest

- Access and use of Nimbus Shoals
- Changes in fishing regulations



# Nimbus Hatchery Fish Passage Project Regulations Alternatives



# Fishing Regulation Changes?

- No Action Alternative and Alternative 2 would not require the modification of current Fishing Regulations.
- Alternative 1 would require Fishing Regulation changes for the protection of Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley steelhead trout (*Oncorhynchus mykiss*) in the lower American River.

# Proposed Fish Ladder & Fish and Game Regulation 2.35

- Alternative 1 would result in a new fish ladder extending into the Nimbus Basin.
- Fish and Game Regulation 2.35
  - No fish may be taken within 250 feet of:
    - (a) Any fishway or egg-taking station.
    - (b) Any dam or any weir or rack which has a fishway or egg-taking station.

# Current American River Fishing Regulations

Area or Body of Water	Open Season	Bag Limit
(A) From Nimbus Dam to the Hazel Avenue bridge piers	All year	1 hatchery trout or 1 hatchery steelhead** 0 salmon
(B) From Hazel Avenue bridge piers to the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site	Jan. 1 through Sept. 14  Only barbless hooks may be used	1 hatchery trout or 1 hatchery steelhead** 0 salmon

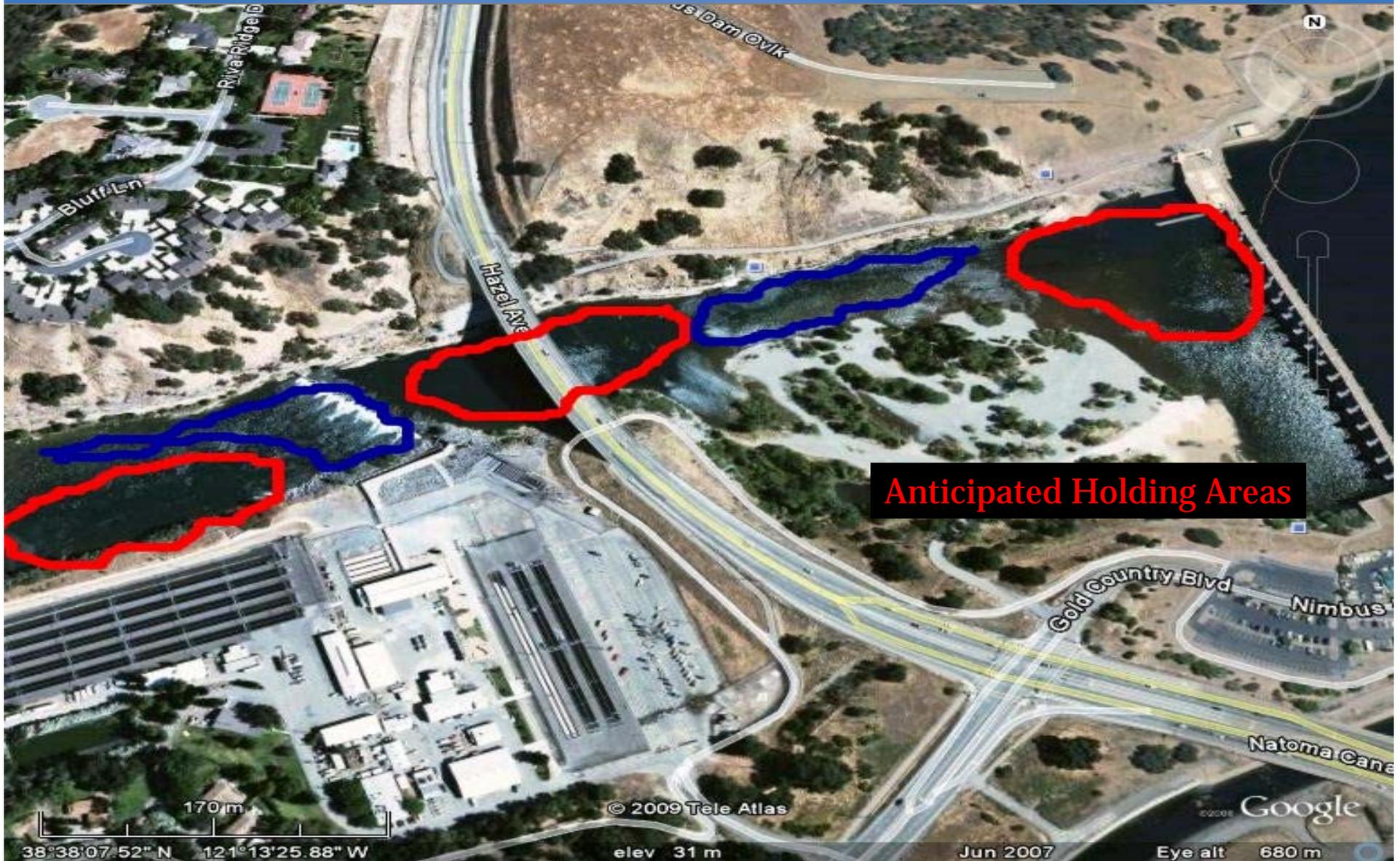
# Current American River Fishing Regulations



**Current Fishing  
Regulation 7.50 (b) (5) (B)  
Jan. 1 through Sept. 14**

**Current Fishing  
Regulation 7.50 (b) (5) (A)  
Open All Year**

# Salmon Holding Areas



# Nimbus Hatchery Fish Passage Project



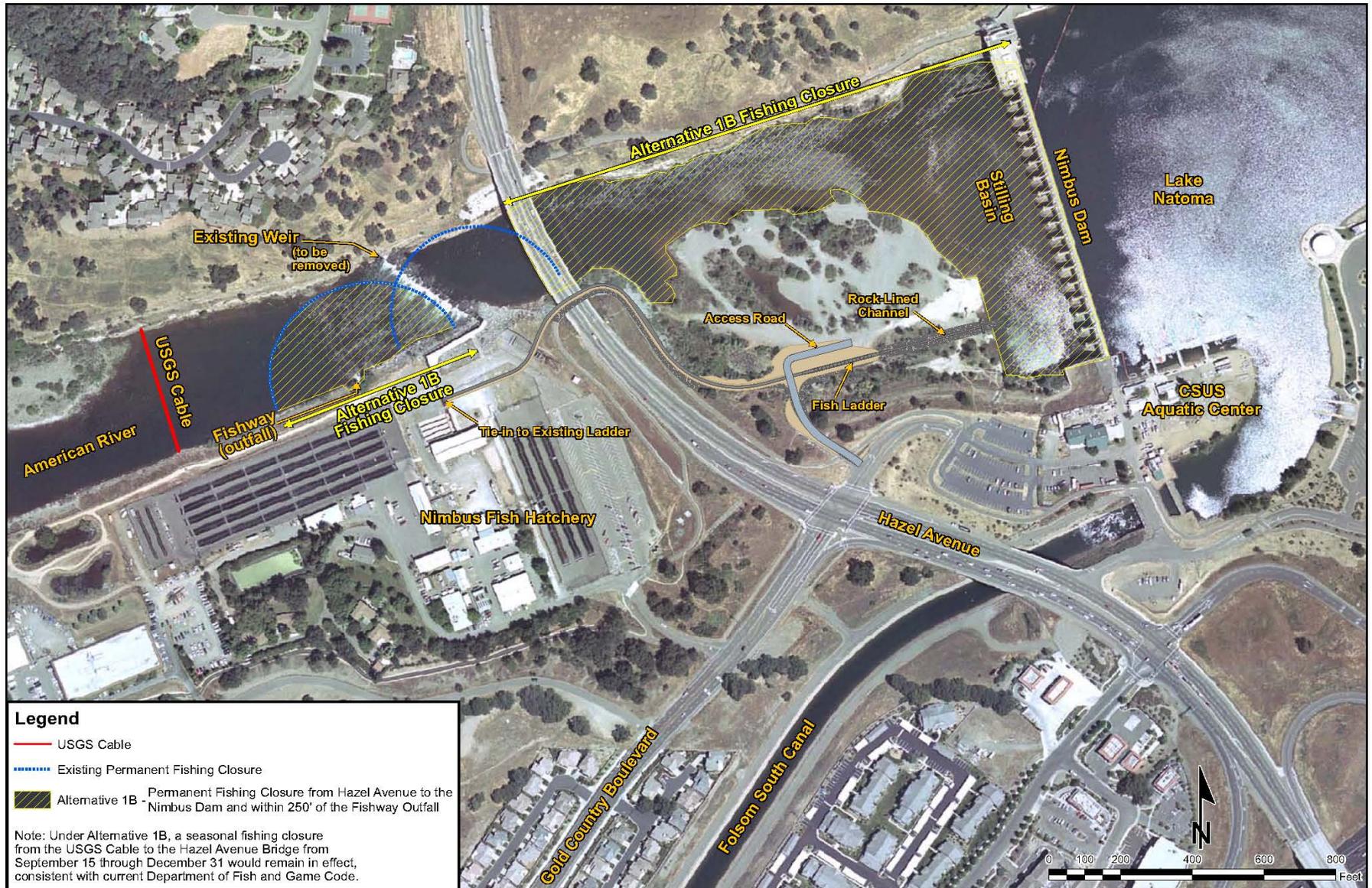
**Alternative 1A - Modified Fishway**

# Proposed American River Fishing Regulations

## Alternative 1B

Area or Body of Water	Open Season	Bag Limit
(A) From Nimbus Dam to the Hazel Avenue bridge piers	Closed to all fishing all year.	0
(B) From Hazel Avenue bridge piers to the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site	Jan. 1 through Sept. 14. Only barbless hooks may be used.	1 hatchery trout or 1 hatchery steelhead** 0 salmon

# Nimbus Hatchery Fish Passage Project



**Alternative 1B - Modified Fishway**

# Proposed American River Fishing Regulations

## Alternative 1C

Area or Body of Water	Open Season	Bag Limit
(A) From Nimbus Dam to the U.S. Geological Survey gauging station cable crossing.	Closed to all fishing all year	0

# Nimbus Hatchery Fish Passage Project



Alternative 1C - Modified Fishway

# Sailor Bar 2004



Nimbus Hatchery Fish Passage Project

## Anticipated Schedule

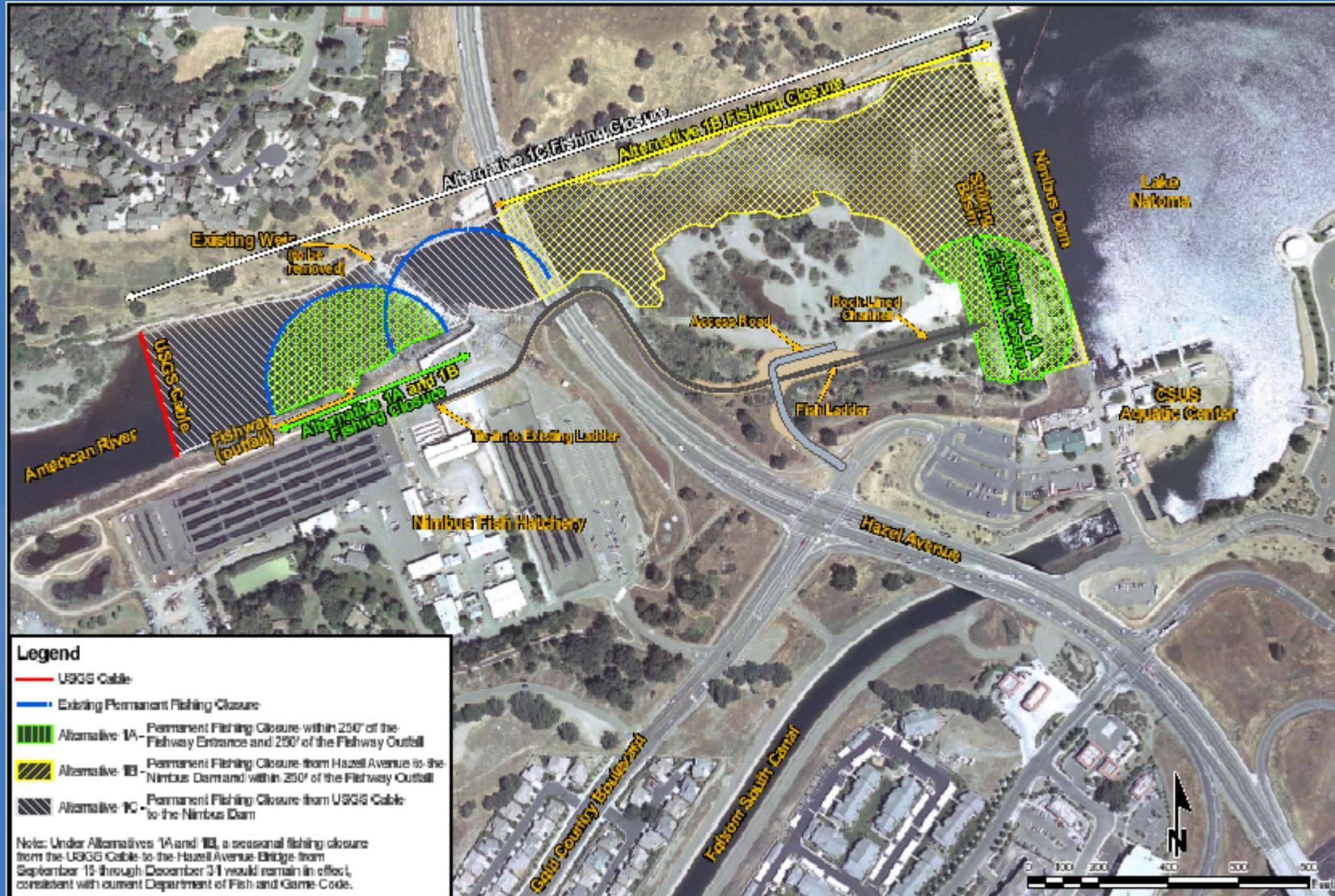
- Scoping Comments Due May 28, 2009
- Draft EIS/EIR December 2009
- Review Period January – March 2010
- Public Hearing January 2010
- Final EIS/EIR August 2010
- Record of Decision September 2010

An aerial photograph showing a river flowing through a landscape. On the right side, a large dam with multiple spillways is visible. A multi-lane highway runs parallel to the river, crossing it via a bridge. In the lower-left quadrant, there is a large industrial or agricultural facility, identified as the Nimbus Hatchery, with several large rectangular tanks and buildings. The surrounding terrain is a mix of dry grass and scattered trees. The word "Questions?" is overlaid in white serif font in the upper right portion of the image.

Questions?

Nimbus Hatchery Fish Passage Project

# Alternative 1. Modified Fishway



# Alternative 2. Diversion Weir Replacement Structure

