

# Water Education Foundation

## BAY-DELTA TOUR

7-22-15 Board meeting



# Tour Focus

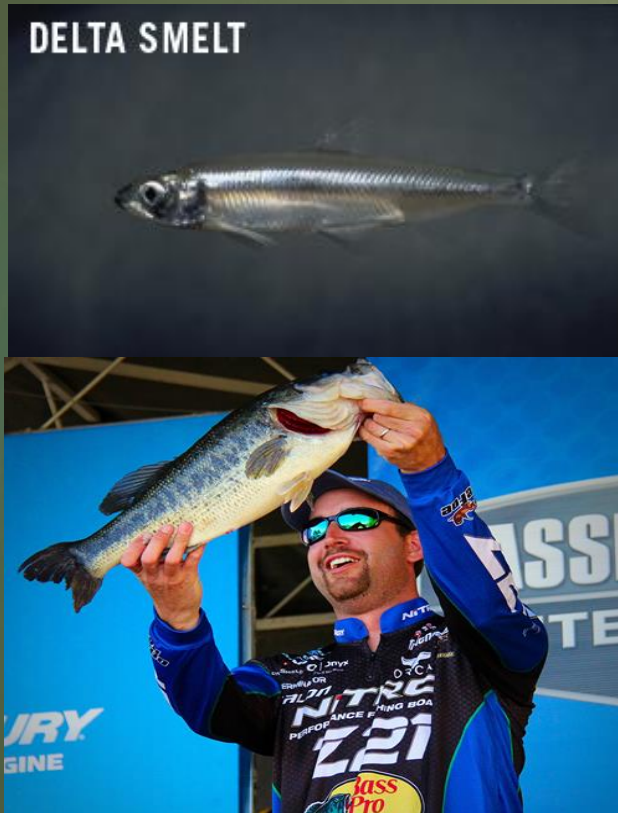


- Ecology of the Bay and the Delta
- Delta Water and Land Uses
- Environmental Issues and Restoration Efforts
- Water Export Operations
- Debate over California Water Fix



# Or in Simpler Terms

■ Fish



Farming

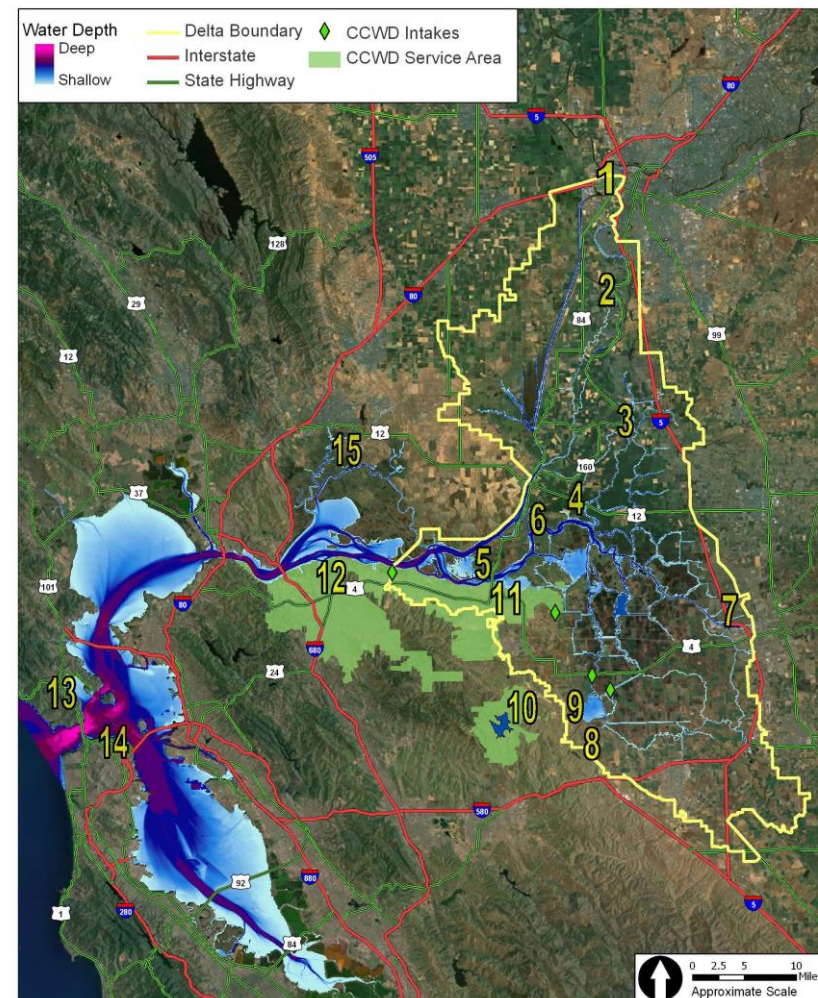


Flow





# Bus Tour Itinerary



## Day 1

- 1 West Sacramento
- 2 Clarksburg
- 3 Delta Cross Channel
- 4 Isleton Farmers Market
- 5 Sherman Island
- 6 Twitchell Island
- 7 Stockton

## Day 2

- 8 CVP Jones Pumping Plant
- 9 SWP Fish Salvage Facility and UCD Fish Conservation and Culture Lab
- 10 Los Vaqueros Reservoir
- 11 Big Break Regional Shoreline
- 12 CCWD Bollman Water Treatment Plant

## Day 3

- 13 Bay Model, Sausalito
- 14 Aquarium of the Bay
- 15 Rush Ranch



3 days

12 educational stops

4 facility tours

33 Individual lectures

and.....



# Bay Delta Issues



- ▶ Fragile Levees
- ▶ Water Quality
- ▶ Declining Environment
- ▶ Restricted Water Exports

# Who cares?

- ▶ Environmentalists
- ▶ Delta Farmers
- ▶ Central Valley Farmers
- ▶ Sports and Food Industry Fishing
- ▶ The Majority of Central and Southern California

# How Does This Impact PWD?

- ▶ Declining Reliability of Exports
- ▶ Environmental Restoration Costs
- ▶ Water Quality Impacts
- ▶ Potential Disruption of Service



# Invasive Species

- ▶ Over 250 invasive plant and animal species.
- ▶ Considered “the most invaded estuary in North America”
- ▶ It is estimated a new species is introduced every 14 weeks on average.



# Los Vaqueros Reservoir –Contra Costa Water District

- ▶ Developed to improve supply and quality for CCWD's 550,000 customers.
- ▶ Originally constructed in 1997 to hold 100,000 Acre Feet of water.
- ▶ Upgraded to hold 165,000 Acre Feet in 2012.
- ▶ A third and final stage will increase the reservoir's capacity to 275,000 Acre Feet.





# Los Vaqueros Reservoir –Contra Costa Water District





# Los Vaqueros Reservoir – Contra Costa Water District



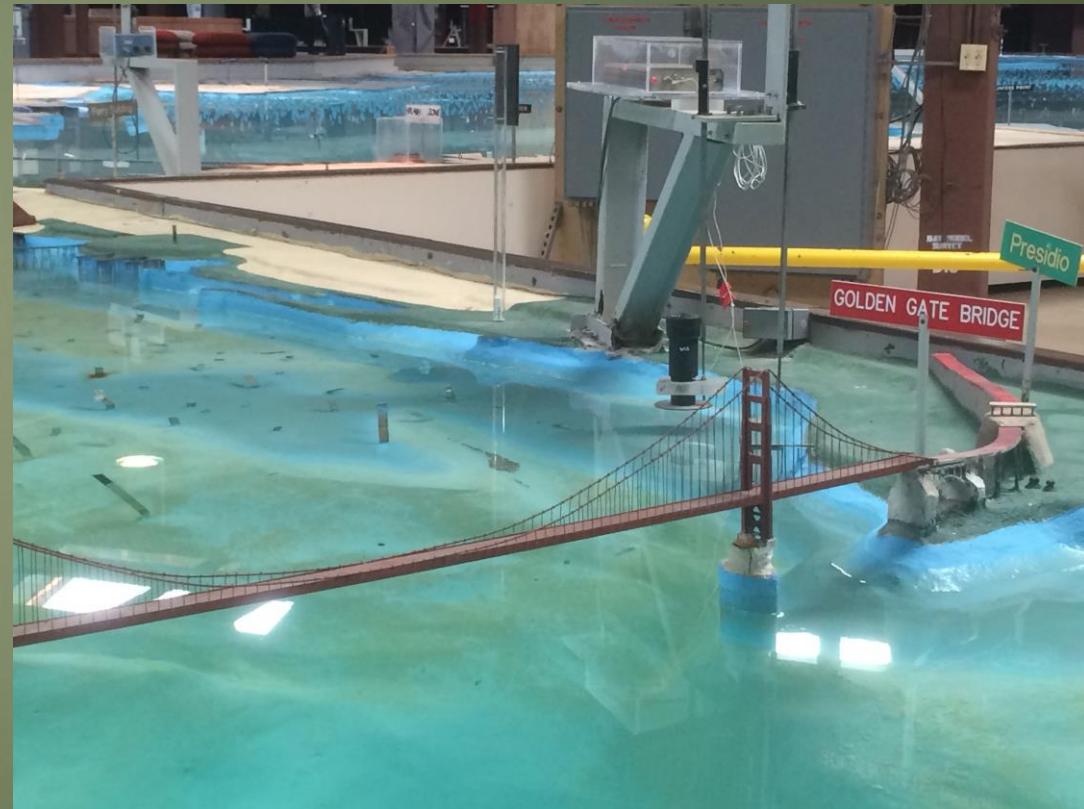
# Army Corp of Engineers Bay Model





# Army Corp of Engineers Bay Model

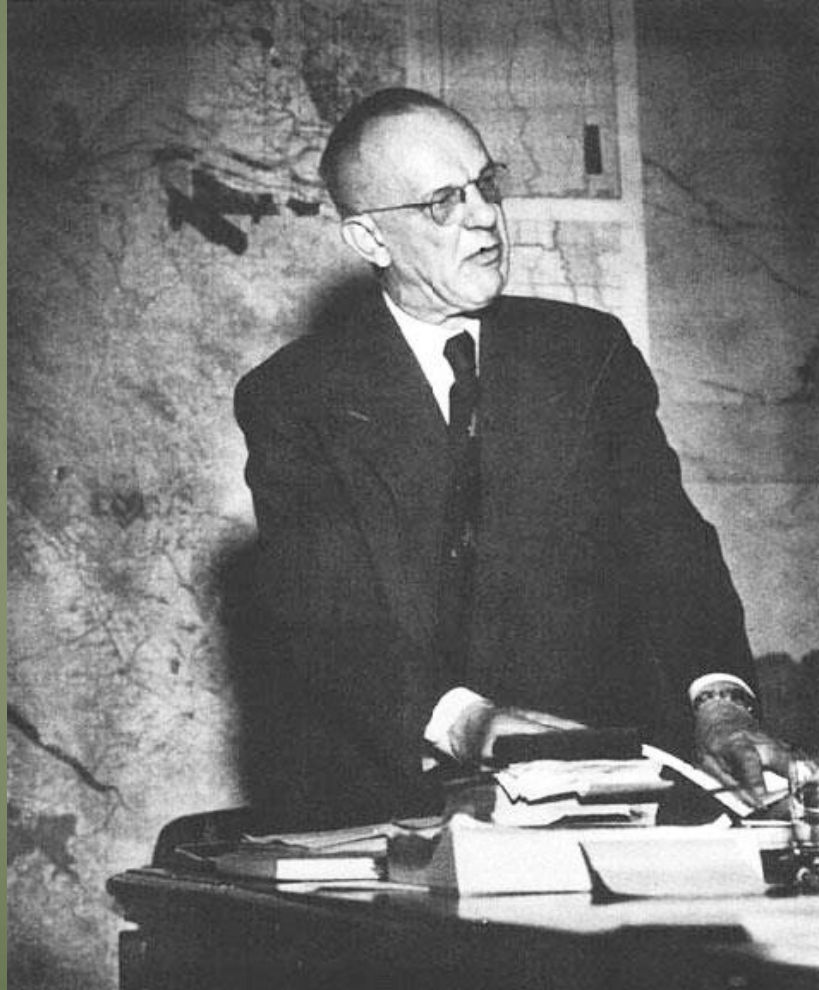
- ▶ Built in 1957 to study “The Reber Plan”
- ▶ 1.5 Acres in size.
- ▶ Simulates tidal flows in the Bay-Delta area.
- ▶ Now serves as an educational site of both historic and existing Bay Delta information.





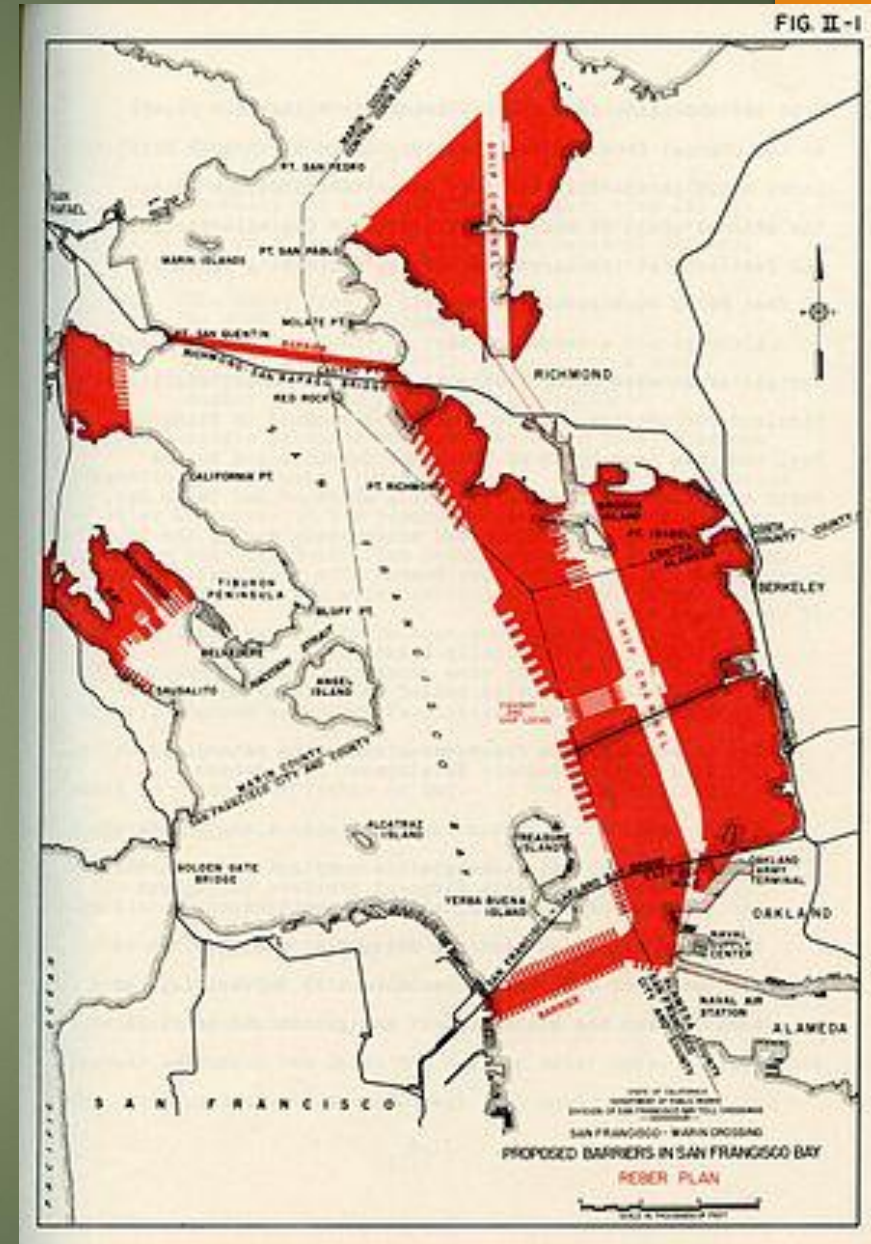
# The Reber Plan

- ▶ After World War II John Reber pushed hard for support of a plan to drastically change the Bay Delta.
- ▶ The plan would have placed two dams in the bay to capture 2.4 million gallons of fresh water.
- ▶ It would have added 20,000 acres of new land.
- ▶ It would also have prevented salt water intrusion in Delta farm lands.



# The Reber Plan

- ▶ Despite prominent backers such as Herbert Hoover the plan was never adopted.
- ▶ Opponents believed that it would lead to a water shortage for California
- ▶ The Bay Model also indicated that it cause significant damage to the Bay.



# Rush Ranch and Suisun Marsh

- ▶ The Rush Ranch is an operating cattle ranch of 200 acres.
- ▶ It is situated next to the Suisun Marsh and provides educational access to the Marsh.
- ▶ The Suisun Marsh is protected, improved and maintained by the Bay Conservation and Development Commission.
- ▶ The marsh is critical habitat for many endangered species.





# Rush Ranch and Suisun Marsh





# Sherman Island

- ▶ Sherman Island is a marsh area that is located near the convergence of the Sacramento and the San Joaquin Rivers.
- ▶ It is a prominent recreation area for windsurfing and fishing.
- ▶ It is a key area that is measured and adjusted to provide good habitat for endangered fish.





# Water Education Foundation

- ▶ Founded in 1977 to create a better understanding of water issues and solutions through education.
- ▶ They provide water relevant publications, workshops, conferences and tours.
- ▶ They are overseen by a panel of 29 board members from a wide range of water interests.

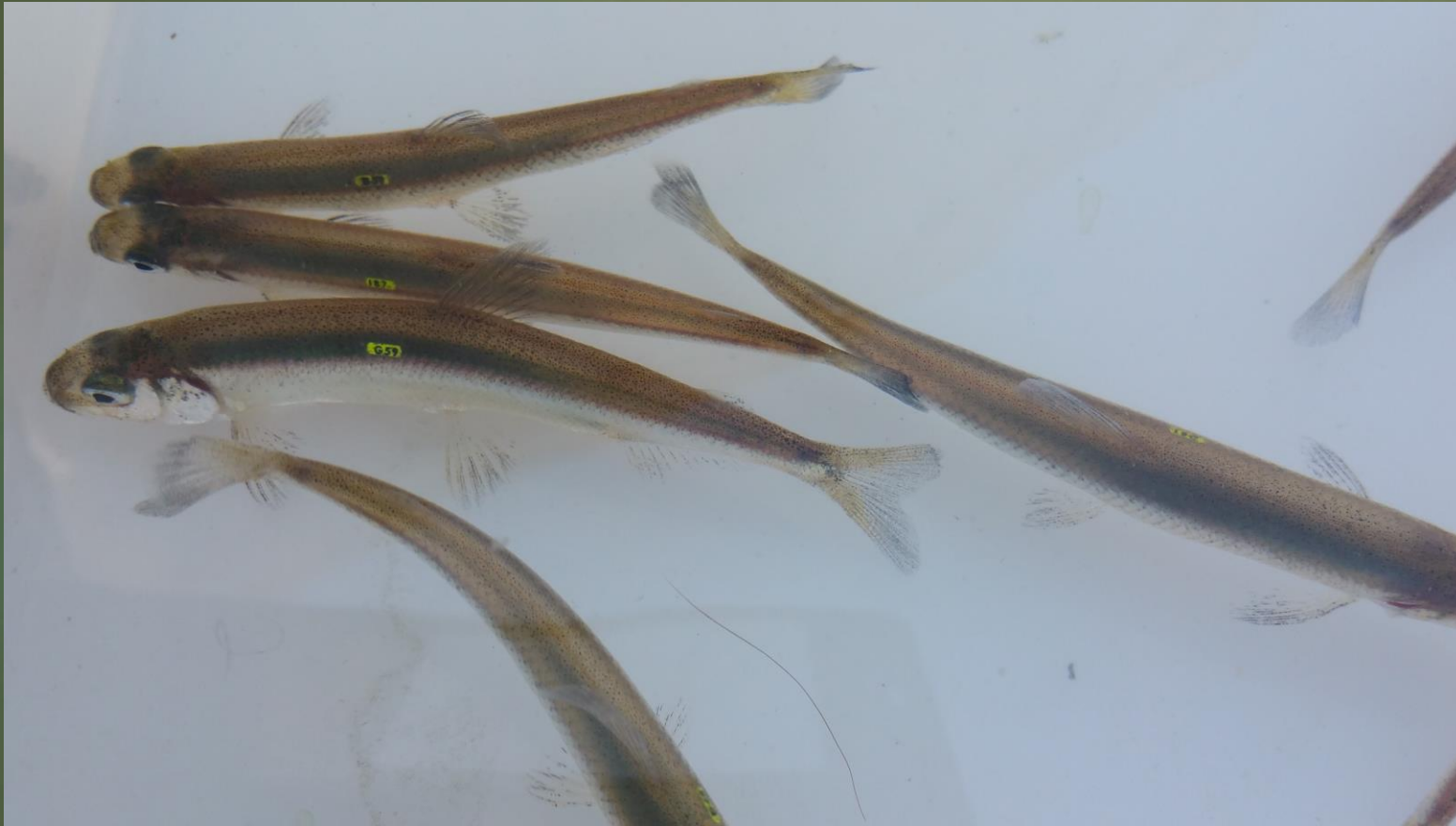


# Jones Pumping Plant





# Fish Conservation and Culture Lab



# Tour Wrap Up

