

Yolo Bypass Toe Drain Board Weir

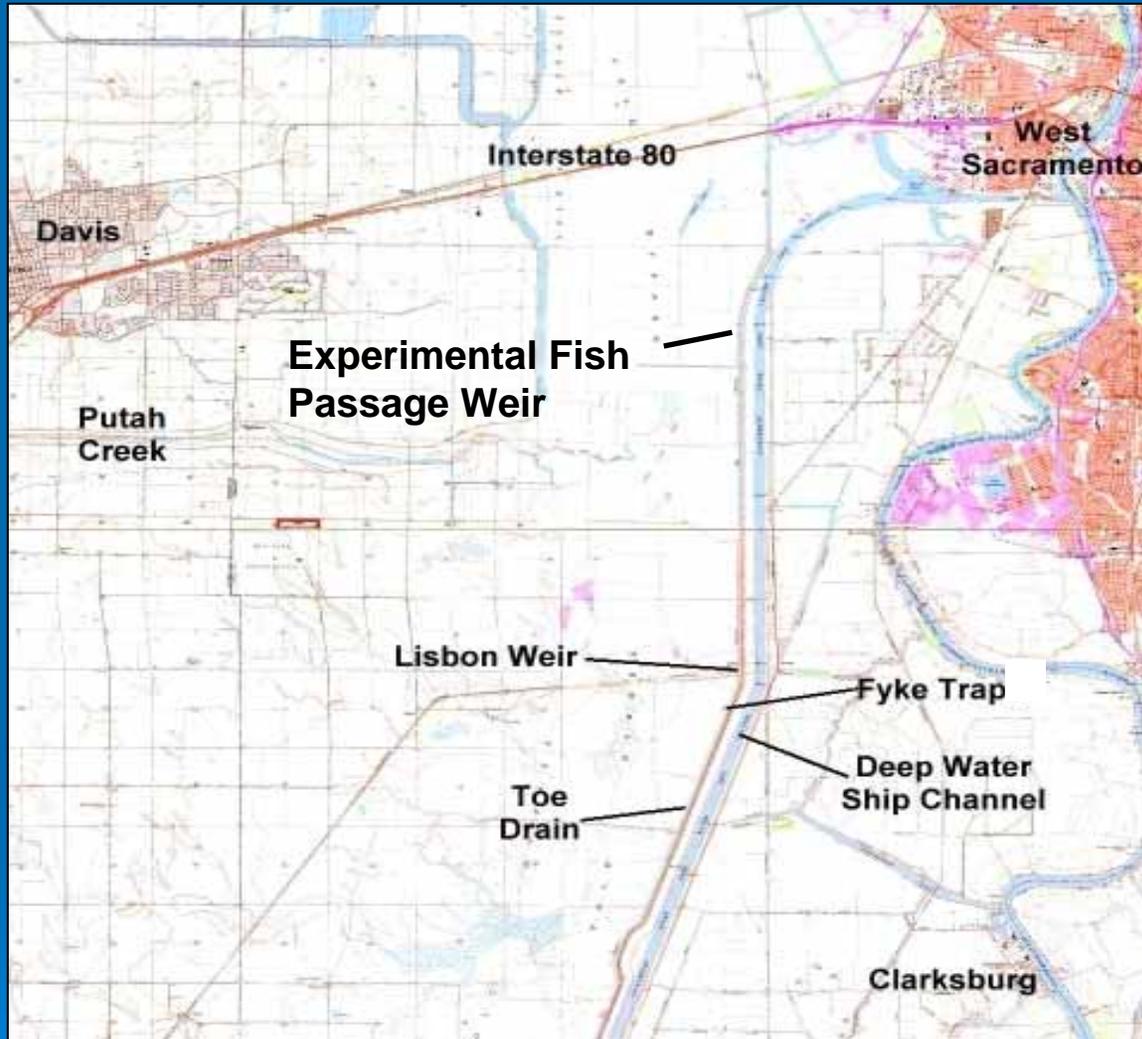
Status of Board Weir Project

Yolo Bypass Toe Drain Board Weir

Purpose

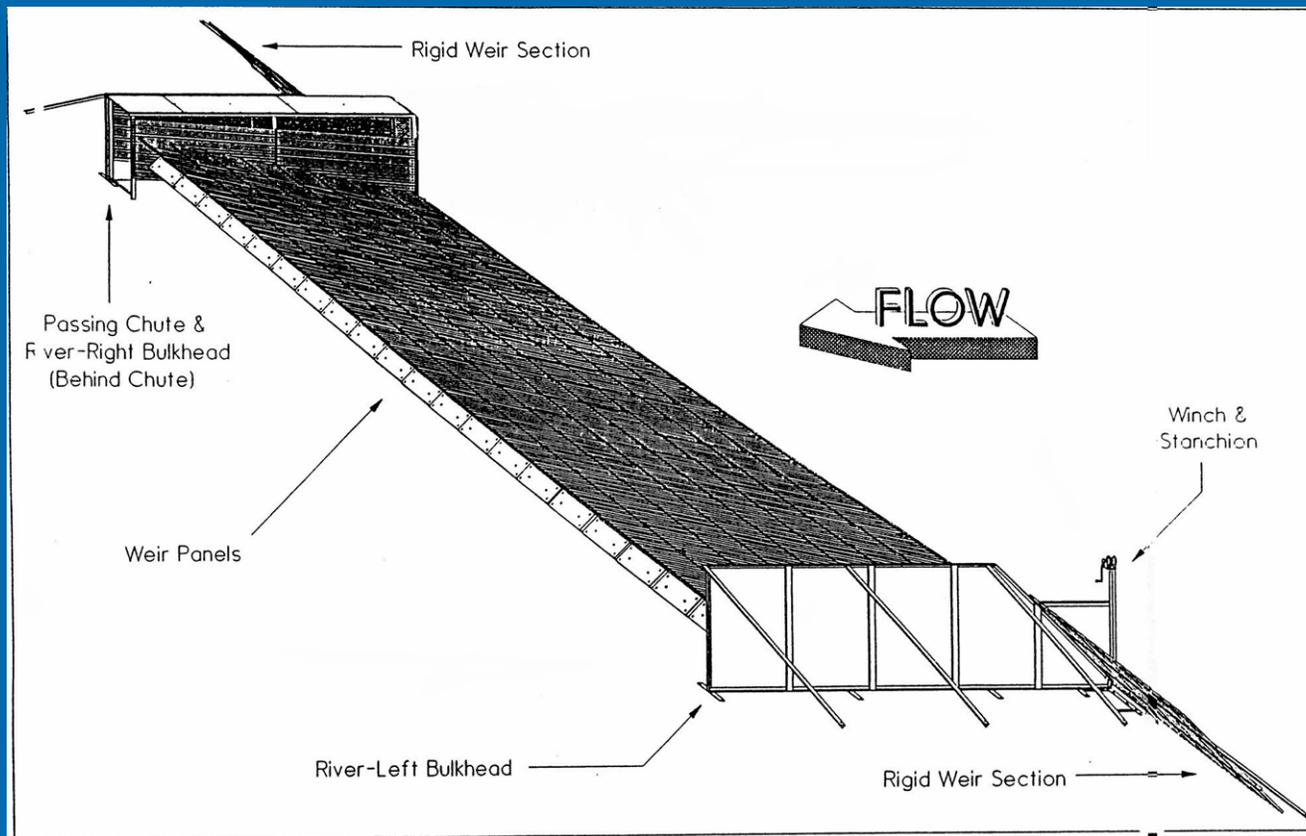
Toe Drain Board Weir Purpose

- To evaluate fish passage in a tidal environment with targeted species
- Evaluate under what conditions the fish would pass (hydraulic and environmental)
- Evaluate passage delays
- Evaluate passage structure



Toe Drain Board Weir Methods

- Sonic tags -- MAP system to evaluate fish movement and passage
- DIDSON camera for fish behavior observations around the barrier
- Tagged fish captured in fyke net and released upstream



Board weir conceptual drawing



Experimental Fish Passage Weir During Construction.



CALFED
BAY-DELTA
PROGRAM





Experimental Fish Passage Weir in the
Yolo Bypass Toe Drain.

8/29/03



11/13/03



Lisbon Weir as it appeared prior to modifications (top) and after additional height was added to decrease its permeability (bottom).



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The Experimental Fish Passage Weir remained submerged for much of the winter in 2003-2004 due to flooding in the Yolo Bypass.

Toe Drain Board Weir

2004

- Board Weir built in fall 2003
- Tagging began in December 2003 but was curtailed due to flooding
- Flows receded in April 2004 and equipment was reinstalled for a brief period
- Lisbon Weir passage issues addressed
- No passage observations, some fish behavioral observations

Toe Drain Board Weir 2005

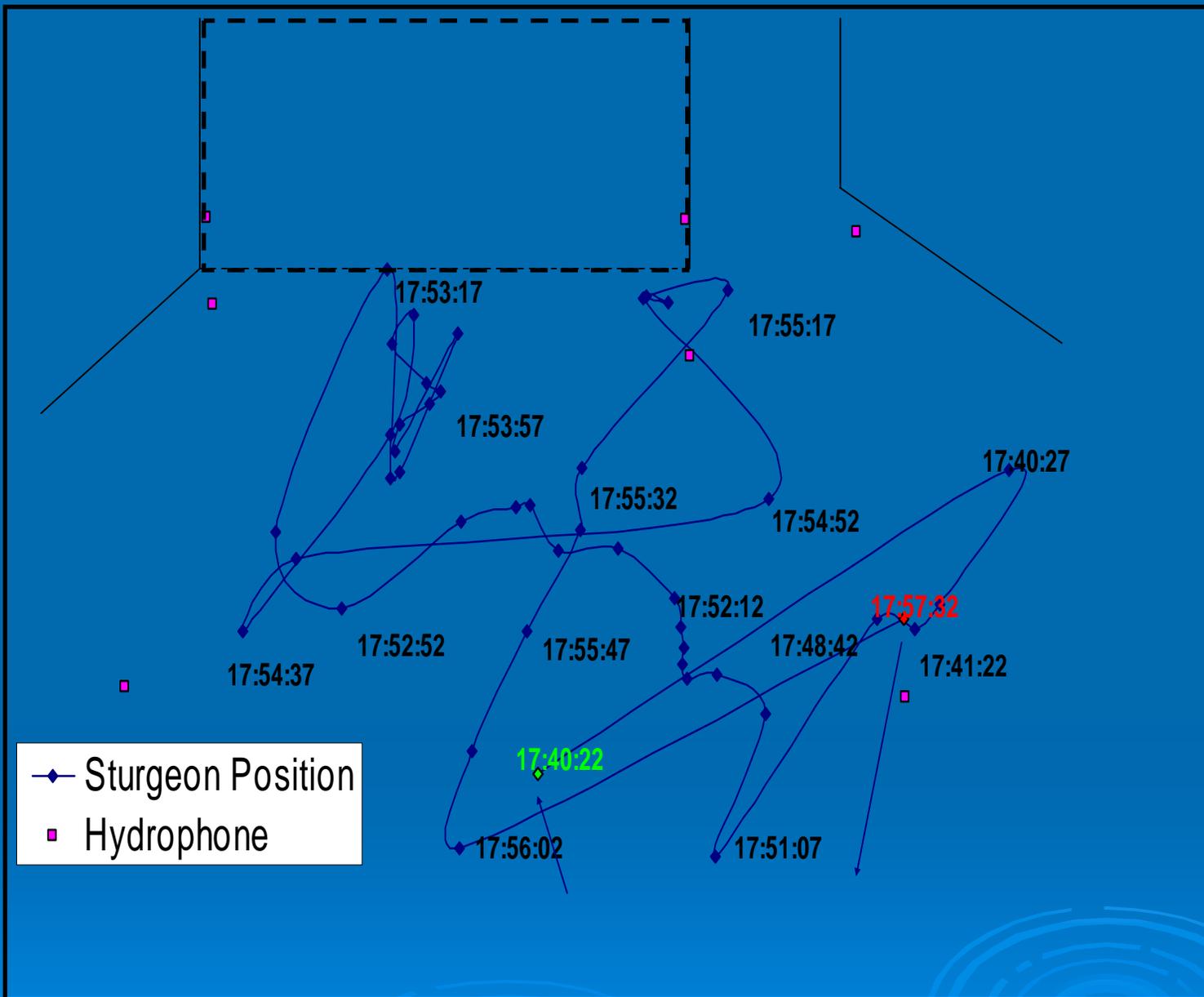
- Plans to reinitiate the pilot study
- Questions unpredictable Toe Drain conditions
- Prop. 13 Yolo Weir Total: \$1,496, 262
- Board Weir was not funded for 2005

Table 1. Fish tagged during 2003-04 testing phase of the project.

Date Tagged	Species	Total Length
04-16-2004	striped bass	520 mm
04-16-2004	striped bass	390 mm
04-21-2004	white sturgeon	1560 mm
04-21-2004	white sturgeon	1770 mm
04-30-2004	white sturgeon	1740 mm
04-30-2004	white sturgeon	1900 mm
04-30-2004	white sturgeon	—
05-08-2004	striped bass	460 mm
05-12-2004	striped bass	425 mm
05-12-2004	striped bass	421 mm
05-12-2004	American shad	358 mm
05-26-2004	striped bass	—

Table 2. Migration period for target species in the Yolo Bypass.

Target Species	Migration Period
Fall-run Chinook salmon	October-February
White sturgeon	December-April
Splittail	January-March
Striped bass	October-May
Sacramento blackfish	January-June
American shad	April-June



Toe Drain Board Weir Possible Next Steps

➤ Decision needed:

- Make minor repairs to the Board Weir and use it for another study
or
- Remove the Board Weir (leave boat ramp)