

**SWRCB WORKSHOP
ON
2015 TUCP ORDER
FEBRUARY 18, 2015**

**PUBLIC WATER AGENCIES
STATE WATER CONTRACTORS/
SAN LUIS & DELTA MENDOTA WATER AUTHORITY**

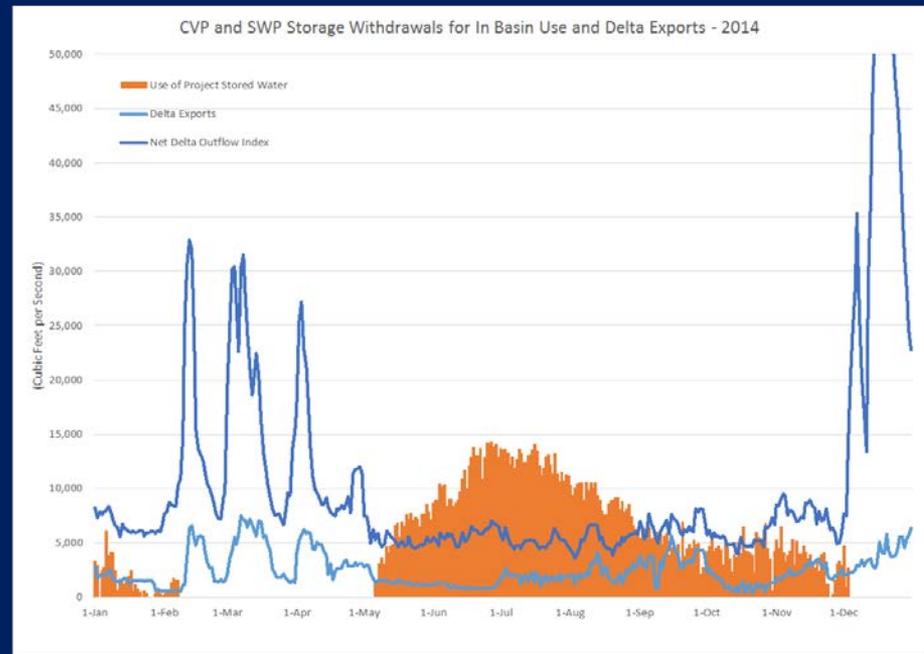
The 2014 TUCP

Served Its Intended Environmental Purposes

Storage supported
May-Dec. outflow

Storage provided cold
water protection for
salmon

Consumptive use
incidental to
environmental
purposes



The Governor's Drought Declaration Called for Facilitation of Water Transfers

“The Department of Water Resources and the State Water Resources Control Board (Water Board) **will expedite the processing of water transfers**...Voluntary water transfers from one water right holder to another enables water to flow where it is needed most.”

(Governor's January 2014 Drought Emergency Declaration)

2015 TUCP Order Should be Modified to Facilitate Water Transfers

2014 TUCP Order: Condition 1(b): These limitations do not apply to water transfers under non-SWP or **CVP** water rights **or between SWP and CVP contractors....**

2015 TUCP Order: Condition 1(e): ...**[Transfers between SWP and CVP contractors not listed.]**

TUCP Order did not consider all relevant evidence

A small increase in project pumping during the TUCP period of low outflow is not likely to adversely impact the fishery. The Order's conclusions are highly uncertain.

During the TUCP reduced outflow time period:

- Entrainment of Delta Smelt, Longfin Smelt, Chinook salmon and steelhead would not be expected to increase ; and,
- Abundance of Delta Smelt and Longfin Smelt would not be expected to change as a result of reduced reservoir releases

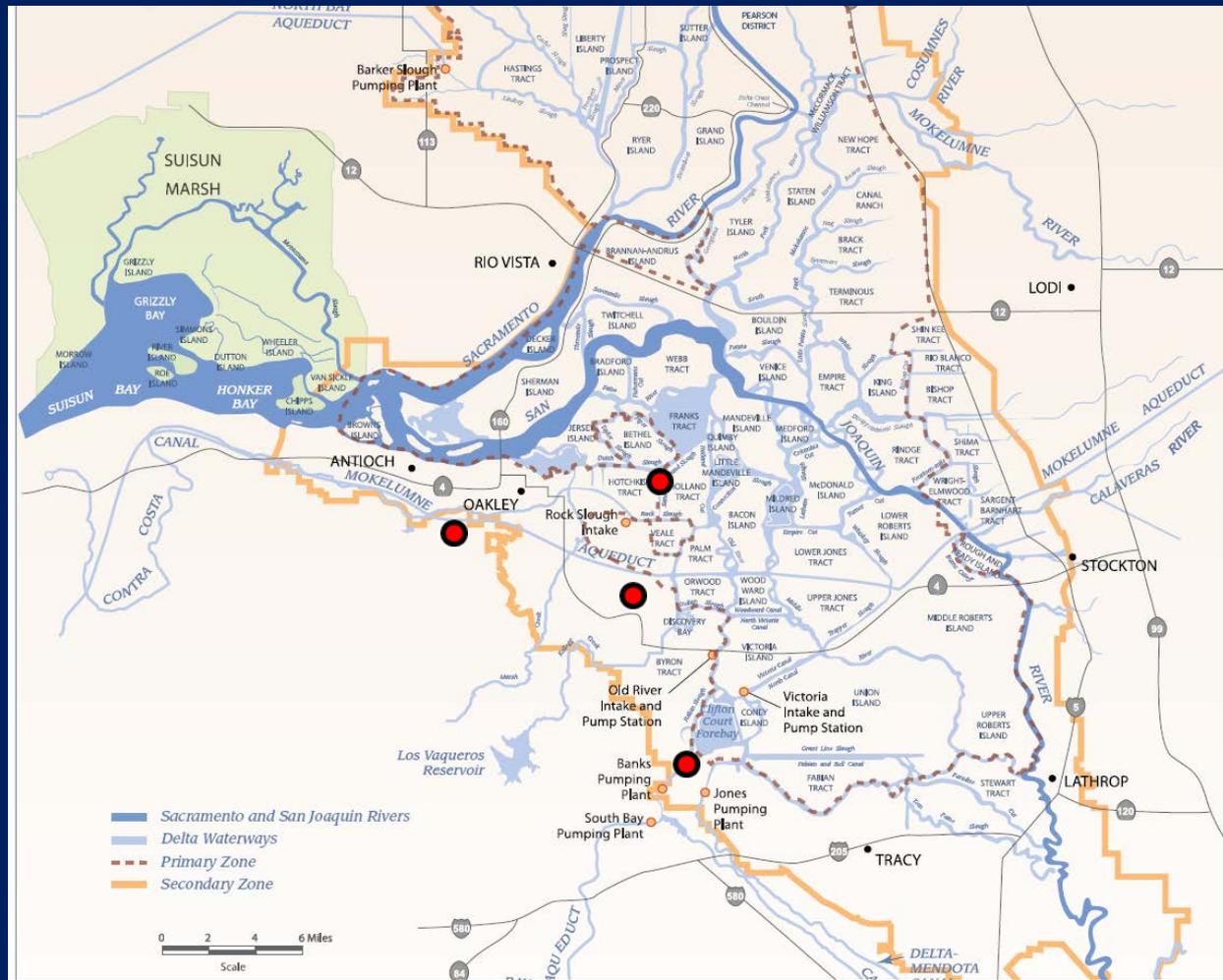
Delta Smelt likely not impacted by proposed increment in combined project pumping

High turbidity and smelt currently present at Jersey Point and Prisoners Point.

If concern level increases, FWS and Projects will respond.

Voluntary December export reductions limited salvage.

Risk of smelt salvage will decline as Delta outflows decline. Little risk of salvage when TUCP in effect.



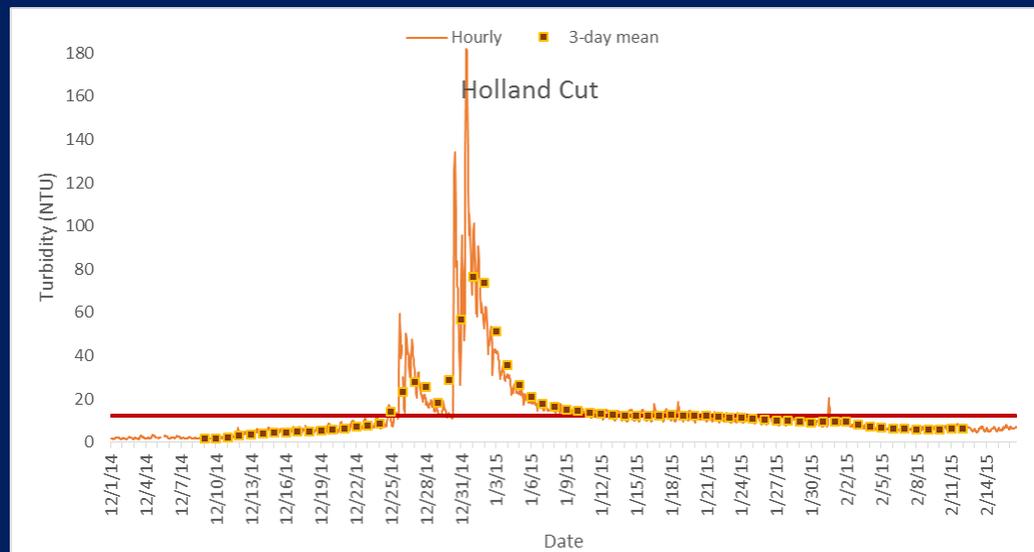
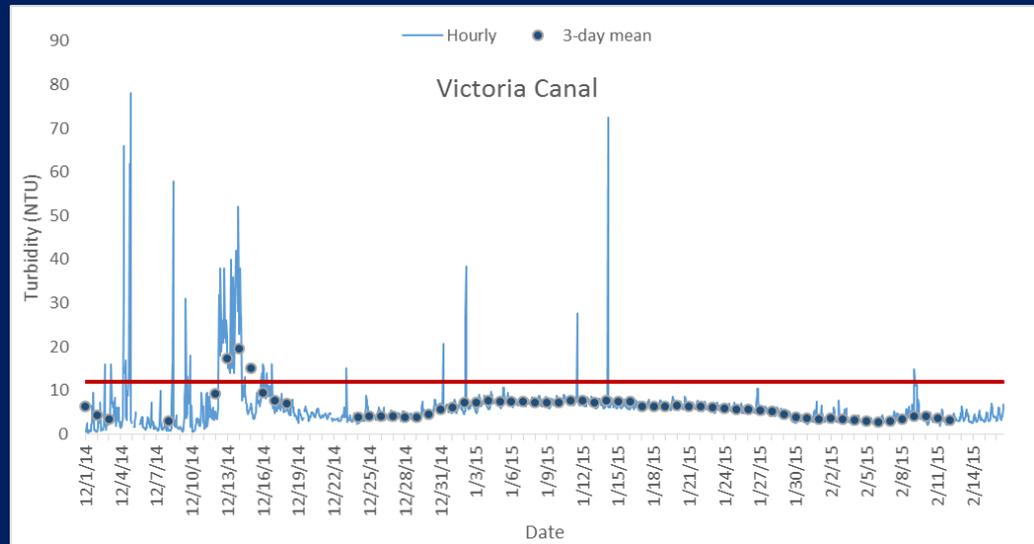
Delta Smelt likely not impacted by proposed increment in combined project pumping

If dry enough that TUCP
activated, salvage events
would not be expected:

Turbidity would be low

Pumping is low at either
level (1,500 cfs or 3,500
cfs.)

OMR not highly negative



It is highly uncertain that a change in outflow would effect Delta Smelt abundance

The MAST Report properly explained the uncertainty, stating at p. 152:

“Furthermore, results are preliminary and included for illustrative purposes only; peer-reviewed publications of these analyses need to be completed before they can be used to draw any conclusions.[emphasis in original]”

The Delta Science Outflow Panel report Similarly cautioned at p. 35:

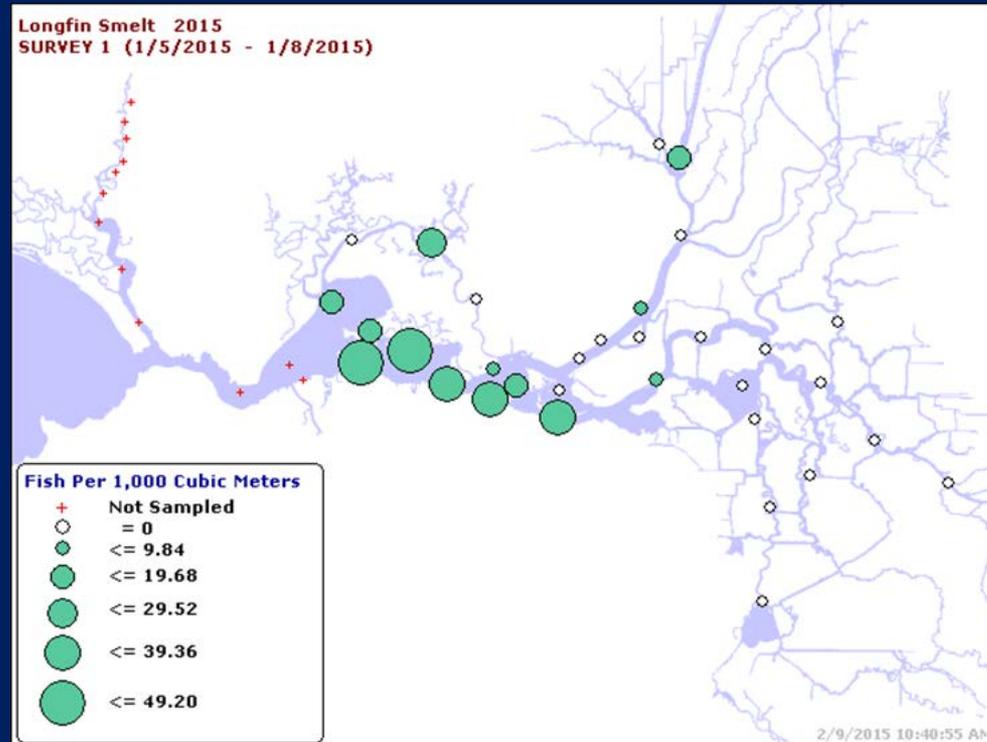
“Many of the uncertain, but restrictive, assumptions that would need to be stated explicitly in a properly documented full life-cycle model are often implicit, but never evaluated, in simpler analyses...”

Longfin Smelt Likely Not Impacted By proposed increment of combined project pumping

Larval Longfin Smelt are widely distributed, in the Cache Slough Complex and far downstream of the confluence.

Recent experimental surveys have identified larval Longfin Smelt in the Napa River and in Petaluma River.

Longfin Smelt adults and larvae at low risk of entrainment



Larval sampling through Survey #3 (February 2-4) shows same result.)

It is highly uncertain that a change in outflow would effect Longfin Smelt abundance

As Kimmerer et al. 2002, p. 1285, explained:

Predicting these [outflow] responses is contingent on understanding the mechanism underlying the flow relationship.

As Kimmerer et al. 2009, p. 10, concluded:

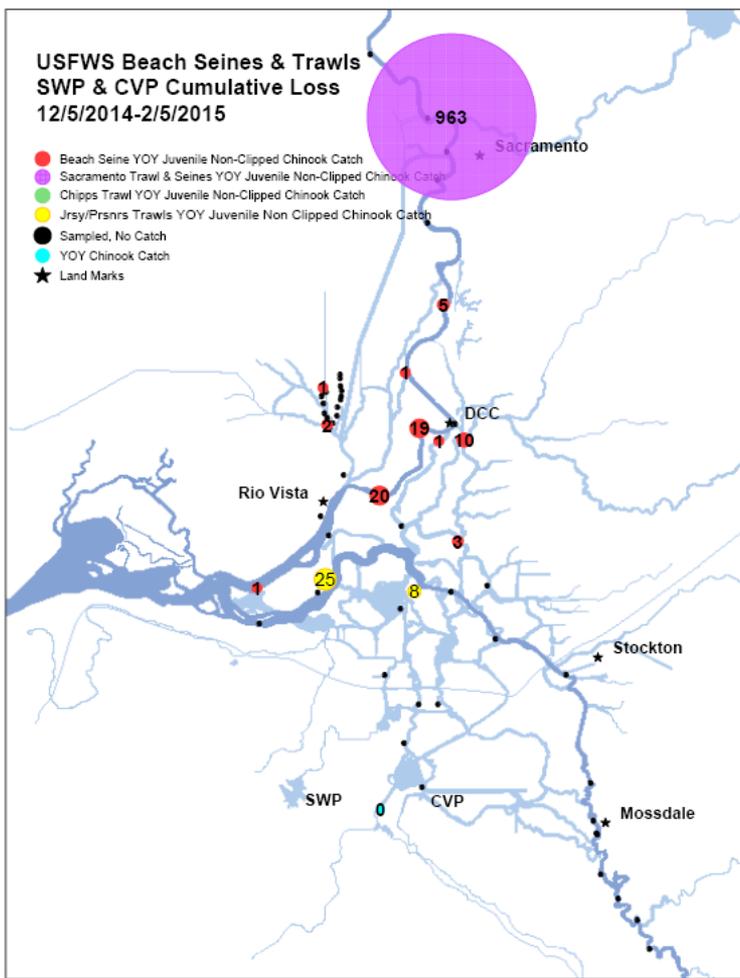
The modest slope of habitat to X2 would allow for only about a two-fold variation in abundance index over that X2 range.

Furthermore, the extent of the longfin smelt population in terms of distance up the axis of the estuary decreases with increasing flow. Therefore, although increases in quantity of habitat may contribute, the mechanisms chiefly responsible for the X2 relationship for longfin smelt remains unknown. It may be related to the shift by young fish toward greater depth at high salinity, possibly implying a retention relationship.

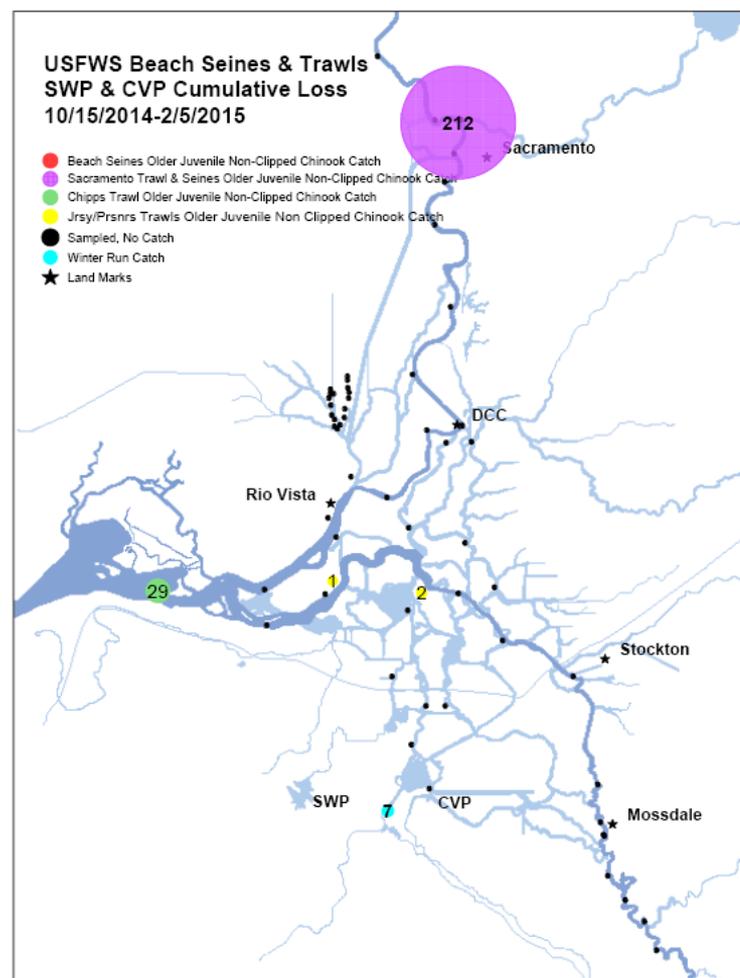
Point: Can't predict outcome without understanding mechanism

Chinook salmon are likely not impacted by the proposed increment of project pumping

Young of the Year Distribution



Older Juvenile Distribution



Chinook salmon are largely distributed in the north and western Delta

QUESTIONS?