

The use of science in the EWA: Where to from here?

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Topics

- Status of EWA
- Workshops in the last year
- Key issues
- Needs for the next few years
- Continuing EWA?

Status of EWA I

Positive signs:

- EWA is an organizational success
- Conflicts have been reduced
- Water has been applied for protective measures
- Favorable notice from outside

..... this look familiar?

- Flexibility
 - Change in Juvenile Production Estimate
 - Trying alternative uses of water, e.g., upstream
- Progress in workshops (esp. delta smelt)

Workshops

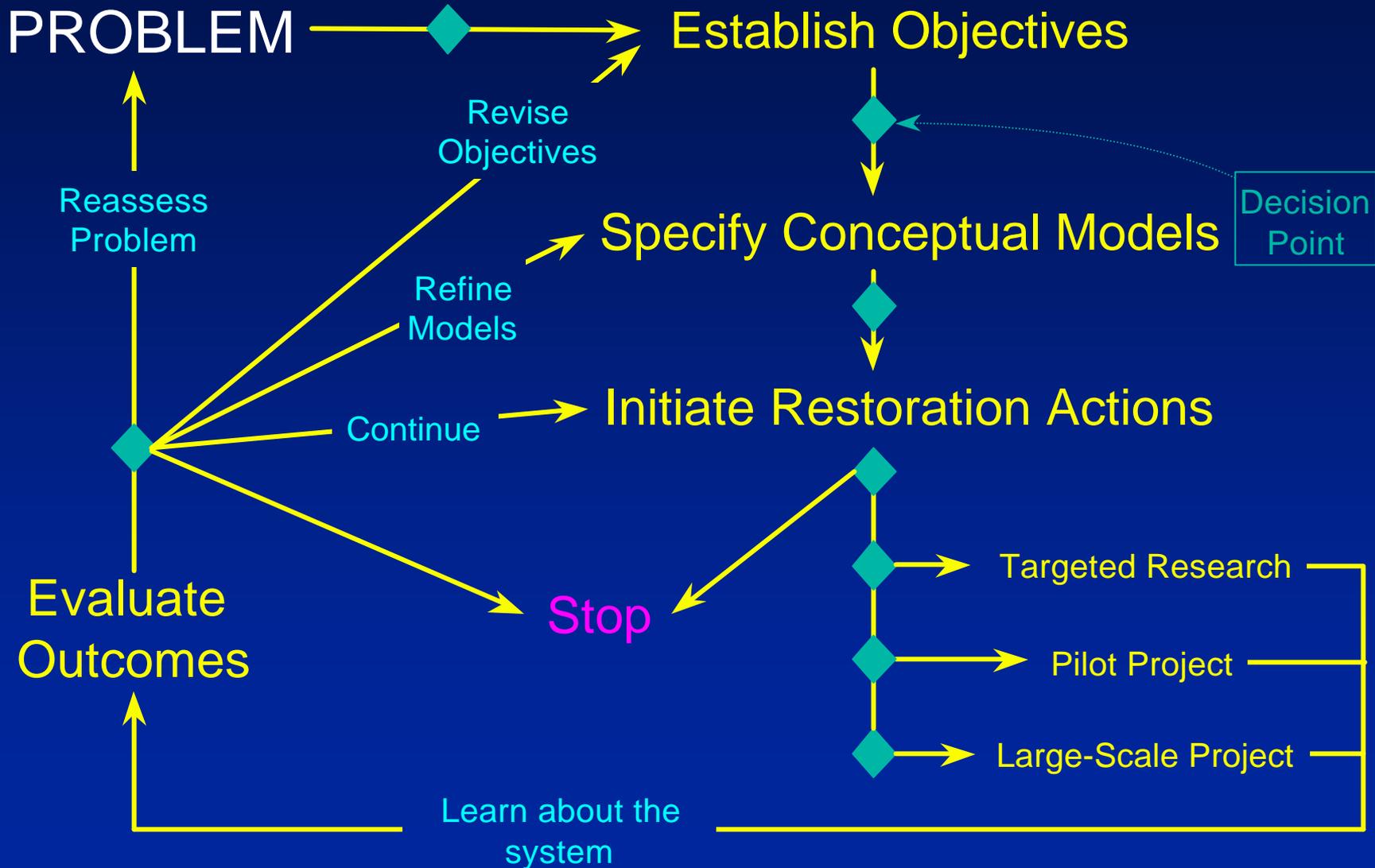
- Salmon workshop, July 2003
 - Modeling
 - Recent research
 - Science needs
 - EWA benefits
- Delta smelt workshop, August 2003
 - Individual-based model
 - Other modeling approaches
 - Lessons learned (or relearned)

Status of EWA II

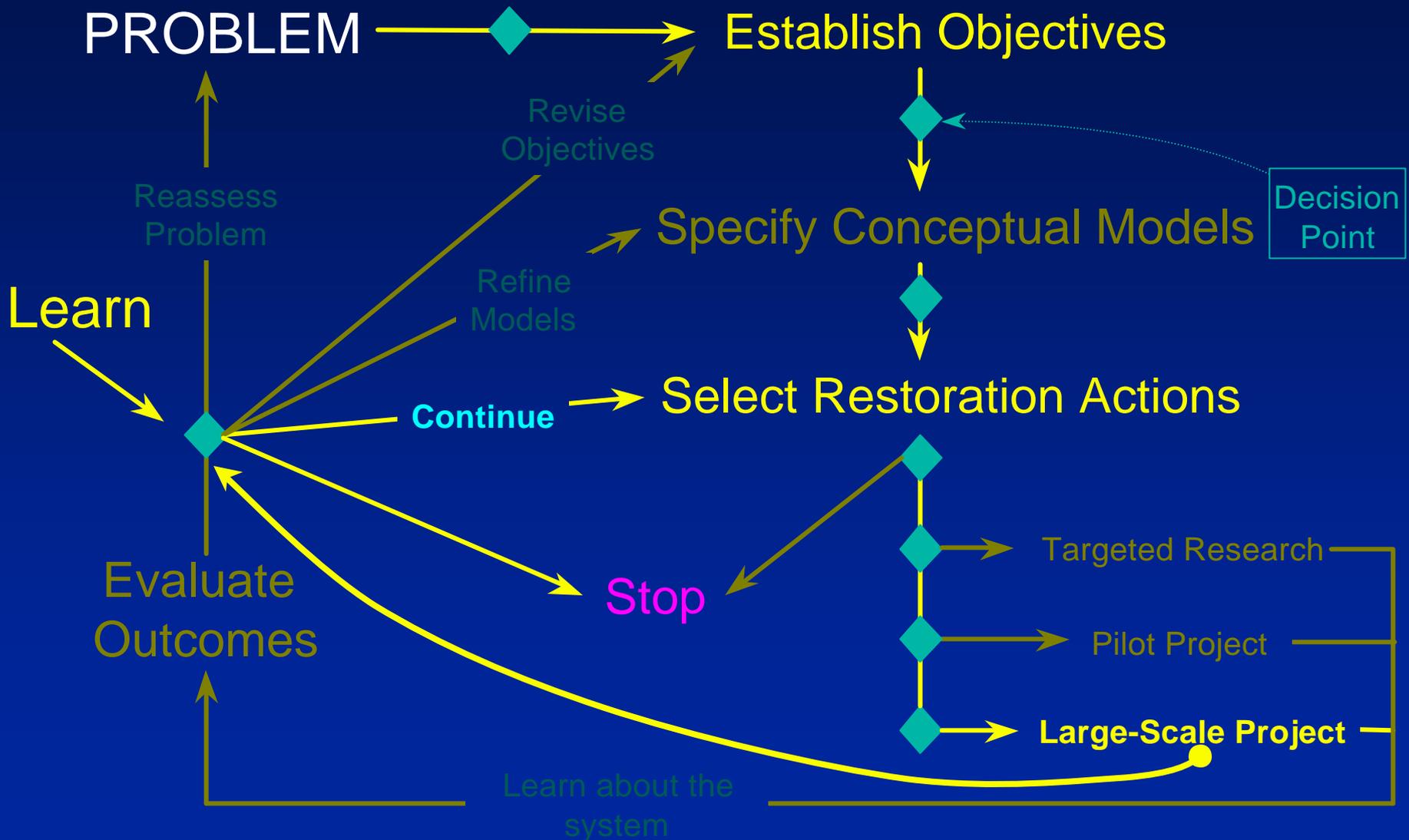
Needs for the future:

- Work on the adaptive aspects of the program
- Improve ability to understand EWA effect on salmon
- Clarify some of the actions
- Develop salmon research program
- Continue with modeling delta smelt

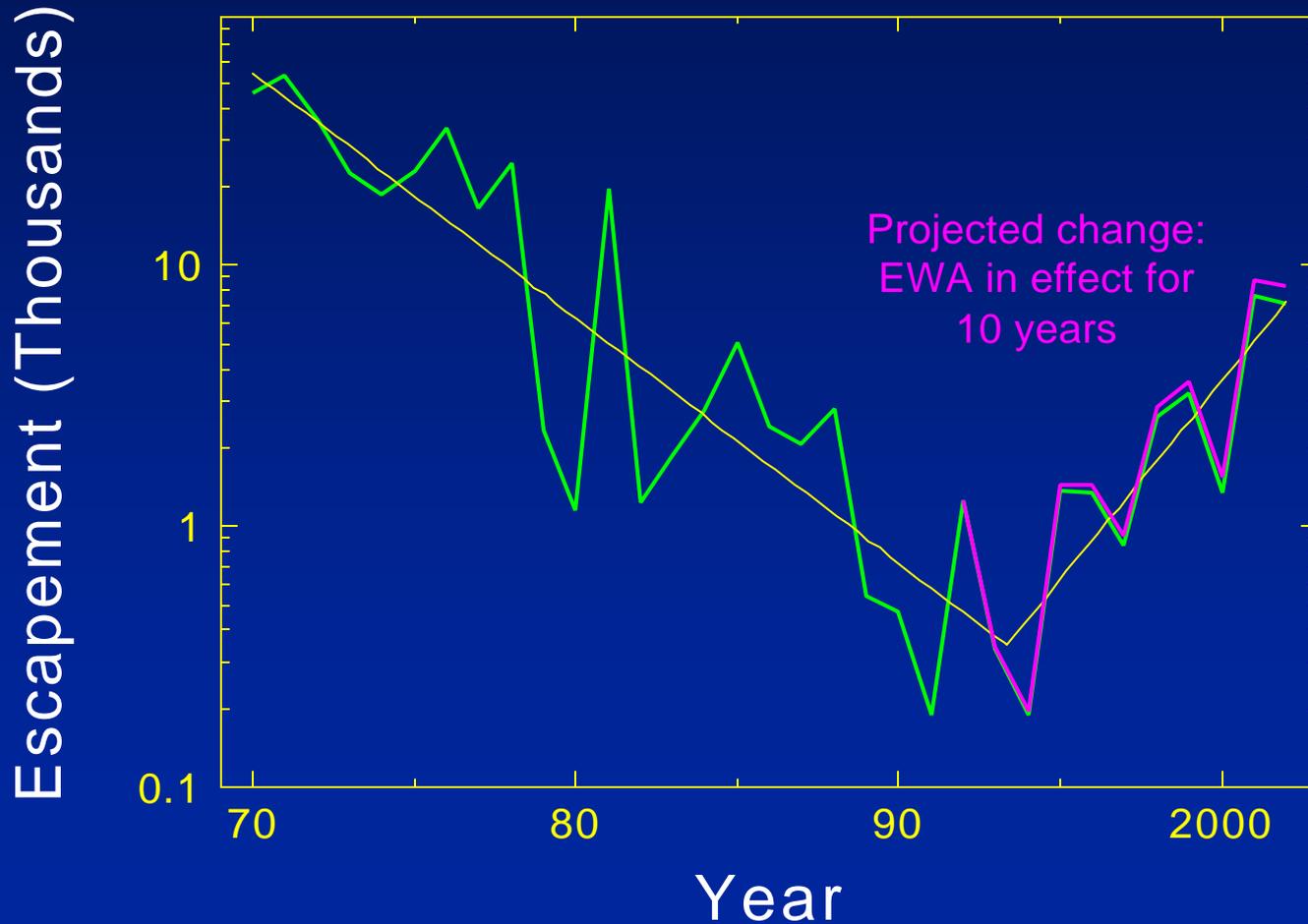
Applied Adaptive Management (the Ladder Diagram)



Watered-Down Adaptive Management (the Buzz Phrase)



Winter Run Salmon Escapement: How might it change with EWA?



Assumptions:
Use all EWA water during 2-month migration period of winter run salmon.
Delta mortality according to model by Brandes

Data Source:
DFG summary
(Terry Mills)

“Shoulders on VAMP”

Target Taxa:
Salmon smolts from
San Joaquin River

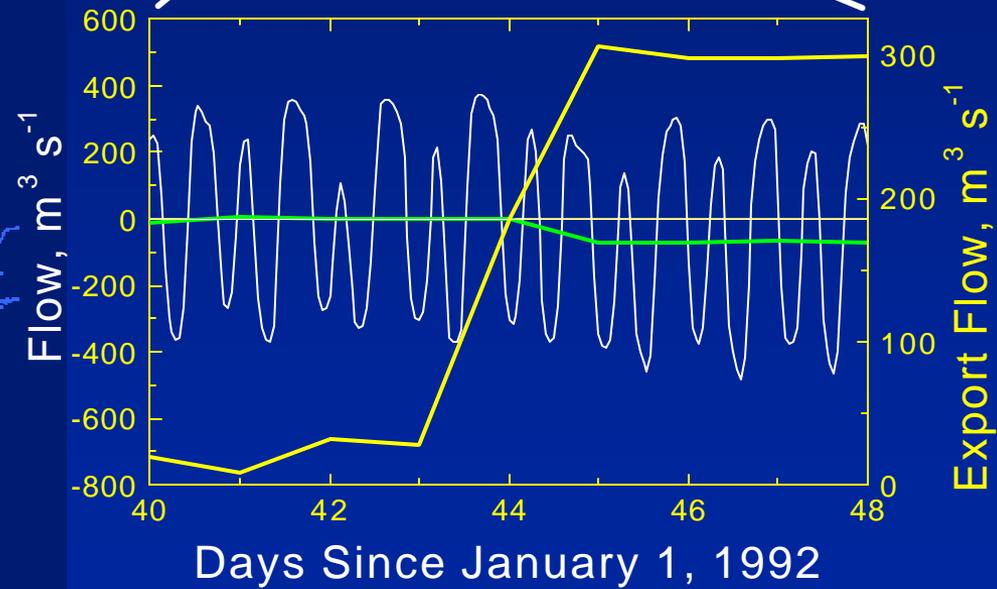
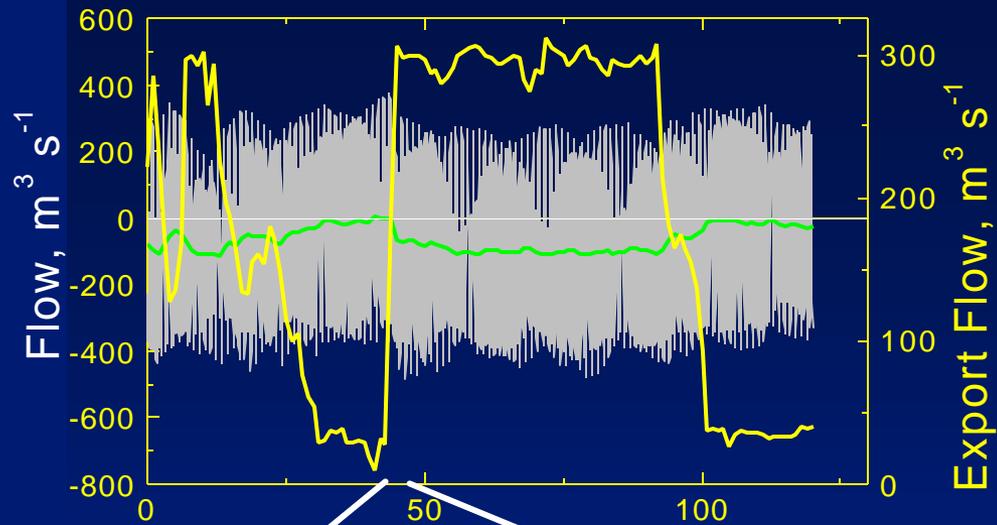
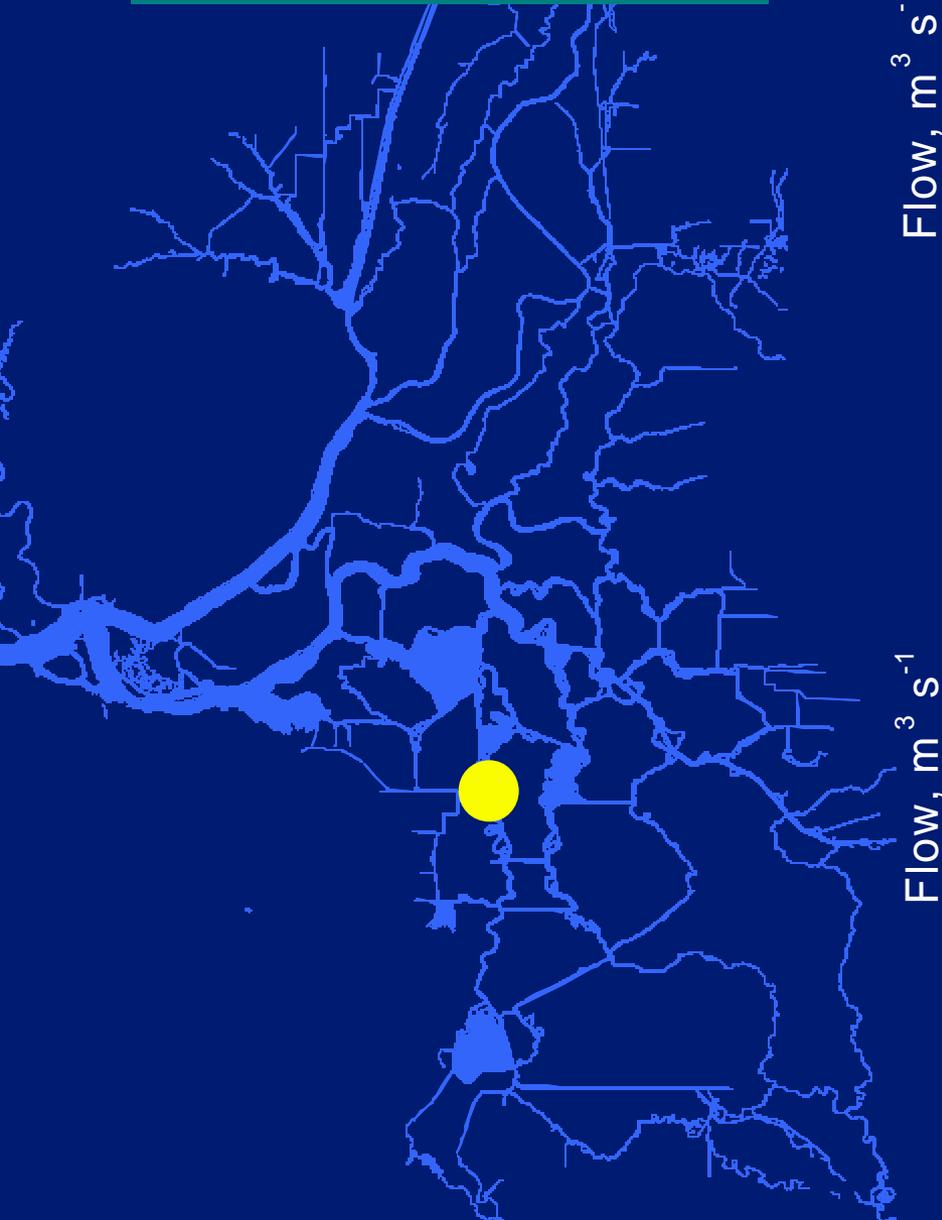
The Question: how
does mortality of
salmon smolts depend
on flow and export
flow?

Design: vary flow and
exports in a designed
pattern, release and
recapture smolts

The Concern: what
does this do to delta
smelt?



Are there shoulders? Measured velocities



What next?

- Develop a coherent salmon research program
- Begin to close the feedback loop
- Encourage publication of key results!
- Follow through on progress with delta smelt

What do we need for salmon?

There is a lot going on, but we need:

- Modeling effort (CUWA, Lindley / Newman,...?)
- Marking program (Hankin / Newman)
- Academic involvement
- Funding commensurate with the importance of the issues

Should EWA continue?

the Big Question
(not our question)

Should EWA continue?

This decision cannot be based on science!

