

Science Needs for the Continuing EWA

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Science Needs and Priorities

First Need: Communication Strategy with CALFED Lead Scientist, Science Program, the Science Advisors and especially the EWA Science Panel

Rationale: The agencies are doing the bulk of the regulation; but also the bulk of the monitoring and research

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Second Need: Develop better approaches (conceptual models) for doing monitoring and research that are **APPROPRIATE AND APPLIABLE TO EWA**

Rationale: The **INTERAGENCY ECOLOGICAL PROGRAM** has been doing studies for over thirty years on the Estuary and most of what we know has come from this multi-agency program , but we may need to revise it.

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Third Need: To sort through all the perceived study needs and **PRIORTIZE** them with respect to applicability to EWA

Rationale: We have many studies that have been identified, but a collaborative effort is needed to prioritize them.

Science Needs and Priorities

Fourth Need: To develop new ways, structurally, fiscally, and collaboratively to get science done

Rationale: Time to open up existing monitoring activities and be more inclusive of the Science program, academia, and non-agency efforts

Science Needs and Priorities

Fifth Need: More monitoring and assessment of EWA -- for all CALFED activities

Rationale: EWA cannot be assessed in a vacuum

What can the agencies commit to?

TO WORKING ON WAYS TO INTERACT MORE WITH THE SCIENCE PROGRAM, THE LEAD SCIENTIST AND THE SCIENCE ADVISORS AND PROVIDE FEEDBACK TO POLICY LEVEL FOLKS

For Example: IEP is working with the Lead Scientist to review the program

What can the agencies commit to?

*TO USE THE BEST AVAILABLE SCIENCE
TO GUIDE EWA IMPLEMENTATION,
PROTECTION, RESTORATION, AND
RECOVERY EFFORTS*

Can be accomplished by: efficient and effective use of appropriate staff; fully engaging all available resources; development of new approaches

What can the agencies commit to?

*TO INCORPORATE NEWLY DEVELOPED
SCIENTIFIC INFORMATION INTO ACTIONS,
EWA POLICY DISCUSSIONS, BOs, REAL
TIME FISH PROTECTION ACTIONS AND
CVP/SWP DECISIONS*

Will occur through various forums:
WOMT/DAT process; WQCP periodic reviews;
South Delta Fish Facilities Forum; EWA
Reviews

What can the agencies commit to?

TO WORK WITH CALFED AND OTHERS EVALUATE THE RELEVANCE OF RESEARCH AND DATA COLLECTION ACTIVITIES and if necessary, augment, or redirect these activities

What can the agencies commit to?

TO WORK WITH THE SCIENCE PROGRAM, LEAD SCIENTIST AND OTHERS TO REVISE ONGOING ACTIVITIES AND AUGMENT, IF NECESSARY, WITH DIRECTED STUDIES

What can the agencies commit to?

AND FINALLY, I SUGGEST THAT THE AGENCIES MUST commit to be Flexible IN IMPLEMENTING THE EWA

What can the agencies commit to?

IN SUMMARY, IT IS CLEAR THAT THE AGENCIES WILL CONTINUE TO CONCENTRATE ON SUPPORTING, IMPLEMENTING AND USING THE BEST SCIENCE AVAILABLE TO MAKE THE NECESSARY MANAGEMENT DECISIONS FOR EWA AND RECOGNIZE THAT WE WILL CONTINUE TO MAKE MANGEMENT DECISIONS EVEN WITH UNCERTAINTY

General Priority Science Needs

- Develop salmon escapement and steelhead monitoring and hatchery fractional marking programs – in process
- Review present monitoring programs – keeping long-term integrity and goals in mind (WQ Program Review Complete)
- Fund additional and augmented monitoring and marking programs in the Delta, upstream, and in the ocean to assess trends and abundance levels of a variety of species at different life stages for assessment of suite of CALFED, CVPIA and AFRP actions. (IEP Plus a start)
- Fund special studies that assess hypotheses of limiting factors and reasons for changes in population levels.
- Fund data generated modeling and targeted analyses
- Fund and support additional data analysis, evaluation, and adaptive management review
- Realign the funding balance such that monitoring, research and restoration are more equitable partners (in CALFED, AFRP, CVPIA).

General Priority Science Needs Con't

- Determine Importance of specific habitat for salmonids
- Measure survival of salmonids through the river and delta
- Assess life stage-specific responses to delta flows (salmonids and delta smelt)
- Refine characterization of salmon by race
- Identify factors limiting salmon and steelhead production
- Determine spawning areas and egg placement of delta smelt
- Identify cumulative factors limiting delta smelt population recovery
- Assess age-group contribution to population fecundity and fertility for delta smelt
- Assessment of non-native species impacts at the population level