

TO: Ramona Swenson, Triby and Associates (510) 6898874  
FROM: Tom Keegan, EIP Associates  
RE: Comments to 6.0 Page 1

Sect. 6.1 Take ~~out~~ all recommendations for further study out of this section. out of place

Also, include Pacific lamprey or anadromous fish species  
Also, USE HEADERS!!!

Pg- 6.3 2<sup>nd</sup> paragraph, inappropriate use of PHABSIM results to lump all life stages together. ~~the~~

Pg 6.7 1 question the assumption of temperature being significantly affected by streamflow in paragraph 2. Air temp. is more important

Sect. 6.2 way too long and wordy. Repetitive. state major points with support - 2 paragraphs max.

Pg 6-12 2<sup>nd</sup> paragraph. water quality and habitat studies are being conducted in lagoon.

### Recommendation for Further Studies.

A lot of the workup here is already being done. Is this document supposed to supplant the work plan? Technical detail is not needed here (e.g. filling out data sheets) but rather brief <sup>of the</sup> description of the results of each job, provide recommended further study and rationale.

- I strongly disagree that aerial photography cannot be used for habitat mapping. It certainly can be used for microhabitat typing (w/ 20% ground truthing) and for passage barrier analysis. more to come.

Joe Ramona Swanson, Trinity Assoc. (510) 689 8874  
FROM: Tom Keegan, EIP  
RE: Page 2, comments

- Pg 6-18 I would not be so strong in recommending GIS at this time. Though GIS is powerful with the right type of data, and complete data sets, I'm not sure how management plans would be augmented through GIS. I would evaluate the potential for GIS.

Job 2 - Pg 6-19

- We know that electrofishing is more quantitative than visual surveys. But, we also know that electrofishing is difficult at best in the SYR when algae is present.
- I would omit section on Quantitative Methods (pg 6-20). I do not think that density is such an important parameter - and I do not think that electrofishing in algae is quantitative! Plus - potential damage in warm water to fish is too high!
- I'm not sure why we would want to focus on tidewater gobies. Haven't we determined that the <sup>potential</sup> range of flows to be discharged from Bradbury Dam would not affect the lagoon in most months?
- Regarding redd surveys - I think you could cover most of the available spawning habitat in the SYR in a day. Tributaries would be more difficult. But trapping works in trib.

To: Ramona Sweeney, Trinity and Associates (510) 6898874  
FROM: Tom Keegan, EIP Associates  
RE: Page 3, comments

pg. 6-22 Discussion of data problems with documenting spawning activity is not necessary. Discussion of spawning survey should focus on ~~the~~ collecting information associated with Redds (pit depth, tail depth, velocities at pit and tail, etc.).

p. 5 6-23 Adult + juvenile migration do not necessarily occur during ~~peak~~ peak flow (paragraph), but during descending hydrograph. Small point, but important. Because traps can be removed during flood event, and reinstalled as flow recede.

6-22 Again, with the videwater goby! This has been said before.

Job 3. Chuck's new section is much improved. This should serve as a model (format) for the other jobs. Still a bit repetitive.

Job 4. Headers!!

~~no~~ water temperature modeling. Repetitive. Just say one time that modeling should occur with specific objectives.

• Vertical temp + D.O. in Lake also important for considering downstream options (Chilton Creek, mainstem discharge)

To: Ramona Swanson, Trihey and Associates (510) 689 8874  
FROM: Tom Keegan, EIP  
RE: Page 4, comments

Job 5. I would add surveying & hydrology studies to be performed on timber, especially at confluence with SYR to determine constraints to passage (up & downstream). This will be needed if any habitat restoration/modification is to be ~~carried~~ conducted in the tributaries. In particular, Hilton Creek, since most adults appear to spawn there. A quantitative estimate of spawning habitat and rearing habitat should be performed in tributaries and compared with that in the mainstem to evaluate priority habitat restoration opportunities.

pg. 6-34. Discussion of determining anadromy or resident stock on S. California ESTH... should add that it would be important to know stock origins for other management considerations (e.g., suitable water temperature, & habitat). Southern stocks would have different suitability criteria than northern stocks.

In general, this report is too verbose & repetitive. It needs editing.