Alameda Creek Fisheries Work Group
Flows Subcommittee

January 30, 2008 10 AM – 3 PM

11th Floor Conference Room
California State Coastal Conservancy
Oakland, CA

Meeting Summary

Attending:

Brenda Buxton, Coastal Conservancy
Jeff Miller, Alameda Creek Alliance
Andy Gunther, Center for Ecosystem Management and Restoration
David Houts, Zone 7 Water Agency
Elke Rank, Zone 7 Water Agency
Brian Sak, San Francisco Public Utilities Commission
Tim Ramirez, San Francisco Public Utilities Commission
Eric Cartwright, Alameda County Water District
Thomas Niesar, Alameda County Water District
Pete Alexander, East Bay Regional Park District
Stuart Moock, representing Pacific Gas & Electric Company
Manny da Costa, Alameda County Flood Control District
Jessie Schwartz, Jones & Stokes, representing San Francisco PUC
Patty Cook, Jones & Stokes, representing San Francisco PUC
Chip McConaha, Jones & Stokes, representing San Francisco PUC
Chris Kern, San Francisco Planning Department
Scott Chenue, San Francisco Public Utilities Commission
Gary Stern, National Marine Fisheries Service
Josh Fuller, National Marine Fisheries Service
Bill Trush, McBain & Trush
Chuck Hanson, Hanson Environmental
Kristine Atkinson, Department of Fish and Game (via telephone)

1. **Announcements, review agenda**

Jeff Miller noted that the permits for the fish rescue/transport program are in place and that the web camera is working. Jeff also noted that the Alliance and the SFPUC have been discussing the Alliance's concerns with the Programmatic EIR in hopes of reconciling their differences.

Manny reported that three consultants have been identified to receive a Request for Proposals for final design of the fish ladder at the BART weir/middle inflatable dam.

Gary reported that the San Francisco Bay Salmonid Restoration Fund (at the National Fish and Wildlife Foundation) received only five proposals, and so the prospects for approval of the joint application from ACWD and Alameda County look promising.

2. Program Manager's Report

Andy noted that he was ready to put the final version of the Phase 1 report on the website, but had presently received only one formal approval. It was the consensus of the group that the report be accepted as final, and so the report should be made available on the web site. Valuable but late comments on the Phase 1 report were received from the Department of Fish and Game and Professor Jerry Smith of San Jose State University. Given that the contract is already closed, it was agreed that these two sets of comments should be posted along with the document.

Krissy Atkinson noted that one of DFG's major concerns is that summer and fall rearing habitat quality in Central / Southern California streams depends on a complex interaction between: (1) water volume (which affects fast-water feeding habitats); (2) water temperature (which affects metabolism, digestion, and growth rates); (3) invertebrate food availability (affected by algal growth, substrate quality, and water flow); and 4) visibility for feeding fish (affected by turbidity and shade). She noted that one would be remiss if one studied only one or two variables at the exclusion of others, and recommended that metrics be established to quantify these variables.

Krissy stated an example of this interaction is that stream reaches with high quality substrate (with high abundance of macroinvertebrates and low embeddedness) and adequate stream flow may produce enough food to compensate for higher metabolic needs of steelhead caused by elevated temperatures. Recent studies show that these conditions at Uvas Creek (Santa Clara County) and the San Lorenzo River (Santa Cruz County) actually produced larger smolts (with higher smolt-to-adult survivor rates) than colder, poorer-substrate-quality reaches. These larger smolts in the San Lorenzo River had higher smolt-to-adult survival rates than their smaller counterparts which reared in the colder, less productive, upper watershed tributaries.

Krissy also noted that creation of fast water habitat not only is important for steelhead rearing, it is also a critical way to minimizing predation on steelhead. Providing fast water habitat during the summer and Fall is a way for steelhead to escape predation by pike minnow and large mouth bass which prefer slow water (pool) habitat. She also noted ongoing monitoring of frog habitat in the watershed by East Bay Regional Parks District, and recommend that flow releases (temperature, flow, ramping rates, etc.) take amphibian life history strategies into consideration.

3. Review meeting goals

It was agreed that the purpose of the meeting was to update the Phase 2 task matrix, and hear from experts regarding methodologies for modeling the relationship between flow and habitat.

4. Phase 2 Work Elements

Andy re-introduced the table of possible priority tasks for Phase 2, noting that the organization by category (Monitoring and Ecological Assessment, Fish Passage, and Modeling, Management) did not including prioritization of tasks within each category. Gary Stern had provided via email an assessment of the priority tasks from NMFS perspective, which he discussed. With the MOU focused upon flows, Gary suggested that the priority study elements should be:

#1: Quantification of steelhead habitat – streamflow relationships
#2: Water temperature monitoring and modeling
#3: Basin-wide water management operations model and data management
#4: Consider other aquatic species in restoring the steelhead fishery and assessing instream flows
#5: Adult steelhead passage assessment

Manny da Costa noted that the matrix contains only a few tasks relative to the large number in the study plan. Everybody agreed that while it was valuable to kick off Phase 2 by focusing upon priority tasks, the subcommittee should not lose sight of the other tasks identified in the Phase 1 plan.

5. Draft Fisheries Assessment Proposal

Pete Alexander presented an initial proposal for sampling in the Alameda Creek Flood Control Channel to determine the presence of smolt predators. This project would use an otter trawl at the mouth of the creek and electrofishing at other sites, and would be conducted by Pete with the assistance of volunteers from the Alliance.

It was noted that the study would only obtain presence/absence information rather than density, and the latter might be more valuable information. In addition, Pete noted that the goal of determining the presence of predators in the pools behind the inflatable dams was not met at present as no method had been identified to get the electrofishing boat to these locations. Gary noted that sampling in the pools would be important, as management options are available to reduce the presence of predators in these pools.

Pete agreed to consult with other subcommittee members to refine the proposal and see if a method might be devised to allow sampling for the pools behind the inflatable dams.

6. Review of Flow/Habitat Assessment Methods

The group benefited from a presentation by Chip McConaha of Jones & Stokes regarding the modeling to be conducted as part of the developing the SFPUC Habitat Conservation Plan. The goal of their work for the SFPUC will be to estimate any take that will be caused by the SFPUC's activities. To do this they will construct a model that incorporates many factors (including flow, channel form, habitat quantity, water quality), and this model will be used to identify important actions that can be taken to implement an effective conservation plan as part of the HCP. Chip noted the challenges in quantifying the impacts of these many factors. Rather than producing precise estimates of fish populations, he indicated the value of such a model is in conducting sensitivity analyses that help identify the actions/factors likely to have the greatest impact on the population.

Bill Trush of McBain & Trush reviewed the modeling concept discussed in the study plan (Fig 16) for estimating "good days" for steelhead in a watershed as a function of temperature, habitat area, and life history type. Bill indicated this type of modeling was going to be used to guide restoration activities on the Trinity River. He recommended strongly that the group discuss how model results will be used in decision making before investing heavily in modeling to make sure that the investment will be useful. Andy noted that the need to define "good days" requires making judgments up front, and this a great opportunity for the group to seeking consensus about how to apply the modeling method.

Gary suggested that the discussion continued by developing a set of specific questions to be answered, and then examining in these specific instances which approaches appear best. As example questions, Gary suggested "How much habitat is available above ACDD" or "Are storage volumes in reservoirs enough to influence flows in the flood control channel?" The group was requested to think about their most important questions, and submit those to Andy prior to the next meeting to be made part of the agenda packet. The SFPUC agreed to provide a list of questions they need to answer as part of developing the HCP. Andy noted that the "management issues" identified in the Phase 1 report are an excellent starting point to preparing questions.

7. Next meeting

It was agreed that the next Subcommittee meeting would be on Monday February 25th, and would again be a workshop devoted to discussion of the key questions identified by subcommittee members and the methods needed to answer them. It was agreed that the presence of Bill Trush and Chuck Hanson was beneficial for the subcommittee, and effort will be undertaken to support their participation at the next meeting.

8. Adjourn

The meeting was adjourned at 3:30.