Alameda Creek Fisheries Restoration Workgroup

Minutes of Meeting

June 6, 2002
Alameda County Public Works Agency

Attendees

Pete Alexander	EBRPD
Kristine Atkinson	DFG
Gordon Becker	CEMAR
Brenda Buxton	California Coastal Conservancy
Eric Cartwright	ACWD
Andrew Garth	Natural Resources Defense Council
Chris Gray	Supervisor Haggerty's Office
Andy Gunther	CEMAR
Jeff Hagar	Hagar Environmental Science
Chuck Hanson	Hanson Environmental
Jim Horen	Zone 7 Water Agency
Laura Kilgour	ACFCWCD
Mary Lim	Zone 7
Jeff Miller	ACA
Stuart Moock	PG&E
Jim Reynolds	ACWD
Anna Roche	SFPUC
Steve Rothert	American Rivers
Brian Sak	SFPUC
Carla Schulteis	ACFCWCD
Dave Shaw	ACA
Gary Stern	NMFS
Richard Wetzig	ACFCWCD

Updates

Steelhead Festival. The Steelhead Festival occurred May 11th, with about 25 agencies and other organizations represented at booths. Jeff Miller reported that attendance was similar to that of last year's festival and that the ACA will probably seek to combine the Steelhead Festival with other local events (such as a merchant's fair) in the future to increase attendance.

Levee Reconfiguration: Carla Schulteis reported that the Phase I process in which the ACFCWCD is involved is now coming to a close, and that a best alternative has been selected. The alternative involves breaching the flood control channel levee near Ardenwood to allow sufficient flood protection while restoring marsh habitat near the channel mouth. An agreement between federal and state agencies and the holders of the Cargill tract to purchase property on the channel's north side (for $100 million) was announced. Construction of a protective levee on the eastern side of this property will probably be necessary for flood protection, at an approximate cost of $8 million. Carla stated that the next phase of the Levee Reconfiguration project is to produce a higher level of detail in the conceptual design. (Additional discussion of the Levee Reconfiguration project is found in the Comment Summary memorandum accompanying these minutes.)

§1135Process. Laura Kilgour and Eric Cartwright summarized discussions carried out between the Corps, ACFCWCD and ACWD regarding the §1135 Process and the Preliminary Restoration Plan (PRP) distributed by ACFCWCD on June 3rd. At issue are cost limitations imposed under the §1135 Process and the likelihood of Corps' support for including various passage projects as elements of the Restoration Plan. As structured, the PRP includes fishways at the BART weir and middle inflatable dam as well as the upper inflatable dam. Screens at diversion points associated with the two inflatable dams are also under consideration. The PRP includes an alternative ,(#2) Middle Grade-Control Structure and Fish Screens Alternative, that deletes the fish ladder at the upper inflatable dam.

The cost of the project proposed in the PRP is estimated at about $8 million by the Corps and is likely to rise prior to implementation. Typically, project costs under the §1135 Process are limited to about $6.7 million. Since there is a possibility that necessary passage projects in the flood control channel will not be funded through this process, the Corps has indicated the potential desirability of the General Investigations program ("G.I. route") for funding through the Corps. The G.I route does not have spending limits and could be used to support a wider array of passage projects in Alameda Creek. However, political uncertainties, a requirement for more cost sharing by local sponsors, and a markedly slower implementation schedule present major disadvantages to this approach.

Eric Cartwright stated that the Corps is expected to address which elements may be included in the §1135 Process in the next four to five months when the Corps conducts its scoping effort for the Project Management Plan (PMP) portion of the Detailed Project Report. ACFCWCD and ACWD announced plans to conduct management-level meetings to derive a strategy for securing funding for flood control channel projects. The Workgroup agreed to reconvene the Grants sub-group (see meeting schedule below) to plan for financial issues related to construction of all necessary passage facilities. (Further discussion of the §1135 Process is provided in the attached memorandum.)

Implications of funding on the implementation schedule of the *Plan* led to an extended conversation regarding instituting an interim trap and haul program on Alameda Creek. While this program was previously discontinued due to concerns about founder effects on a restored Alameda Creek steelhead run and permitting issues, Gary Stern suggested that new information and the planning context may indicate a renewed desirability for trap and haul. Possible fish collection locations and methods were briefly discussed, as well as potential responsibilities and funding sources.

Gary Stern said that he would inquire about the need to guarantee adequate out-migration conditions as a condition of receiving authorization to conduct a trap and haul operation. Kristine Atkinson mentioned that such an operation would also require a DFG permit. The Workgroup members present agreed to further investigation of the process for establishing and permitting an interim trap and haul program. Gordon Becker later contacted the SFPUC regarding its position on conducting such a program. This issue will be discussed further at the next Workgroup meeting.

Agenda Items

Draft Restoration Action Plan. CEMAR reviewed the items in the *Plan* that produced comments requiring discussion by the Workgroup. These issues were summarized in a memorandum to the Workgroup dated May 31, 2002. The results of the Workgroup discussion are summarized in the attached memorandum, which lists the proposed changes to the *Plan* for Workgroup review. A new section of the *Plan* will be added describing valuable but non-essential restoration-related studies and projects in the watershed. To date, the following studies and projects have been identified by the Workgroup:

- Restoration-related water sources, responsibilities, costs and funding
- Passage flows and beneficial channel modifications
- In-stream Flow Incremental Methodology (IFIM) analysis
- Restored steelhead population estimates
- Levee reconfiguration
- Zone 7 Water Agency flood control facilities redesign
- Sunol Valley weir upstream of gravel pits modification/removal
- USGS gaging station weir modification/removal
- Alameda Creek Diversion Dam modification/removal

CEMAR requests that comments on proposed changes to the *Plan* be submitted electronically or in writing so that Workgroup consensus is accurately portrayed in the document's revision.

Next Workgroup Meetings. A meeting of a sub-group to discuss grant funding of restoration projects was scheduled for Tuesday, July 23rd at 9:30 a.m. at ACFCWCD. The next regular meeting of the Workgroup will occur Tuesday, July 30th at 9:30 at ACFCWCD. Agendas will be circulated prior to these meetings.

DISCUSSION SUMMARY AND
PROPOSED REVISIONS TO THE
DRAFT STEELHEAD RESTORATION ACTION PLAN
Prepared for the Alameda Creek Fisheries Restoration Workgroup
July 3, 2002

At its last meeting (June 6th), the Workgroup discussed comments received on the draft *Steelhead Restoration Action Plan* (issued on March 11, 2002). This memorandum summarizes the content of the discussions as well as proposed revisions/additions to the *Plan* to reflect Workgroup consensus on issues relating to the *Plan* and implementation of activities to restore steelhead to Alameda Creek. This material is presented both to document the results of the meeting and to offer Workgroup members the opportunity to comment on the proposed changes to the *Plan*. Members should direct comments to Andy Gunther or Gordon Becker at CEMAR.

Topics:

1. Levee reconfiguration

Comment Summary: ACFCWCD suggests adding the Levee Reconfiguration project to the *Plan*.
Discussion Questions: What does it mean to include this project in the restoration plan? Does the Workgroup believe that the project is essential to re-establishing steelhead in the watershed? Is inclusion agreeable to all Workgroup members?

Discussion Summary: The Workgroup agreed that levee reconfiguration could have both beneficial and adverse effects on a re-established steelhead population in Alameda Creek. In particular, marsh area created by the project may be useful to juvenile steelhead prior to out-migration provided that sufficient cover and food supply are available. Also, the project should be designed to avoid conditions that would lead to stranding as channel sections are dewatered after storm flow or tidal recession. Pete Alexander noted that the project could lead to increased predation from seals if steelhead, particularly in-migrating adults, hold in areas with insufficient cover.

It was also noted that the project will be very expensive (over $100 million) and that funding will be complicated and may involve uncertainty.

Plan Modifications: Since the levee reconfiguration is not essential to steelhead restoration, it will not be included in the *Plan* sections that describe necessary Workgroup activities. Cost and schedule information will not be included in the cost estimate or the timeline for steelhead restoration actions. However, the levee reconfiguration will be described in a new section of the *Plan* that lists non-essential activities in the watershed that may benefit steelhead. Other activities to be listed in this section will include "naturalizing" projects in flood control channels by Zone 7 Water Agency and CalTrans projects benefiting the corridor adjacent to Alameda Creek. Workgroup members are invited to submit information on other projects in the watershed that may benefit steelhead restoration.

2. Maps

Comment Summary: Maps are needed to convey information contained in the *Plan*.
Discussion Questions: What maps should be included in the *Plan*? What scale(s) is preferable? What format (GIS-based or other) is preferred? How is map preparation funded?

Discussion Summary: Workgroup members noted various organizations known to have mapping capabilities applicable to the Alameda Creek watershed such as ACFCWCD, DWR, and the Regional Water Quality Control Board.

Plan Modifications: CEMAR will work with ACFCWCD to produce maps in the *Plan* showing both watershed- and reach-scale features in appropriate formats.

3. §1135 project status and elements

Comment Summary: According to ACFCWCD, the cost of the §1135 projects is greater than that reported in the *Plan* and "will likely increase."
Discussion Questions: Given uncertainty regarding funding processes, should the *Plan* "de-link" the individual restoration actions from the §1135 process and note this source as only one of several potential funding sources?

Discussion Summary: ACFCWCD and ACWD are awaiting information on which flood control channel project elements may be funded through the §1135 process. The Corps is expected to develop this position in the next four to five months through a scoping process as part of Project Management Plan portion of the Detailed Project Report. Simultaneously, management at ACFCWCD and ACWD will meet to discuss strategy for securing funding for all needed flood control channel projects. In addition, a sub-group of the Workgroup will address funding issues in an upcoming meeting (see minutes accompanying this memo).

Because of the uncertain nature of funding for various flood control projects, the Workgroup members present committed to investigating the potential of a re-instituted trap and haul program for Alameda Creek as an interim solution to passage problems (see minutes).

Plan Modifications: The *Plan* will be revised slightly to reflect current uncertainty regarding the source of funds for flood control channel projects. The revisions will "de-link" specific projects and funding sources and will instead state that the §1135 process is being pursued as one of several possible strategies including the "G.I. route" or other options developed during the up-coming meeting of the grants sub-group.

The *Plan* may include an interim trap and haul program for Alameda Creek, including estimated costs and an implementation schedule, if such a program is adopted by the Workgroup.

4. Smolt out-migration

Comment Summary: ACFCWCD comments state, :"we should address the issue of out-migration of smolt somewhere in the document. This could include such issues as temperatures, predation, salinity, and water depth."
Discussion Questions: Should this information be developed and included in the Plan or should it be the subject of an additional recommended study? If it is to be included in the Plan, who will prepare the information and who will review it?

Discussion Summary: This issue was addressed in several contexts during the meeting including discussions regarding items 7 (Low-flow channel), 11 (In-stream flows) and 15 (Passage flows). The Workgroup agreed that restoration planning must include a determination of acceptable passage conditions for out-migrating steelhead smolts (e.g., flood control channel size and configuration, quantity and period of discharge through fishways, water supply facilities operations, etc.). However, the process by which this determination will be made is less clear and will likely involve multiple iterations over time.

Re-instituting trap and haul operations, which may occur in the future, is likely to entail determining acceptable passage flows for out-migration (in terms of both timing and quantity). Also, further efforts on fishway design will require information to be developed regarding the flow regime and channel geometry necessary to pass smolts through the flood control channel.

Plan Modifications: The *Plan* will cite the elements of valuable future study concerning both passage flows (reaches, timing and quantity) and low-flow channel characteristics.

5. Recreational fishing

Comment Summary: ACWD comments state that the Plan "should address the issue of recreational fishing in the watershed and identify the action items needed to determine to what extent recreational fishing will be allowed, if at all."
Discussion Questions: What are the Workgroup and regulatory agency policies on future recreational fishing in Alameda Creek? What agency policy changes, regulations, etc. will implement these policies? Who will perform and fund enforcement?

Discussion Summary: The previously operated put-and-take fishery in Alameda Creek was discontinued two years ago, and no plans exist to re-establish planting practices. According to Gary Stern, NMFS is in the process of evaluating impacts of fishing on steelhead but has not issued a no-fishing policy to date. Kristine Atkinson of DFG stated the likelihood that the only acceptable fishery involving restored steelhead in Alameda Creek would be of the barbless hook catch-and-release variety. Fishing regulations may be enforced by DFG or county game wardens.

Plan Modifications: The *Plan* will be revised to point out that past trout planting practices have been discontinued, and will include a description of NMFS current policy regarding steelhead fishing in areas where the fish are ESA listed. It will also describe the Workgroup goal of no adverse impacts on steelhead from fishing in watershed areas potentially serving as steelhead habitat. The *Plan* will not call for additional restrictions on fishing as an essential action, but will note that future conditions may warrant revisiting this issue.

6. Habitat conditions

Comment Summary: Information from the Hanson habitat studies should be used to revise the habitat descriptions in the Plan.
Discussion Questions: Given the non-standard formats of these studies (i.e., lack of setting, methods and discussion sections as well as graphical and tabular representations of study features necessary for evaluation and conveyance of information as noted in comments prepared by Jeff Hagar), will they be revised for incorporation in the Plan?

Also, does recently-developed information regarding habitat conditions affect the goals of the Workgroup for restoration of various stream reaches? In particular, is the Workgroup goal for Niles Canyon that it serve only as migratory habitat? Should the reach be the subject of habitat enhancement through provision of in-stream flows? Should additional restoration activities such as gravel enhancement be proposed for this reach?

Discussion Summary: Chuck Hanson agreed to revise the format of the study reports prepared by Hanson Environmental based on comments provided by Jeff Hagar and the Workgroup. This will allow for habitat information to be incorporated into the *Plan.*

Further discussions focused largely on the importance of information relating to Niles Canyon habitat to the overall goal of restoring steelhead in the watershed. Information is available suggesting both that portions of Niles Canyon may be suitable for *O. mykiss* rearing and that the reach is largely unsuitable for rearing. Neither scenario, however, negates the possibility that a viable steelhead population may be able to use existing habitat in the watershed for successful spawning and rearing.

It is unknown whether steelhead will be able to use portions of Niles Canyon for spawning and/or rearing in the future due to incomplete information (including the effects of removing Sunol Dam and possibly the USGS weir on water temperatures) and uncertainty regarding future water

management arrangements. The Workgroup agreed, however, that the *Plan* should not incorporate habitat enhancement activities in Niles Canyon until more is known about these issues.

Plan Modifications: The *Plan* will incorporate information developed in the Hanson studies into descriptions of Alameda Creek habitat. In general, the revised description will emphasize that current habitat conditions in Niles Canyon are likely to be stressful to steelhead potentially using the reach for spawning and/or rearing. Other recently-developed habitat information such as that produced by the Trihey & Associates studies will be also be cited. Areas where the Workgroup lacks information to characterize habitat will be noted, as will areas like the Arroyo de la Laguna tributaries where Workgroup members are currently undertaking habitat studies.

7. Low-flow channel

Comment Summary: ACWD comments state that "flows above 60 cfs are required to provide acceptable passage depth." ACWD therefore suggests that "…the development and maintenance of a low-flow channel within the flood control channel should be included as an essential action item."
Discussion Questions: Does the Workgroup believe existing information is adequate to characterize necessary passage flows in the flood control channel (see comments on Hanson study prepared by Jeff Hagar)? Should additional characterization be performed? What is the Workgroup policy regarding establishment and maintenance of a low-flow channel as part of the Plan?

Discussion Summary: The Workgroup reviewed the conclusion reached in a Hanson Environmental study that minimum flows necessary for steelhead passage would be reduced by providing a low-flow channel in the lower creek. Richard Wetzig noted that ACFCWCD practices for maintaining flood capacity in the lower channel could be altered so as to leave a low-flow channel after de-silting operations. The Workgroup agreed that providing a low-flow channel in the lower creek is likely to benefit steelhead restoration and reduce the impacts on water supply of providing in-stream flows. The mechanism for designing, establishing and maintaining a low-flow channel was not determined.

Plan Modifications: The *Plan* will include establishing a low-flow channel in the Flood Control Channel reach as a restoration action. Design and implementation details will be developed in a future study. The contents of this study will be described in the *Plan*, and will include quantities and timing of flows necessary for adequate passage, as well as implications for channel modifications in the watershed.

8. Population estimates

Comment Summary: Revise estimates of the potential run size in Alameda Creek reaches.
Discussion Questions: Should this work be performed as part of the Plan revisions or cited as a future study? Who will perform this work? For which reaches should estimates be performed? How will assumptions used in the estimation process (e.g., population density factors, location and length of stream reaches providing acceptable habitat, water supply provisions) be reviewed by the Workgroup?

Discussion Summary: Eric Cartwright emphasized the importance of providing numerical restoration goals to planning conducted by ACWD. Jim Horen agreed that Zone 7 management finds population estimates useful for planning purposes.

Gordon Becker reviewed the assumptions contained in the population estimates cited in the *Plan* and noted that the estimates were produced in part to characterize the recreational fishery that could be supported by restoring steelhead. He stated that since the estimates were produced, ESA listing of steelhead and omitting recreational fishing as a restoration goal have made the population

estimates non-essential. Pete Alexander noted that such estimates proved to be highly divisive to previous groups working to restore steelhead to Alameda Creek.

The Workgroup agreed that the estimates cited in the *Plan* would require revision to be meaningful for planning purposes. The Workgroup also agreed that the level of effort needed to produce scientifically-defensible population estimates is beyond the scope of the *Plan.*

Plan Modifications: Reference to population estimates previously developed for Alameda Creek will be omitted from the *Plan.* A summary description of the desired future condition, including the important concept of the Alameda Creek steelhead stock as an important part of the Central Coast ESU, will be added. Steelhead population estimates will be added to the *Plan* section noting valuable future studies for the Workgroup. The elements of this study, including an outline of the methodology, necessary assumptions (e.g., available habitat, population density, etc.) and provisions for peer review, will be presented in the study's description in the *Plan.*

9. Habitat improvement projects

Comment Summary: ACWD suggests that the costs of habitat improvement projects be included in estimated costs.
Discussion Questions: Are additional enhancement projects essential to re-establishing steelhead in the watershed? Should additional habitat enhancement projects be presented in the Plan (e.g., gravel replenishment, channel modifications and management actions)? What method should be used to estimate such costs (e.g., typical cost per stream mile, commissioned study, etc.)?

Discussion Summary: The Workgroup agreed that insufficient information exists to identify particular habitat improvement projects other than those already listed in the *Plan* (i.e., instream flows, riparian corridor improvements).

Plan Modifications: This comment will not result in changes to the *Plan.*

10. Oncoryhynchus mykiss supplementation

Comment Summary: DFG comments state that restoration activities may create conditions of "less (or no) need to intervene with artificially supplementing the steelhead run."
Discussion Questions: Is supplementation part of the Plan? Under what conditions? How should it appear on the implementation schedule?

Discussion Summary: The Workgroup agreed that supplementation will not be pursued concurrently with barrier modification, but will be studied as a tool to re-establish steelhead populations in the watershed if natural recruitment appears insufficient. The Workgroup may investigate pursuing an interim trap and haul program to bolster steelhead production until migration barriers are mitigated.

Plan Modifications: The *Plan* will describe supplementation as a tool available to the Workgroup should natural recruitment be deemed insufficient to re-establish a viable steelhead population in the watershed.

11. In-stream flows

Comment Summary: DFG recommends that flow enhancement "be prioritized as secondary" to passage-related projects.
Discussion Questions: Does the Workgroup agree with this statement and, if so, how does this affect the structure of the Plan? What is the Workgroup consensus on when flow schedules and water sources will be determined? What is the process for determining flow schedules and water sources?

Discussion Summary: The Workgroup agrees that operation of fishways will require associated in-stream flow provisions. Also, a trap and haul program re-instituted in the watershed could affect water diversion practices during trapping periods and/or the period of out-migration. Finally, Gary Stern cited the need for providing flows as part of the process of developing Habitat Conservation Plans related to resource management in the watershed.

Due to the complexity of in-stream flow determinations and existing gaps in knowledge concerning operational impacts and requirements, in-stream flow requirements will likely be determined *ad hoc*. The Workgroup does not appear to have the authority or resources to conduct the necessary investigations for in-stream flow schedules by reach. Rather, flows are likely to be determined as planning proceeds (e.g., for fishway design purposes) or as legal processes (e.g., Section 7 consultations, etc.) dictate.

Plan Modifications: The *Plan* will be revised to reflect the desirability of coordinated planning for in-stream flows and the likelihood that flow determinations will be made on an "as needed" basis.

12. IFIM and water operations model

Comment Summary: NMFS recommends "a full instream flow study (IFIM) be performed for steelhead and a water operations model [be] developed that integrates all existing facilities within the watershed." Regarding IFIM, SFPUC comments state "the suggestion of doing an IFIM is not warranted due to lack of flow (both pre and post-development)."
Discussion Questions: What method should be used to evaluate habitat availability under various flow regimens? How will this effort be funded?

Discussion Summary: The Workgroup agreed that information produced through an IFIM study would be valuable in determining habitat restoration goals in reaches affected by impoundments or other facilities capable of altering flow conditions. Stuart Moock related PG&E's experiences with IFIM, including "ball park" cost figures. Like in-stream flow issues, the Workgroup does not appear to have the resources or the authority to undertake IFIM studies at this time.

Plan Modifications: The *Plan* will state that IFIM studies would be valuable for planning purposes, but are not included as essential actions at present. The description of the studies will note the Alameda Creek reaches likely to be the subject of IFIM in the future, the outline of the IFIM methodology, information resulting from the studies, and "ball park" cost estimates.

13. SFPUC water facilities

Comment Summary: SFPUC comments suggest discussing the proposed fishery enhancement project in the Plan.
Discussion Questions: What information relating to this project is appropriate for inclusion in the Plan?

Discussion Summary: The author of this comment was not present at the Workgroup meeting, and the issue was not discussed due to time constraints. CEMAR invites comments on this issue from Workgroup members.

Plan Modifications: No changes to the *Plan* are currently proposed as a result of this comment.

14. Programmatic environmental review

Comment Summary: SFPUC comments note that "more work has to be done to identify the program such that a programmatic environmental document can be prepared."
Discussion Questions: Will the Plan be used to support programmatic environmental review? If so, how should its structure or content change to support this goal? Also, what agency would be the lead agency for this process?

Discussion Summary: The author of this comment was not present at the Workgroup meeting, and the issue was not discussed due to time constraints. CEMAR invites comments on this issue from Workgroup members.

Plan Modifications: No changes to the *Plan* are currently proposed as a result of this comment.

15. Passage flows

Comment Summary: SFPUC comments cite the need for additional discussion of implications for water supply.
Discussion Questions: Where will water needed to operate fish ladders come from?

Discussion summary: The Workgroup agreed that additional information regarding the flows providing adequate passage conditions in the flood control channel will be needed prior to additional design work on the proposed fishways. Flow amounts will also need to be developed in conjunction with designing and maintaining a low-flow channel in the lower creek. No additional information was provided regarding the source of water to be used to operate the fishways or maintain adequate passage conditions in the flood control channel.

Plan Modifications: The *Plan* will include a description of a valuable future study that characterizes flow requirements for steelhead passage in Alameda Creek. The study would list the stream reaches needing supplemental flows or other projects to provide passage, the quantity and timing of flows necessary, and design considerations for a low-flow channel in the flood control channel, among other passage-related issues.

16. Water costs

Comment Summary: Zone 7 comments suggest that the Plan include provisions for securing funds to finance water for in-stream flows.
Discussion Questions: Is raising money for environmental water purchases a part of the Plan?

Discussion Summary: The Workgroup agreed that uncertainties regarding the amount, source, timing and funding of in-stream flows make lengthy analysis of financing water purchases premature. Jim Horen noted that providing in-stream flows will involve costs like the other parts of the *Plan*, but that those costs are not estimated in the document. Jeff Miller stated that placing a high priority on securing financing for water purchases is not in the best interest of the restoration process until such time as legal requirements for in-stream flows are better understood. Gary Stern cited the need for providing flows as part of the process of developing Habitat Conservation Plans related to resource management in the watershed.

Plan Modifications: The *Plan* will include additional discussion of likely sources of water for in-stream flows and possible sources of funding for water purchases. The *Plan* will also cite the elements of a valuable future study that discusses water supply issues relating to steelhead restoration including responsibilities, sources, costs, and funding.