

Memorandum of Understanding (MOU)
Revised June 7, 2007

Among

Alameda County Flood Control and Water Conservation District, Alameda County Resource Conservation District, Alameda County Water District, Alameda Creek Alliance, American Rivers, California State Coastal Conservancy, California Department of Fish and Game, East Bay Regional Park District, National Marine Fisheries Service, Natural Resources Defense Council, Pacific Gas and Electric Company, San Francisco Public Utilities Commission, San Francisco Regional Water Quality Control Board, U.S. Army Corps of Engineers, U.S. Natural Resources Conservation Service, U.S. Fish and Wildlife Service, Zone 7 Water Agency

Regarding

The Alameda Creek Fisheries Restoration Workgroup and collaborative Flow Studies focused on Steelhead Restoration

I. Recitals

A. Steelhead and rainbow trout (*Oncorhynchus mykiss*), as well as other native fish, historically inhabited some portions of the Alameda Creek watershed. However, during the last 150 years, human activity in the watershed has resulted in the elimination of the historic steelhead run, and reduced the available habitat for rainbow trout.

B. The Alameda Creek Fisheries Restoration Workgroup (Workgroup) was organized in 1999 to address steelhead restoration issues in the Alameda Creek watershed. Initial Workgroup efforts focused in part on the identification and removal or modification of physical barriers preventing the migration of steelhead to and from, and the movement of rainbow trout within, the Alameda Creek watershed.

These and related efforts are described in two existing reports completed with input from the Workgroup:

1. An Assessment of the Potential for Restoring a Viable Steelhead Trout Population in the Alameda Creek Watershed (1999); and
2. Draft Steelhead Restoration Action Plan for the Alameda Creek Watershed (2003).

C. The Workgroup participants have decided to document the process by which the Workgroup functions and to pursue collaborative studies that would focus on water flows and habitat restoration in the Alameda Creek watershed that would support steelhead, while considering other native fishes and riparian communities. Funding for these collaborative studies will be provided as detailed in Section IV B, below.

II. Purposes of this MOU

The purposes of this MOU are to:

- A. Describe how the Workgroup operates as a collaborative forum to achieve the common goal of restoring steelhead fisheries in the Alameda Creek watershed; and
- B. Outline the process for jointly conducting flow studies to estimate the range, magnitude, timing, duration, frequency and location of flows necessary to restore steelhead fisheries, while also considering other native fishes and riparian communities, in the Alameda Creek watershed while minimizing the potential impacts to agencies responsible for supplying drinking water to Bay Area communities (Flow Studies, Phases 1-2, as outlined below).

III. Definitions The abbreviations and capitalized words and phrases used in this MOU have the following meanings:

- A. "ACFCWCD" refers to Alameda County Flood Control and Water Conservation District.
- B. "ACWD" refers to Alameda County Water District.
- C. "ACA" refers to Alameda Creek Alliance.
- D. "SCC" refers to California State Coastal Conservancy.
- E. "CDFG" refers to California Department of Fish and Game.
- F. "EBRPD" refers to East Bay Regional Park District.
- G. "NMFS" refers to National Marine Fisheries Service.
- H. "NRDC" refers to Natural Resources Defense Council.
- I. "PG&E" refers to Pacific Gas and Electric Company.
- J. "SFPUC" refers to San Francisco Public Utilities Commission.
- K. "Zone 7" refers to Zone 7 Water Agency.
- L. "Party" or "Parties" refers to the organization(s) signing this MOU.
- M. "Signatory" or "Signatories" refers to the person or group of people signing this MOU on behalf of their organization(s). The Signatories are the General Managers, Directors, Executive Officers, etc. from each organization, or their designees.
- N. "Workgroup" refers to the Alameda Creek Fisheries Restoration Workgroup.
- O. "Workgroup Members" refers to the senior staff delegated by the Signatories to represent their organization on the Workgroup.
- P. "CEMAR" refers to Center for Ecosystem Management and Restoration.
- Q. "Steelhead" refers to *Oncorhynchus mykiss* individuals that have spent a portion of their life in the ocean and are returning to freshwater environments to spawn.
- R. "Rainbow trout" refers to *Oncorhynchus mykiss* individuals that have spent their entire life in freshwater environments.
- S. "Consultant" means the independent fisheries consultant approved by the Alameda Creek Fisheries Restoration Workgroup to conduct the studies authorized by this MOU.

III. Workgroup Principles, Organization, and Participant Roles

A. Convener of Workgroup Meetings: The creation of the Workgroup in 1999 was led by ACFCWCD. The ACFCWCD currently chairs the Workgroup meetings and provides administrative support (e.g., circulating meeting agendas, preparing meeting minutes, etc). The designation of the Chair and the provisions for administrative support may be changed at the discretion of the Workgroup and the ability and willingness of any Party to act in these roles.

B. Voluntary Participation; Designation of Party Representatives; Ability to Set Meetings; Formation of Subcommittees: Participation in the Workgroup is voluntary, and open to the public. As a consequence of this MOU, each Signatory shall designate a representative as the primary contact for that Party on all Workgroup activities. The designated representatives will constitute the Workgroup Members. Workgroup Members agree to keep the Workgroup informed of activities they are carrying out related to steelhead restoration in the Alameda Creek watershed. As necessary, the Signatory from any Party can call a meeting of the Signatories. At least one meeting of the Signatories will occur during each calendar year to keep each Party informed of current events at the policy recommendation decision-making level. As necessary, the Workgroup Members or Signatories can establish ad hoc subcommittees to conduct work on behalf of the Workgroup. These ad hoc subcommittees would report back to the Workgroup.

C. Meeting Schedules, Circulation of Agendas, and Meeting Minutes. The Workgroup convenes approximately once every two months. Draft agendas and meeting minutes will be circulated in advance to Workgroup Members for comment before email distribution to the broader group. Draft minutes will be finalized by adoption by Workgroup Members at the next meeting. Adopted meeting minutes are currently posted by the Center for Ecosystem Management and Restoration (CEMAR) on their website, making them available to the public. If for whatever reason CEMAR is unable or unwilling to provide this service, new arrangements will be made to make these minutes available to the public.

D. Workgroup Dispute Resolution

The intent of the Parties is that any dispute should be resolved at the Workgroup Member level. If agreement on an issue cannot be reached among the Workgroup Members, then a more formal level of dispute resolution may be pursued.

If any Party chooses to pursue formal dispute resolution, they may do so by notifying the other Parties at the Signatory level in writing. This written notification shall also include a statement of the issue and any pertinent background material. The Parties will then convene a meeting of the Signatories within 45 calendar days of this notification to review the issue. If the Signatories cannot reach agreement, then the issue will remain unresolved, and each Party will be provided an opportunity to state their position on the issue.

IV. Purpose, Conduct and Funding of Flow Studies

A. Purpose of Flow Studies: The purpose of the flow studies is to develop the basis to estimate the range, magnitude, timing, duration, frequency and location of flows necessary to restore steelhead fisheries (while also considering other native fishes and riparian communities) in the Alameda Creek watershed while minimizing the potential impacts to water supply. Given the diversity of interests participating in the Workgroup, and the complexity of the issues surrounding steelhead restoration in the Alameda Creek watershed, a collaborative Technical Team, led by an independent consultant, can play an important role by generating data and analyses that are viewed as credible, unbiased, and can be supported by the Workgroup Members.

In addition, work conducted by the Technical Team at the direction of the Flows Subcommittee will be coordinated with the effort of the environmental consultant hired by the selected proposer to the Sunol Valley Quarry Request for Proposals (Surface Mining Permit 30) authorized by the SFPUC at its 12/13/05 meeting. This effort, in part, will include a riparian restoration plan through the Sunol Valley and a preferred alternative to address passage at the PG&E natural gas line that crosses Alameda Creek and currently blocks fish passage.

B. Joint Funding of Flow Studies: ACWD, PG&E, SFPUC, and Zone 7 have each agreed to contribute \$30,000 (\$120,000 total) towards Alameda Creek watershed flow studies that would be coordinated by a project manager, conducted by the Technical Team, and led by an independent consultant (Consultant) working on behalf of the Workgroup. The SCC will consider for approval in October 2006 at its regularly scheduled meeting or thereafter a match to this investment of an additional \$120,000. The selection of the project manager, scope of work for these studies and the identification of the Consultant will be led by the Flows Subcommittee on behalf of the Workgroup.

C. Phasing of Flow Studies: The flow studies will be conducted in three phases generally described as follows:

1. Phase 1 will begin after the Consultant has been identified by the Flows Subcommittee and approved by the Workgroup. The Flows Subcommittee will direct the Technical Team, which will be led by the Consultant, to review all the relevant existing data, reports, and studies on hydrologic and geomorphic conditions and fish habitat in the watershed. Based on this foundation and under the direction of the Flows Subcommittee, the Technical Team, led by the Consultant, will prepare a detailed work plan for the work necessary to estimate the range, magnitude, timing, duration, frequency and location of flows necessary to restore steelhead fisheries (while also considering other native fishes and riparian communities) in the Alameda Creek watershed while minimizing the potential impacts to water supply. The detailed work plan will include

a scope of work - including specific recommendations for additional data necessary to characterize existing conditions in the watershed, cost estimate, and schedule – that will be conducted in the second phase of the flow studies. The development of this detailed work plan will be supported by a small commitment of the joint funding, and will include specific responsibilities for members of the Technical Team, including the consultants and/or staff representing the water agencies. This detailed work plan will be approved by the Flows Subcommittee and the Workgroup prior to the release of funds provided by ACWD, SCC, PG&E, SFPUC, and Zone 7 to support Phase 2.

2. Phase 2 is focused on developing a common understanding of the existing conditions in the watershed (e.g., hydrologic and geomorphic conditions, and habitat) and collecting additional data necessary (as recommended in Phase 1) to provide the information necessary to estimate the range, magnitude, timing, duration, frequency, and location of flows necessary to restore steelhead fisheries (while also considering other native fishes and riparian communities) in the entire Alameda Creek watershed while minimizing the potential impacts to water supply. This assessment will be based on the review of existing hydrologic and geomorphic conditions and the estimated flows needed to support steelhead throughout their lifecycle in the watershed. Results from this second phase will form the foundation from which flow proposals that would support steelhead (while considering other native fishes and riparian communities) in the Alameda Creek watershed while minimizing impacts to water supply can be developed and analyzed.

3. The scope of Phase 3 of the flow studies will be determined following completion of Phases 1 and 2. Phase 3 may include, but is not limited to, development and analysis of specific alternatives, including operational, engineering, and natural resource strategies, with the intent of achieving the restoration goals identified in Phase 2.

D. Oversight of Flow Studies by Flows Subcommittee

The Flows Subcommittee, on behalf of the Workgroup, will provide the oversight in the development of the flow studies. The Flows Subcommittee will initially include the following Workgroup Members:

- (1) ACFCWCD;
- (2) ACWD;
- (3) ACA;
- (4) CDFG;
- (5) NMFS;
- (6) NRDC;
- (7) PG&E;
- (8) SFPUC;
- (9) USFWS; and

(10) Zone 7.

Additional Workgroup Members may be added in the future to the Flows Subcommittee with the concurrence of all Workgroup Members.

E. Implementation of Flow Studies

An organization chart has been developed by the Flows Subcommittee outlining the process for conducting the flow studies (see Appendix A). In summary:

1. The Workgroup will approve the selection of the Consultant, detailed work plan, and the Final Report as described below. The Workgroup will also review and comment on the draft reports.
2. The Flows Subcommittee will make recommendations to the Workgroup regarding the selection of the Consultant, the detailed work plan and budget to conduct Phases 1 and 2 of the Flow Studies, and the Final Report from the Technical Team. The Flows Subcommittee will also select the project manager, review monthly reports prepared by the project manager, and review and comment on draft reports prepared by the Technical Team.
3. The Project Manager will report to the Flows Subcommittee. The Project Manager will be responsible for overseeing the day-to-day work of the Consultant, and for notifying the Flows Subcommittee of any technical concerns and/or disagreements from the Consultant and/or members of the Technical Team.
4. The Technical Team will work collaboratively to conduct the Flow Studies. The Technical Team will: (1) consist of the Consultant and consultants and/or staff from ACWD, SFPUC, and Zone 7, (2) be led by the Consultant and (3) be coordinated by the Project Manager. The Technical Team may also be supplemented by consultants and/or staff representing CDFG, NMFS, or any of the other Flows Subcommittee members. The intent of the Technical Team membership is to ensure coordination of the ongoing activity by the Flows Subcommittee members with the work of the Technical Team, avoid duplication of effort, and to provide for broad ownership among the Flows Subcommittee members of the material developed by the Technical Team. The Technical Team members will be funded by the applicable Flows Subcommittee members, except for the Consultant, who will be supported by the joint funding provided by ACWD, SCC, PG&E, SFPUC, and Zone 7.
5. The Consultant will be recommended by the Flows Subcommittee, and approved by the Workgroup, to be part of and lead the Technical Team to conduct Phase 1, and potentially Phase 2, of the Flow Studies.
6. The project administrator will be ACWD. The role of the project administrator includes receiving the joint funds from SCC, PG&E, SFPUC, Zone 7, and any other potential sources of funding (e.g., local, State, and/or Federal) and dispersing payment to the Consultant.
 - a. The ACWD's contract with the Consultant will contain a requirement that entities providing joint funds (SCC, PG & E,

SFPUC and Zone 7) be named as additional insureds on any required insurance policies, and further that these entities be named as additional indemnitees in any indemnity clauses required by ACWD.

b. The ACWD's contract with the Consultant shall require the Consultant to submit monthly invoices. The invoices shall set forth in detail the consulting services provided and the expenses incurred by the Consultant, as well as the amount of total billings to date and the remaining balance in the contract. The ACWD's contract with the Consultant shall allow the Parties the right to audit the Contractor's books and records for a period of at least three years following completion of services under the contract.

7. Material generated by the Technical Team members will be subject to independent peer review at the direction of the Flows Subcommittee.

F. Regulatory Assurance

It is the intent of these flow studies to develop an agreed-upon flow strategy in Phase 3 that will meet with approval by State and Federal regulatory agencies and satisfy regulatory requirements. This flow strategy, when combined with other aspects of a fisheries restoration program, should provide long-term assurances and certainties for restoring and maintaining native fisheries, as well as providing water agencies and other utilities and special districts with long-term assurances and certainties for continued water supply and other infrastructure operations in the watershed.

G. Flow Studies Dispute Resolution

It is the intent of the Workgroup that any disagreement among the members of the Flows Subcommittee be resolved in that forum. If this is not possible, any Party may pursue the dispute resolution process described in Section IIID above. Any member of the Flows Subcommittee will be provided an opportunity to document any disagreement in writing and during a Workgroup meeting. In the event that there is an unresolved disagreement among the Technical Team members and/or the Flows Subcommittee members regarding interpretation of data or similar disagreement of a technical nature, the disagreement will be documented in the Technical Team's final report, and to the extent possible, recommendations will be provided to resolve the disagreement.

V. General Provisions of this MOU

A. Term This MOU will expire in five years from the date of execution by all the Parties unless extended by mutual consent of the Parties.

B. Amendments and Additional Signatories

This MOU may be amended at any time with the unanimous approval of the Parties. Additional Parties may be added at any time with the unanimous approval of the Parties.

C. Withdrawal. Any party may withdraw from this MOU at any time by giving 30 days written notice to the other parties. Such withdrawal shall not relieve the withdrawing party from any obligation to contribute to the funding of work by third parties that have already been engaged pursuant to the MOU by the effective date of the notice of withdrawal. Without limiting the generality of the foregoing, a party that is dissatisfied with the outcome of the dispute resolution process provided for in Section IIID may withdraw. The MOU remains in effect for the remaining Parties.

D. Construction of Terms: This MOU is for the sole benefit of the parties and shall not be construed as granting rights to any person other than the parties or imposing obligations on a party to any person other than another party.

E. Good Faith: Each party shall use its best efforts and work wholeheartedly and in good faith for the expeditious completion of the objectives of this MOU and the satisfactory performance of its terms.

F. Limitations: Implementation of this agreement by the signatory federal agencies is subject to the Anti-Deficiency Act, 31 U.S.C. Section 1341, and the availability of appropriated funds. This agreement is not intended and will not be construed to require the obligation, appropriation, or expenditure of any money from the U.S. Treasury. The signatories acknowledge that the federal signatories will not be required under this agreement to expend any federal agencies' appropriated funds unless and until an authorized official of that agency affirmatively acts to commit such expenditures as evidenced in writing.

G. Governing Law: This MOU is made under and shall be governed by the laws of the State of California and the United States.

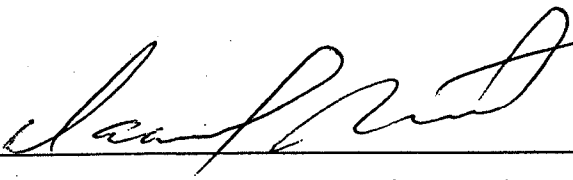
Signatures Attached.

Appendix A - Organization Chart for Alameda Creek Flows Studies

Signatures

APPROVED AS TO FORM
RICHARD E. WINNIE

By Cudrey Beaman



Alameda County Flood Control and Water Conservation District

Name Daniel Woldeesenbet, PhD., P.E.

Title Director of Public Works

Alameda County Resource Conservation District

Name _____

Title _____

Alameda County Water District

Name _____

Title _____

Alameda Creek Alliance

Name _____

Title _____

Signatures

Alameda County Flood Control and Water Conservation District

Name _____

Title _____

Alameda County Resource Conservation District

Name _____

Title _____



8/18/06

Alameda County Water District

Name Paul Piraino

Title General Manager

Alameda Creek Alliance

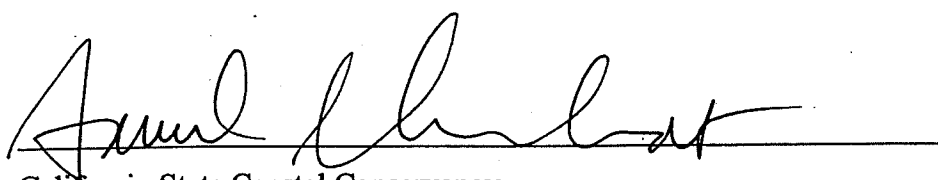
Name _____

Title _____

American Rivers

Name _____

Title _____



California State Coastal Conservancy

Name Samuel Schubert

Title EO

California Department of Fish and Game

Name _____

Title _____

East Bay Regional Park District

Name _____

Title _____

American Rivers

Name _____

Title _____

California State Coastal Conservancy

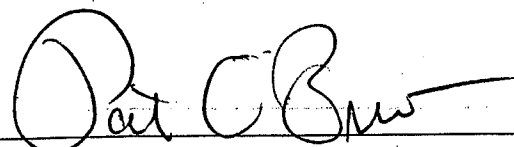
Name _____

Title _____

California Department of Fish and Game

Name _____

Title _____



East Bay Regional Park District

Name Pat O'Brien

Title General Manager

National Marine Fisheries Service

Name _____

Title _____

Natural Resources Defense Council

Name _____

Title _____



Pacific Gas and Electric Company

Name Wendy Pulling

Title Director, Environmental Policy

San Francisco Public Utilities Commission

Name _____

Title _____

National Marine Fisheries Service

Name _____

Title _____

Natural Resources Defense Council

Name _____

Title _____

Pacific Gas and Electric Company

Name _____

Title _____

San Francisco Public Utilities Commission

Name *Susan Leal* *SUSAN LEAL*

Title *GM*

Signatures

Alameda County Flood Control and Water Conservation District

Name _____

Title _____

Doreen S. Combs

Alameda County Resource Conservation District

Name Doreen S. Combs

Title PRESIDENT

Alameda County Water District

Name _____

Title _____

Alameda Creek Alliance

Name _____

Title _____

Signatures

Alameda County Flood Control and Water Conservation District

Name _____

Title _____

Alameda County Resource Conservation District

Name _____

Title _____

Alameda County Water District

Name _____

Title _____



Alameda Creek Alliance

Name Jeff Miller

Title Executive Director

American Rivers

Name _____

Title _____

California State Coastal Conservancy

Name _____

Title _____



California Department of Fish and Game

Name Charles Armor

Title Regional Manager

NOV 03 2008

East Bay Regional Park District

Name _____

Title _____

Rodney R. McInnis

National Marine Fisheries Service

Name Rodney R. McInnis

Title Regional Administrator

Natural Resources Defense Council

Name _____

Title _____

Pacific Gas and Electric Company

Name _____

Title _____

San Francisco Public Utilities Commission

Name _____

Title _____

Dale Myers 8/22/06
Zone 7 Water Agency 100 North Canyons Pkwy
Name Dale Myers Livermore, CA 94551
Title General Manager

Appendix A - Organization Chart for Alameda Creek Flows Studies

Appendix A
Organization Chart for Alameda Creek Flows Studies

