



## ***Alameda Creek Alliance***

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*Sent via e-mail to [wsip.peir.comments@gmail.com](mailto:wsip.peir.comments@gmail.com) on October 1, 2007*

October 1, 2007

San Francisco Planning Department  
Attention: Paul Maltzer  
Environmental Review Officer, WSIP PEIR  
30 Van Ness Avenue, Suite 4150  
San Francisco, CA 94103

### **Alameda Creek Alliance Comments on WSIP Draft PEIR**

Attached are the comments of the Alameda Creek Alliance (ACA) on the Draft Program Environmental Impact Report (DPEIR) for the SFPUC's Water System Improvement Program (WSIP). The ACA is a community watershed group dedicated to the protection and restoration of the natural ecosystems of the Alameda Creek watershed. The ACA has over 1,450 members that live in or near the Alameda Creek watershed. The ACA has been working to restore steelhead trout and salmon to Alameda Creek and to protect endangered species in the Alameda Creek watershed since 1997.

The ACA supports the SFPUC's efforts to make needed repairs and earthquake safety retrofits to its water system, however we also expect the rebuilt water system infrastructure in the Sunol Valley (including Calaveras Dam and Reservoir, Alameda Diversion Dam, and San Antonio Reservoir) to be operated to allow restoration of steelhead trout and salmon to Alameda Creek. We have some serious concerns with the DPEIR. The failure of the DPEIR to address impacts to anadromous fish in Alameda Creek and its inadequate mitigation measures for special-status species has the potential to jeopardize the SFPUC's time table for implementing the WSIP projects.

We are very concerned that two of the WSIP projects proposed in the Sunol Valley Region, the Calaveras Dam Replacement Project and the Alameda Creek Fishery Enhancement Project, include proposals to divert additional streamflow from Alameda Creek, water diversions that which would severely impact native fish and other aquatic wildlife in Alameda Creek. The SFPUC already diverts 86% of the stream flows tributary to the Sunol Valley, from Alameda, Calaveras and San Antonio Creeks, with significant, unmitigated impacts to native fish and wildlife.

The SFPUC continues to illegally operate Calaveras and San Antonio Reservoirs, with no minimum bypass flows to keep native fish downstream in good condition. It is questionable whether the SFPUC has a legal water right to divert Alameda Creek streamflow at the Alameda Diversion Dam, and the WSIP plan to divert almost all of the

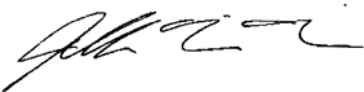
winter and spring stream flows from upper Alameda Creek at this dam is unacceptable. It is inconceivable that the Calaveras Dam replacement, a major infrastructure project that should address and remedy the impacts of the dam on Alameda Creek fisheries, does not include adequate minimum flows for anadromous fish nor mitigations commensurate with the impacts of the operation of the dam.

With other agencies planning fish passage projects in lower Alameda Creek that could allow steelhead trout and chinook salmon to return to the upper watershed by 2010 (before construction of Calaveras Dam is complete), we are extremely disappointed that the WSIP does not include planning, environmental benefits and adequate mitigations for sustaining steelhead and salmon in Alameda Creek.

The ACA has made every effort since 2001 to communicate our concerns and suggestions regarding the SFPUC's Sunol Valley projects with potentially significant impacts to the fisheries of Alameda Creek, to every level of the SFPUC, at numerous public forums and meetings, and in numerous written comments. In 2005, 68 Bay Area conservation groups called on the SFPUC to improve its stewardship of local and regional watershed lands, specifically asking the SFPUC to restore stream flows in Alameda Creek sufficient to sustain steelhead and rainbow trout, protect rare fish populations in SFPUC reservoirs, remove the Alameda Diversion Dam, and abandon plans to construct a controversial dam as part of the Fishery Enhancement Project.

The public expects the SFPUC to operate a water system that adequately protects and restores the watersheds and wildlife habitats under the SFPUC's management. The WSIP should reflect this stewardship obligation and the PEIR should adequately analyze and mitigate for reasonably foreseeable significant impacts to all special-status species and rare habitats.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Miller", written in a cursive style.

Jeff Miller

Director, Alameda Creek Alliance

## **THE DPEIR FAILS TO CONSIDER IMPACTS AND INCLUDE ADEQUATE MITIGATIONS FOR ANADROMOUS FISH**

The DPEIR approach to the issue of potential steelhead restoration in Alameda Creek is that since “there is no current steelhead migration above the BART weir” (page S-67) in lower Alameda Creek, there can be no impacts to steelhead from implementation of the WSIP. The DPEIR states:

“For the purposes of full disclosure the PEIR provides this discussion of steelhead in lower Alameda Creek, and the potential for steelhead to be restored to the upper reaches of Alameda Creek (above the BART Weir). However, because this steelhead access does not currently exist and there is no current steelhead migration above the BART Weir, there would be no impact on steelhead migration, spawning, or juvenile rearing upstream of the BART Weir as a result of WSIP implementation. Further, as described in the preceding discussion, since a number of steps are required before steelhead migration further upstream can occur, it is speculative to assess the specific impacts that system operation under the WSIP might have on the potential future restoration of steelhead. Thus, no impact analysis or conclusion is developed in this PEIR. If and when steelhead are restored, the SFPUC will be required to conform its system operations to comply with the applicable Endangered Species Act requirements.”

This approach is nonsensical. The WSIP contemplates construction and operation of facilities that will last decades, if not centuries. Over a dozen public agencies are working Alameda Creek restoration projects that will bring steelhead trout and salmon back into upper Alameda Creek, very likely before environmental review and construction have been completed for WSIP projects in the Sunol Valley. Operations of Calaveras Dam and other WSIP facilities are certain to impact these fish. It makes no sense to install major infrastructure and conduct environmental review for operating procedures that may then need to be modified or replaced to comply with wildlife protection laws.

Furthermore, on July 31, 2007, the Alameda County Flood Control and Water Conservation District and the Alameda County Water District signed a Memorandum of Understanding (MOU) for an agreement to develop a preliminary design of a fish passage facility in the Alameda Creek flood control channel. The MOU states the goal of these agencies to “have the Fish Passage Facility constructed by the end of calendar year 2010,” before construction of Calaveras Dam begins. This facility will provide fish passage for anadromous fish past the BART weir and the middle ACWD rubber dam, the primary barriers to steelhead migration up lower Alameda Creek.

The lower ACWD rubber dam is scheduled for removal in 2008. The ACWD operates the upper ACWD rubber dam to have the dam deflated during winter storm events, which will allow some anadromous fish to bypass the dam and migrate into Niles Canyon during some winter flows. The next significant fish passage barriers on Alameda Creek are the USGS gaging station weir in lower Niles Canyon, owned by the SFPUC and

likely not a barrier to fish migration at higher flows, and a PG&E gas pipeline crossing in the Sunol Valley. The DPEIR (Table 5.7-13) states that the PG&E gas pipeline crossing fish passage project is scheduled for completion by 2009.

The construction of Calaveras Dam from 2009 through 2011 or 2012 clearly has a reasonably foreseeable impact on steelhead trout that could access Alameda Creek by 2010. The DPEIR claims that it is “speculative to assess the specific impacts that system operation under the WSIP might have on the potential future restoration of steelhead.” As discussed above, it is not speculative to consider the impacts of the construction and operation of WSIP projects on migratory fish. Indeed, it is known that stream flows contemplated in the WSIP will be inadequate to protect steelhead and salmon. The DPEIR must assess potential impacts to all anadromous fish in Alameda Creek, including steelhead trout, chinook salmon and Pacific lamprey.

### Status of Fisheries

Pacific lamprey are designated a state Species of Concern, and have declined severely in California. The species was petitioned for federal ESA listing in 2003. Pacific lamprey have been found recently in only three other streams in the Bay Area - Coyote Creek, Conn Creek and Sonoma Creek - so the Alameda Creek lamprey population is quite significant. Adult lamprey already have passage into upper Alameda Creek and are known to occur from the lower Sunol Valley through Sunol Regional Park. The DPEIR fails to discuss or analyze the impacts of WSIP projects on lamprey and whether proposed stream flows are adequate to keep lamprey populations below SFPUC dams in good condition. The DPEIR discussion of Alameda Creek fisheries (5.4.5-2) states that SFPUC fishery monitoring has documented successful lamprey spawning and rearing within Niles Canyon in recent years. The Alameda Creek Alliance citation given, *Comments on Central California Coast steelhead status review, October 19, 2004 (ACA, 2004)*, does not refer to lamprey. There is also documentation of lamprey in Alameda Creek from the Sunol Valley up to near the Calaveras Creek confluence.

The DPEIR discussion of Alameda Creek historical fisheries (section 5.4.5.1) should acknowledge that Alameda Creek also supported coho salmon and chinook salmon, and that there is historical evidence of steelhead trout in Arroyo de la Laguna, Arroyo Mocho, and Arroyo Valle – these occurrences have been extensively documented by the Alameda Creek Alliance (see [http://www.alamedacreek.org/About\\_Alameda\\_Creek/Alameda%20Creek%20salmonid%20documentation%203-8-06.pdf](http://www.alamedacreek.org/About_Alameda_Creek/Alameda%20Creek%20salmonid%20documentation%203-8-06.pdf)).

The DPEIR discussion of the regulatory status of steelhead/rainbow trout should mention the SFPUC’s role in eliminating proposed ESA protections for resident rainbow trout in Alameda Creek, and the resultant removal of Alameda Creek from designated critical habitat protections for Central California Coast steelhead.

The National Marine Fisheries Service (NMFS) proposed in June of 2005 to include resident trout and some landlocked steelhead, including those in Alameda Creek, as part

of the Central Coast steelhead population, based on genetic evidence that Alameda Creek's resident fish are similar to adult ocean-run steelhead. Studies published by the U.S. Geological Survey in 1999 and 2003 demonstrated that native Alameda Creek rainbow trout and reservoir fish above SFPUC dams are genetically related to wild steelhead in the Central Coast steelhead population. The studies analyzed fin clips from adult steelhead captured at the Fremont BART weir in recent years by ACA volunteers, rainbow trout populations in upper Alameda Creek and its tributaries collected by Alameda County in 1999, and landlocked reservoir trout from surveys conducted by the SFPUC. Landlocked trout behind the two SFPUC reservoirs are thought to be the descendants of the original migratory steelhead run in Alameda Creek and represent the best native gene pool for restoring steelhead below the dams.

The SFPUC lobbied against listing Alameda Creek trout, despite compelling genetic evidence that these fish are descendants of wild steelhead, and the final NMFS determination in December 2005 excluded resident fish and excluded Alameda Creek from designated critical habitat for Central Coast steelhead. This issue will likely be revisited by the courts and NMFS, and it is foreseeable that resident rainbow trout in SFPUC reservoirs and in Alameda Creek could be listed under the ESA.

**PROPOSED WATER SUPPLY OPERATIONS IN THE DPEIR FAIL TO COMPLY WITH STATE AND FEDERAL WILDLIFE PROTECTION LAWS AND THE SFPUC ENVIRONMENTAL STEWARDSHIP POLICY AND THE DPEIR HAS AN INCOMPLETE DISCUSSION OF REGULATORY REQUIREMENTS, REQUIRED ACTIONS AND APPROVALS**

The WSIP states (pages S-10 and 3-39) that the proposed SFPUC water system operation strategy includes "complying with all water quality, environmental, and public safety regulations" and "meeting all downstream flow requirements." The DPEIR (page 3-43) claims that the SFPUC "will meet, at a minimum, all current and anticipated legal requirements for protection of fish and other wildlife habitat."

State Fish and Game Codes

The DPEIR fails to discuss relevant California Fish and Game Codes and California Department of Fish and Game (CDFG) requirements to protect native fish and wildlife.

The SFPUC currently operates Calaveras and San Antonio Reservoirs with no minimum bypass flows to keep native fish downstream in good condition, in violation of California Fish and Game Code §5937. California Fish and Game Code §5937 requires that the owner of a dam allow sufficient water to pass through a fishway or dam, to keep in "good condition" any fish that may be planted or exist below the dam. The law applies to any dam regardless of when it was built.

The California Department of Fish and Game submitted comments on the Notice of Preparation for the DPEIR on November 22, 2005, stating that "at this time, both the Alameda Creek Diversion Dam and Calaveras Reservoir are out of compliance with Fish

and Game Code 5937 which requires dam owners to release enough water to keep downstream fish populations in good condition.”

Under the WSIP, the SFPUC proposes to operate the Alameda Diversion Dam in a manner that will violate §5937, diverting almost the entirety of late fall through spring flows from upper Alameda Creek, which will clearly fail to keep fish populations downstream of the diversion dam in good condition. The SFPUC also has not demonstrated that the proposed operation of Calaveras and San Antonio Reservoirs under the WSIP will keep fish populations downstream of these dams in good condition. The SFPUC must show that the minimum flows proposed for Calaveras Reservoir will maintain healthy fish and wildlife populations downstream. The CDFG commented that the SFPUC “will need to assess adequate flows for anadromous steelhead trout and will need to renegotiate with DFG such that adequate flows are released to comply with Fish and Game Code 5937.”

The CDFG commented that the DPEIR should “consider utilizing the SFPUC’s related water storage facilities within the Alameda Creek watershed (i.e., San Antonio Reservoir) to meet the needed minimum bypass flows in the affected reach of Alameda Creek and in particular passage flows needed through Sunol Valley.” The WSIP does not include consideration of any minimum flows from San Antonio Reservoir.

The proposed operation of the Alameda Diversion Dam without fish passage violates California Fish and Game Code §5901, which makes it illegal to maintain any device which prevents or impedes the passing of fish up and down stream. The diversion dam blocks the upstream and downstream movements of both resident and transient fishes, including resident rainbow trout. Once fish passage projects in lower Alameda Creek are completed, the diversion dam could block upstream and downstream migration of steelhead trout. Operation of the diversion dam not only affects fish migration past the diversion dam, but also potential fish passage through Little Yosemite, by diverting the majority of the annual flow of upper Alameda Creek. Reducing the frequency of high flow periods downstream of the diversion dam reduces fish passage opportunities through Little Yosemite.<sup>1</sup>

The WSIP should also include feasible fish passage provisions for Calaveras and San Antonio Dams. Calaveras and San Antonio Dams block the upstream and downstream movements of both resident and migratory fishes, including steelhead trout.<sup>2</sup> The reservoir trout populations appear to be descended from native steelhead populations isolated behind the dam.<sup>3</sup> Calaveras Dam blocks steelhead access to the upper Calaveras watershed including its tributaries Arroyo Hondo, Smith, and Isabel Creeks, likely the

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<sup>1</sup> Gunther, A. J. et al. 2000. An Assessment of the Potential for Restoring a Viable Steelhead Trout Population in the Alameda Creek Watershed. Prepared for the Alameda Creek Fisheries Restoration Workgroup.

<sup>2</sup> San Francisco Public Utilities Commission (SFPUC). 2005. Population Size Estimates for Adult Rainbow Trout (*Oncorhynchus mykiss*) in San Antonio and Calaveras Reservoirs. Technical Memorandum No. 2-04-006, October 2005. Water Quality Bureau, Sunol, CA.

<sup>3</sup> Nielsen, J. L. 2003. Population Genetic Structure of Alameda Creek Rainbow/Steelhead Trout - 2002. Final Report Submitted to Hagar Environmental Science December 4, 2003. US Geological Survey, Alaska Science Center, Anchorage, Alaska.

best historical steelhead spawning and rearing habitat in the entire Alameda Creek watershed. San Antonio Dam blocks steelhead access to San Antonio and Indian Creeks. These dams prevent gene flow between trout populations above and below the reservoirs, and may be affecting the long-term genetic viability of reservoir and stream populations.

#### 1997 MOU for Flows from Calaveras Reservoir

The WSIP references a Memorandum of Understanding (MOU) the SFPUC signed with CDFG in 1997, to release up to 6,300 acre-feet per year of water to Calaveras and Alameda Creeks for enhancement of fisheries and the other natural resources. Compliance with the MOU would restore minimal stream flows to approximately five miles of Alameda Creek, at which point the water would be recaptured and diverted back into the SFPUC's water supply system.

To date the SFPUC has not released water for this purpose, but the WSIP proposes releasing these flows after completion of construction of Calaveras Dam. The DPEIR (pages 5.4.1-9 and 5.4.1-10) claims that implementation of the 1997 MOU is "hindered by the lack of sufficient cold-water storage in Calaveras Reservoir" and that the releases are "on hold due to lack of sufficient cold-water storage in the reservoir." The SFPUC has also stated in its *Final Conceptual Engineering Report* for Calaveras Dam that the 1997 MOU flows have "not been fully implemented because of the current limitations on storage" and "because of the storage restriction ordered by DSOD at the reservoir."

This is a misrepresentation of the limitations the DSOD drawdown places on the SFPUC's ability to immediately release flows from the reservoir. Although current water storage in Calaveras Reservoir is at 60% less than the maximum before the DSOD drawdown, the SFPUC's yield (available treated water supply) from Calaveras has apparently only been minutely affected by the DSOD operating restrictions on Calaveras Reservoir. According to the Notice of Preparation for the WSIP PEIR published by the SFPUC in 2005, Calaveras yield was 219 mgd, fully 98% of the normal system yield of 223 mgd. This means that water was available for flow releases to Calaveras Creek and Alameda Creek, but that the SFPUC chose to divert this water to its water treatment plant instead. As discussed below, the resident trout population below Calaveras Dam is not being kept in good condition - low summer flows and high water temperatures have reduced native rainbow trout to remnant populations in upper Alameda Creek.

The MOU flows are intended to benefit resident rainbow trout in five miles of stream, and were not intended to meet the habitat needs of anadromous fishes such as steelhead trout, salmon, or lamprey. The MOU also allows these flow releases to be recaptured downstream in the vicinity of the Sunol Valley Water Treatment Plant. It is important to note that the MOU flows are required minimum stream flows at the confluence of Calaveras and Alameda Creeks, not flows that must be released from Calaveras Reservoir. During most winters, the flows required under the MOU from November 1 through March 15 could be met by natural stream flow in Alameda Creek, thus requiring little or no flow releases from Calaveras Reservoir by the SFPUC. For normal and wet water years, summer releases would be the only truly enhanced stream flow, so that in

most years the SFPUC would release only 3,150 acre-feet under the proposed Project. The DPEIR fails to discuss the rationale and scientific basis for the proposed flow schedule and whether these flows are adequate for all life stages of anadromous, or for that matter, resident fish. These flows will not allow for upstream and downstream migration of anadromous fish and will not provide rearing habitat for fish below the recapture point. The WSIP should include adequate flows for anadromous fish without downstream recapture as part of the operating criteria for the rebuilt Calaveras Reservoir.

The California Department of Fish and Game stated in their comments on the Notice of Preparation for the DPEIR on November 22, 2005, that the SFPUC must:

“provide flow releases to the stream channel below Calaveras Reservoir dam to encourage riparian vegetation growth, invertebrate productivity, adequate dissolved oxygen, low water temperatures, and provide some rearing habitat for juvenile steelhead trout and spawning adult steelhead trout. The SFPUC, under the aforementioned 1997 MOU with DFG, agreed to specific flow releases to provide habitat for resident rainbow trout and other native fish species downstream of Calaveras Reservoir based on the knowledge of fish migration barriers being present in the lower downstream reaches of Alameda Creek. At this time, however, there is active fish passage remediation at these barriers. The SFPUC will need to assess adequate flows for anadromous steelhead trout and will need to renegotiate with DFG such that adequate flows are released to comply with Fish and Game Code 5937.”

#### Questions About SFPUC Water Rights

The DPEIR discussion of existing water rights and entitlements (Section 2.5.1) does not mention the potential lack of a valid water right for the Alameda Diversion Dam, and also fails to mention that existing water rights can be adjudicated by the State Water Board to protect beneficial uses, including fisheries.

It is questionable whether the SFPUC has a legal water right to divert Alameda Creek streamflow at the Alameda Diversion Dam. The SFPUC has a valid pre-1914 appropriative right for Calaveras Dam and reservoir, but this water right does not mention the Alameda Creek diversion dam and tunnel, which were not built until the 1930s. The WSIP plan to divert almost all of the winter and spring stream flows from upper Alameda Creek at this dam violates Fish and Game Code §5937. As noted by the State Water Resources Control Board in a DPEIR scoping comment letter to the SFPUC dated October 3, 2005, “an appropriative water right issued by the State Water Board is also required for any increased diversion from Alameda Creek.”

In a letter submitted during the scoping phase for the PEIR, the State Water Resources Control Board (SWRCB) stated, “the DEIR should include sufficient information for the State Water Board to use the document for water right permitting purposes. Therefore, the document should evaluate the availability of unappropriated water after taking into

consideration prior rights and the water required to maintain public trust resources. Division staff recommends that any evaluation utilize a cumulative flow impairment methodology, such as the assessment method described in the *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams (Draft)* prepared by NOAA Fisheries Service and the Department of Fish and Game and dated June 17, 2002.” The impact evaluation in the DPEIR does not employ a cumulative flow impairment methodology and falls short of answering the question of whether there is sufficient water available to maintain public trust resources.

The DPEIR should mention that in 2001 the SWRCB estimated that the entire Alameda Creek watershed is 72% “impaired,” impairment representing the ratio of water appropriation under existing water rights to estimated stream flow, and that in 2002 the state Department of Water Resources DWR concludes the Alameda Creek watershed is “fully appropriated” and no further water diversions will be considered.

### Misinterpretation of the Raker Act

The discussion of the Raker Act in the WSIP misinterprets the Act. The Raker Act, Section 9(h) provides:

“That the said grantee shall not divert beyond the limits of the San Joaquin Valley any more of the waters from the Tuolumne watershed than, together with the waters which it now has or may hereafter acquire, shall be necessary for its beneficial use for domestic and other municipal purposes.”

Since San Francisco must fulfill its “beneficial use” water needs with “waters which it now has or may hereafter acquire,” Tuolumne River water must be a source of last resort for San Francisco. The DPEIR has interpreted this section of the Raker Act as follows: “section 9(h) of the Raker Act requires San Francisco to make full use of its local sources of water.” The Notice of Preparation interpreted this requirement in the Raker Act in an overly narrow way:

“under the WSIP, the regional water system would continue to comply with the conditions of all applicable institutional and planning requirements, including: . . . maximizing use of water from local watersheds.”

The Raker Act does not define the “water which it now has” as “water from local watersheds.” It is true that San Francisco “now has” water rights to water from Bay Area creeks including Alameda Creek. However, it is also true that San Francisco “now has” waters that it is discharging from waste water treatment plants that could be recycled, and waters recoverable through water use efficiency and water conservation measures.

## Federal Endangered Species Act

The federal Endangered Species Act (ESA) prohibits unauthorized take of listed species. The DPEIR does not ensure that WSIP projects will be in compliance with the ESA, specifically with regards to adequate stream flows for steelhead trout in Alameda Creek.

The DPEIR claims that the U. S. Army Corps of Engineers (USACE) will not need to consult with the National Marine Fisheries Service (NMFS) on steelhead trout impacts for the operation of Calaveras Dam. The DPEIR states:

“the USACE is required under Section 7 of the ESA to consult with NMFS and the USFWS on designated species to obtain a biological opinion of no jeopardy and an incidental take statement. NMFS also advised the SFPUC that while the USACE would need to initiate a Section 7 consultation with NMFS on the Calaveras Dam Replacement project, it was unlikely that operation of Calaveras Dam would adversely affect steelhead in the area below the BART Weir by making conditions unsuitable for successful steelhead spawning, egg incubation, or juvenile rearing. For this reason, NMFS advised that the steelhead issues above the BART Weir would not be addressed in the Calaveras Dam Replacement project Section 7 consultation, and that incidental take coverage for steelhead in the upper watershed would have to be obtained through a habitat conservation plan (HCP) or through a re-initiated USACE consultation on the Calaveras Dam Replacement project after the lower passage problems are remedied.”

This is incorrect. It would be illegal for the Corps to fail to consult on the impacts to steelhead. As noted above, steelhead trout will potentially have access to Alameda Creek stream reaches affected by the operation of Calaveras Reservoir (and San Antonio reservoir and the Alameda Diversion Dam) by 2010, including the Niles Canyon, Sunol Valley, Little Yosemite, and lower Calaveras Creek reaches managed by the SFPUC. It is reasonably foreseeable that listed anadromous steelhead will return to SFPUC stream reaches before or shortly after construction of Calaveras dam and will be significantly affected by operation of the SFPUC dams.

The DPEIR states that “if and when steelhead are restored, the SFPUC will be required to conform its system operations to comply with the applicable Endangered Species Act requirements.” However, the DPEIR must analyze the reasonably foreseeable impacts to steelhead and other anadromous fish now, since it is highly probable that these species will be present in Alameda Creek during the construction and operation of the proposed Sunol Valley WSIP projects. Future operation of SFPUC dams and diversions to comply with the ESA requirements for steelhead will be dependent on current planning and inclusion of appropriate infrastructure in the WSIP projects.

The discussion of the Regulatory and Conservation Planning Framework in the DPEIR (p 4.6-23) mentions the need for consultation with federal wildlife agencies on listed

species. The DPEIR should also discuss published recovery plans for listed species potentially affected by the WSIP and ensure that WSIP activities are consistent with these recovery plans.

### Water Enterprise Environmental Stewardship Policy

One of the stated Program Goals of the WSIP is to enhance sustainability in all system activities and more specifically to manage natural resources and physical systems to protect watershed ecosystems. To further clarify their commitment to environmental stewardship, the SFPUC adopted the Water Enterprise Environmental Stewardship Policy in 2006. The policy states, “It is the policy of the SFPUC to operate the SFPUC water system in a manner that protects and restores native fish and wildlife downstream of SFPUC dams and water diversions, within SFPUC reservoirs, and on SFPUC watershed lands.”

The DPEIR description of how the SFPUC manages the Alameda Creek watershed (page 5.4.1-3) with the “primary objective of conserving local watershed runoff for delivery to customers” and how it plans to operate Calaveras Reservoir and the Alameda Diversion Dam (pages 3-14, 3-39, and 5.4.1-7), appears to conflict with this policy. The proposed system operation strategy is to “maximize use of water from local watersheds.”

Although the stewardship policy is cited in section 5.2.3 of the DPEIR, it is missing from Table 2.3, SFPUC Water Resource Policies Related to the WSIP. The SFPUC Water Enterprise Environmental Stewardship Policy is a foundational policy for the WSIP, and should be listed as a policy upon which the WSIP is supposed to be based, not simply one the WSIP should be “consistent” with. The Policy establishes environmental stewardship as a fundamental component of the Water Enterprise mission and was adopted with the explicit intent that implementation of the policy would occur through: “Integration of the policy into the Water System Improvements.” Because the proposed WSIP program will have significant impacts on native fish and wildlife populations in the Alameda Creek watershed, the SFPUC has failed to “integrate” the Environmental Stewardship Policy into the WSIP.

### **THE DPEIR OMITTS CONSIDERATION OF IMPACTS TO SEVERAL SPECIAL-STATUS SPECIES**

The ACA has provided the SFPUC with specific information about the occurrence of special-status species as part of formal and informal comments on the Alameda Watershed Management Plan, Calaveras Dam Project, Alameda Creek Fishery Enhancement Project, Sunol valley Water Treatment Plant Project, Habitat Reserve Program, Habitat Conservation Plan, and WSIP PEIR scoping. Not all of this information is reflected in the DPEIR.

The SFPUC should publicly make available the species surveys and reports cited in the DPEIR (such as Entomological Consulting Services 2004 and 2005, Leeman 2006, Loran 2006), before the public and regulatory agencies can determine if adequate surveys have

been done for special-status species and if the assessment of potential impacts is reasonable. For example, for special-status plants, surveys may need to be made over several years to determine whether plant species are present, since plants do not necessarily germinate or flower in every year. Likewise, for many species, the Fish and Wildlife Service and CDFG have published protocol surveys to properly determine whether a species is present – the DPEIR should discuss whether protocol-level surveys have been completed for any special-status species.

### Bay Checkerspot Butterfly

For the Bay checkerspot butterfly, the 2004 Entomological Consulting Services report referenced in the DPEIR (the 2005 report has not been publicly available) was based on surveys that did not specify how many days were spent searching for butterflies, how thorough the searches were, and exactly what dates the searches began and concluded. The 2004 report noted that “flight season for the Bay Checkerspot butterfly was already underway” when surveys started on an unspecified date in March. Since flight season for the Bay checkerspot butterfly can begin in late February and is typically four to six weeks in length, and it is known that the flight season began early in 2004 due to unseasonably warm weather, depending on when in March the surveys began, the surveys could have missed all or most of the butterflies of the 2004 flight season. Since individual adult butterflies live approximately ten days, the surveys could easily have missed butterflies that emerged early in the season.

The 2004 report also expressed the opinion that that the species is unlikely to occur in serpentine grassland habitats containing the checkerspot’s larval and adult food plants within the Alameda Creek watershed. The U. S. Fish and Wildlife Service considers any site with appropriate habitat within the vicinity of the butterfly’s range to be potentially occupied. Given the fact that populations of the checkerspot historically occurred north of the watershed at Mt. Diablo and south of the watershed in Santa Clara County, and the acknowledgment in the 2004 report that there are patches of the checkerspot’s primary larval food plant growing in association with adult food plants (albeit in low abundance), there is potential for undetected populations of the checkerspot to persist within the watershed. Since the species is so rare, with only two known populations in existence, the SFPUC has an obligation to presume the species may be present and protect the remaining patches of habitat, no matter how fragmented.

### Berkeley Kangaroo Rat

The DPEIR fails to consider potential impacts to the Berkeley kangaroo rat (*Dipodomys heermanni berkeleyensis*), which has recently been potentially rediscovered by the East Bay Regional Park District on ridges east of Calaveras Reservoir. The CDFG scoping comments on the PEIR noted that:

“The Berkeley kangaroo rat has been considered extinct, but was historically known to live in a few locations near the hills of Berkeley, Eureka Peak, Orinda Lake, Mt. Diablo, and Calaveras Reservoir; it was

found in the 1940's near the vicinity of Calaveras Dam. The Berkeley kangaroo rat should be added to the list of species present and assessments of the population (including genetic analyses) should be performed. A survey protocol for Berkeley kangaroo rat should be developed in concert with DFG and the U. S. Fish and Wildlife Service (USFWS). The SFPUC should conduct comprehensive surveys to determine conclusively whether the species is present in the area. If detected, the SFPUC should consider the impacts of covered activities on the Berkeley kangaroo rat. If shown to still exist, the species would likely be a candidate for emergency Federal listing.”

Any impacts to the Berkeley kangaroo rat or suitable habitat for the species should be considered significant and should be avoided due to the rarity of this species.

#### San Joaquin Kit Fox

The DPEIR discusses potential impacts to the San Joaquin kit fox in the San Joaquin region, but fails to consider potential impacts in the Sunol Valley region. As noted in the DPEIR, a kit fox was seen near the former Sunol Dam site in 2006, suggesting “a small population may be reestablishing itself in the area.” Any kit fox in the Sunol region would be very significant, since this would be the western-most population of the species. Any impacts to the kit fox or suitable habitat for the species should be considered significant and should be avoided due to the rarity of this species.

#### Calaveras Reservoir Species

The DPEIR analysis of the potential impacts to special-status species at Calaveras Reservoir (page 5.4.6-1) omits impacts to landlocked steelhead/rainbow trout, California red-legged frog, California tiger salamander, and Alameda whipsnake during construction of the new dam. The impacts on rainbow trout could be particularly significant – the *Final Conceptual Engineering Report* for the Calaveras Dam Project mentions the potential for evacuating the reservoir to deadpool elevation, in other words nearly draining the reservoir, which could devastate the Calaveras Reservoir trout population. The DPEIR fails to discuss the impacts of the construction of Calaveras Reservoir on rainbow trout in the reservoir and Arroyo Hondo (page 5.4.5-1). The CDFG has also raised the issue of maintaining fish passage and connectivity between the reservoir and Arroyo Hondo so that trout can migrate into and out of Arroyo Hondo.

### **MITIGATIONS PROPOSED FOR SIGNIFICANT IMPACTS TO SPECIAL-STATUS SPECIES AND HABITATS ARE INADEQUATE**

#### Alameda Diversion Dam Operation

The WSIP proposes to operate the Alameda Diversion Dam to divert almost all of the late fall, winter and spring stream flows from upper Alameda Creek. Aside from the questionable legality of this plan, the DPEIR acknowledges that this would nearly

eliminate low and moderate (1 to 650 cfs) flows in Alameda Creek downstream of the diversion dam that currently occur when the diversion gates are closed, and substantially reduce many higher (greater than 650 cfs) flows. The DPEIR categorizes this as a significant and unavoidable impact. We concur that the impact would be significant but the impact is clearly avoidable if the SFPUC removes the diversion dam or operates it in a lawful manner that protects fish and wildlife downstream of the dam.

The proposed operation of the diversion dam would be to divert all but 1 cfs of flow when the gates are open up to a flow of 650 cfs. Diverting the entire stream flow (except 1 cfs) and cutting the frequency of peak flows during December through May will clearly affect downstream fish passage, fish rearing, amphibian populations, and stream temperatures. The SFPUC has bypassed most flows past the diversion dam since 2002, and trout and aquatic resources below the diversion dam are dependent upon these natural stream flows.

The DPEIR acknowledges that:

“under the WSIP, there is no requirement for maintaining minimum instream flows within Alameda Creek at the diversion dam to support fishery habitat downstream of the dam. The proposed diversion of most Alameda Creek flows below 650 cfs would result in a significant change in hydrologic conditions in Alameda Creek downstream of the diversion dam when compared to existing conditions. Diversion of most or all flows during the late winter and spring months could adversely affect the ability of resident rainbow trout to spawn and for eggs to successfully incubate in this reach. The diversion dam is equipped with control gates but does not include a positive barrier fish screen or other protective device that would exclude trout or other fish from being entrained through the diversion structure into Calaveras Reservoir. Trout and other fish species inhabit Alameda Creek upstream of the diversion dam and may be diverted from the creek into the reservoir under the WSIP, preventing fish passage to downstream reaches of Alameda Creek. Passage through the diversion dam, however, has the potential to result in increased stress, physical abrasion, and vulnerability of fish to predation mortality within the reservoir, and other potentially adverse effects. Passage of fish over the diversion dam downstream in Alameda Creek may also result in stress and potential injury to trout and other fish species.”

The DPEIR proposes the following mitigations for operation of the Alameda Creek Diversion Dam (Measure 5.4.1-2):

“The SFPUC will establish and implement written operational criteria for the Alameda Creek Diversion Dam that directs that the diversion dam and tunnel shall be operated to pass flows down Alameda Creek when diversion of those flows is not required to maintain desired levels in Calaveras Reservoir in order to provide the maximum possible days of

winter and spring flows in Alameda Creek below the diversion dam. This measure reinforces the way the SFPUC generally operates the diversion tunnel now: that diversion gates are closed in the spring once desired Calaveras Reservoir storage have been reached. However, at times additional flows have been diverted from Alameda Creek after reservoir storage levels have been achieved such that the “excess” water has subsequently been released from the reservoir to maintain the appropriate water level. This measure would formalize Alameda Creek diversion procedures to maintain flows in Alameda Creek to the extent they are not needed to achieve required reservoir storage. This measure would reduce the flow reduction impact but not to a level that is less than significant.”

This is a ridiculous mitigation measure, essentially promising to not divert the remainder of stream flows that are not diverted. Bypassing stream flows based solely on whether or not they are needed for water supply, without regard for the instream flow needs of downstream fish and wildlife is not an adequate mitigation measure. The DPEIR maintains that “after implementation of the WSIP, flow in this 2.85-mile reach of Alameda Creek below the diversion dam would approximate conditions experienced between 1935 and 2001.” The DPEIR provides no information that the dam was operated legally or in a manner that adequately protected fish and wildlife during this period.

The mitigation measures also include Measure 5.4.5-3b, Diversion Restrictions or Fish Screens:

“If, after 10 years of monitoring results for Measure 5.4.5-3a, Minimum Flows for Resident Trout in Alameda Creek, indicate that the measure does not sustain the resident trout population in Alameda Creek below the diversion dam, then the SFPUC shall also implement additional measures as follows: either implement seasonal restrictions on Alameda Creek diversions to Calaveras Reservoir to protect the downstream resident trout fishery during the critical spawning period (December 1 through April 30) or install and operate a fish passage barrier to “screen” the diversion facility (screening could consist of a behavioral barrier, such as electrical or sound barrier that deters fish, or a physical barrier – such as a screen facility).”

This mitigation measure is also inadequate, since it promises to continue to illegally divert Alameda creek stream flow for another decade, without necessarily bypassing flows sufficient to keep fish and wildlife downstream in good condition during that decade. Similarly, if the diversion tunnel is currently injuring or harming fish, it legally needs to be screened now, not in 10 years. The DPEIR acknowledges that Fish and Game Code Section 5980 contains requirements for an intake screen or other suitable method for avoiding and minimizing fish entrainment at the Alameda Creek Diversion Dam. The DPEIR also acknowledges that the Diversion Dam could block migration to any migrating steelhead that travel upstream of the Little Yosemite area. This would be a significant (and illegal) impact that is not mitigated in the WSIP. If and when steelhead

trout migrate upstream to the Little Yosemite and the diversion dam, the SFPUC has an obligation to ensure adequate stream flow, and a fish ladder or dam removal for fish passage at that time.

#### Minimum Flows for Resident Trout

The DPEIR fails to consider impacts and include adequate mitigations for resident fish.

The DPEIR contains mitigation measure 5.4.5-3a:

“The SFPUC shall develop and carry out as part of the implementation of the Calaveras Dam Replacement (SV-2) project, an operational plan to implement minimum stream flows when precipitation generates runoff into the creek below the diversion dam to the Calaveras Creek confluence from December 1 through April 30 to support resident trout spawning and egg incubation. This is the period when winter precipitation typically would produce flows for spawning and egg incubation. The operational plan will identify the specific minimum flow requirements to support resident trout spawning and egg incubation, a detailed monitoring plan to survey and document trout spawning and egg incubation and any diversion facility modifications that are needed to implement the minimum stream flows. Minimum flow requirements to support resident trout spawning and egg incubation vary depending on stream reach conditions. Although site-specific studies are needed to determine an appropriate minimum flow requirement for each specific creek reach, based on the general size and characteristics of the Alameda Creek channel immediately downstream of the diversion structure it has been suggested that a minimum flow on the order of 10 cfs may be needed to support trout spawning and egg incubation. The SFPUC’s Natural Resources Division will complete the site-specific studies needed to determine the appropriate minimum stream flow for this reach of the creek; studies may show that the minimum flow requirement is more or less than 10 cfs. This minimum flow requirement would be met when precipitation would naturally generate runoff in the creek (below the diversion dam) under unimpaired conditions between December 1 and April 30. When precipitation generates runoff in the creek, the SFPUC shall provide for bypass of flow up to the required minimum flow amount. The operational plan will allow for adapting minimum flow amounts to support resident trout spawning and egg incubation based on the monitoring results and best available scientific information.”

This mitigation measure is likely inadequate to mitigate for the impacts of Calaveras Dam and the Alameda Diversion Dam on steelhead trout, Pacific lamprey, and chinook salmon, as it is targeting flows for resident trout, and does not provide for adequate flows for in-migration or out-migration of anadromous fish.

The DPEIR also seems to suggest that adequate flows for resident trout may not be implemented until after 10 years of monitoring. There is information indicating that the SFPUC may not currently be keeping resident trout below Calaveras Reservoir in good condition. The SFPUC has conducted annual monitoring since 1998 of Alameda Creek fisheries in a study reach including Calaveras Creek below Calaveras Dam, and Alameda Creek from the confluence with Calaveras Creek downstream to the Sunol Valley Water Treatment Plant. SFPUC monitoring data from 1998-2004 shows that observations of resident rainbow trout in this study reach have declined dramatically: 55 trout were observed in 1998; 5 trout in 1999; 5 trout in 2000; 3 trout in 2001; 1 trout in 2002; 2 trout in 2003; and 0 trout in 2004. The DPEIR does not contain adequate information to determine whether the 10 cfs proposed to support trout spawning and egg incubation will be sufficient. The DPEIR does not specify which stream reaches will have 10 cfs and which time of year. 10 cfs of cold water during summer that reaches areas where trout are rearing will provide more significant benefit than 10 cfs released during winter storms.

The DPEIR claims this measure “addresses the decrease in flow below the diversion dam that would occur under the WSIP as a result of re-instituting flow diversions to Calaveras Reservoir once the dam is replaced...and the loss of fish from the lower creek system that would result from fish entrainment through the unscreened diversion tunnel to Calaveras Reservoir.” This measure does not address the impacts to rainbow trout and steelhead in Alameda Creek between the diversion dam and the Calaveras Creek confluence.

The DPEIR promises that if monitoring indicates that this measure does not sustain the resident trout fishery in this reach, then the SFPUC shall either modify the minimum stream flow to enhance downstream habitat conditions to fully meet the mitigation requirement or also implement mitigation measure 5.4.6-3, Operational Procedures for Calaveras Dam Releases:

“During project-level CEQA review on the Calaveras Dam Replacement project (SV-2), the SFPUC will develop operational procedures for managing planned releases from Calaveras Dam to minimize habitat impacts on amphibians, their egg masses, and tadpoles. The goal of such releases, apart from benefits to fish, is to mimic a more natural pattern of hydrology regime as much as possible. The procedures will specify the minimum amount and frequency of planned releases and the rate of the increase and decrease of any individual release event. One of the specific goals of such releases would be to reduce the risk of mortality to breeding amphibians. Such operational procedures will be developed prior to completion of construction of the Calaveras Dam Replacement project. In addition, instream flow releases required under CDFG agreement with SFPUC (see Table 5.4.1-9) would begin upon completion of construction.”

There is no evidence that the 1997 MOU flows are adequate to maintain rainbow trout or native amphibians such as the California red-legged frog or foothill yellow-legged frog that inhabit stream reaches below SFPUC dams. The potential releases under measure

5.4.6-3 would begin no earlier than 10 years after the construction of Calaveras Dam. What if the resident trout population below the SFPUC dams is extirpated by then? Mimicking the natural hydrograph will potentially benefit native stream amphibians, but again this measure is delayed 10 years.

### Fishes

For all the reasons discussed above, the DPEIR contains inadequate or no mitigation measures for potential significant impacts of the construction and operation of WSIP projects on steelhead trout, chinook salmon or Pacific lamprey.

Mitigation measures for fishes (mitigation measure F1) should include: fencing cattle out of all spawning habitat in fish-bearing streams (lower Arroyo Hondo Creek and lower San Antonio and Indian Creeks above the reservoirs, and Alameda Creek below the reservoirs) to protect trout redds, spawning habitat and riparian vegetation; eradicating introduced bass from Calaveras and San Antonio Reservoirs to reduce predation on the small landlocked trout populations in the reservoirs; and increasing the dissolved oxygen content in Calaveras and San Antonio Reservoirs to provide adequate habitat for reservoir trout (the current dissolved oxygen levels are aimed at drinking water quality standards and are not necessarily adequate for cold water fish).

### Butterflies

The proposed mitigations for listed butterfly species (mitigation measure I.3) states that “suitable habitat for Bay checkerspot and callippe silverspot butterflies will be avoided.” “Suitable habitat” needs to be defined as any area with host plants or the ability to support host plants. As mentioned above, the Alameda Creek watershed contains fragmented, but nonetheless significant, potential habitat for these species. The DPEIR does not include mitigation measures for the potential impacts of dust from construction activities or roads – according to the U.S. Fish and Wildlife Service, adult and early larval stages of these butterflies are susceptible to mortality from dust.

### Burrowing Owl

The proposed mitigations for western burrowing owls include passive relocation (mitigation measure B.3). For most passive relocations of burrowing owls conducted in California there is no way of knowing where the evicted owls go or whether they are able to breed successfully in other areas. The SFPUC mitigations should include monitoring of the areas where owls are evicted to determine the success of any passive relocation. Passive relocation of owls can work if the birds are moved short distances (i.e. under 5 miles) and the habitat they are moved to is managed for them. Burrowing owls should never be translocated or forced to move to unprotected private property. Predators must also be taken into consideration - if owls are moved from an area where they have only been exposed to feral cats, red-tailed hawks and northern harriers, they will probably do poorly if moved to an area with coyotes or red foxes. The SFPUC should commit to monitoring and managing habitat for moved owls and purchasing replacement habitat if

moved owls do not successfully breed.

### San Joaquin Kit Fox

The proposed mitigations for the San Joaquin kit fox include a provision that “limited destruction of potential dens may be allowed” if they are not currently in use. For the reasons discussed above, there should be no destruction of any potential kit fox dens allowed in the Sunol Valley region.

### Mitigation Ratios

Mitigation for impacts to wetlands and aquatic resources should be at a greater than 1:1 replacement ratio for created wetlands, since created wetlands rarely have the same habitat value and function as natural wetlands.

Any impacts that have the potential to extirpate a local population of a special-status species (such as the kit fox or Berkeley kangaroo rat), affect essential breeding or migration habitat, or destroy or degrade designated critical habitat for a listed species should be mitigated at a much higher ratio than 1:1.

### Habitat Reserve Program

As discussed in the ACA’s August 28, 2007 letter to the SFPUC regarding the proposed Habitat Reserve Program, the reliance on mitigations proposed in the HRP may be inadequate to mitigate for potentially significant impacts to special-status species in the Sunol Valley for several reasons:

- The acreage of habitat protection proposed under the HRP is not sufficient to mitigate for the impacts to biological resources and habitat contemplated in the WSIP;
- The HRP includes very little protection of at-risk habitat for affected species through acquisition of or conservation easements on high biological value private land at risk of development;
- The HRP attempts to give the SFPUC mitigation credit for land management activities that should already be required to protect endangered and sensitive species, or are good management practices that should already be employed by the SFPUC as good stewardship of our public lands; and
- The HRP proposes conservation easements on public lands that are already owned by the SFPUC, of questionable benefit to sensitive species since these lands should be at no risk of development or mismanagement.

## **THE DPEIR CONTAINS INSUFFICIENT INFORMATION TO CLAIM MITIGATIONS WILL REDUCE IMPACTS TO LESS THAN SIGNIFICANT**

As noted in the CDFG comment letter to the SFPUC on the Calaveras Dam Project dated November 22, 2005, the SFPUC needs to provide information as part of the environmental review process that will allow the public and regulatory agencies to

determine if impacts have been properly assessed and if mitigations are adequate.

The DPEIR fails to provide information on the following issues raised by the CDFG two years ago:

- A habitat-based stream assessment for Calaveras, Arroyo Hondo, and Alameda Creeks, done at a seasonally appropriate time period that incorporates habitat and life history criteria of species which may be impacted by the Calaveras Dam Project.
- A hydrologic study to determine the amount of water that is needed to support steelhead trout through critical reaches under various water year conditions within the reaches affected by the Calaveras Dam Project, specifically the reach of Alameda Creek from Alameda Creek Diversion Dam downstream to Alameda Creek's confluence with Arroyo de la Laguna.
- A specific proposal to provide minimum bypass flows for both Calaveras Dam and the Alameda Creek Diversion Dam for maintenance of habitat for fish and other aquatic species, taking into account current and projected water operation scenarios of the SFPUC's regional water system.
- An analysis of current and projected operational scenarios for Calaveras Reservoir and their impacts to the existing population of land-locked steelhead trout that utilize Calaveras Reservoir and Arroyo Hondo throughout various stage of the steelhead trout's life cycle. This study should include a plan to preserve the existing population of steelhead trout during interim operations (preconstruction) and post construction operations of Calaveras Dam. The concerns to be addressed include the following:
  - a) Maintain fish passage between the reservoir and Arroyo Hondo by keeping reservoir water elevations as high as possible during the period when adult trout migrate upstream from the reservoir through the end of the downstream (adult and juvenile trout) migration season.
  - b) Maintain channel integrity (maintain active channel / minimize delta / maximize hydrological connectivity) of Arroyo Hondo.
  - c) Maintain physical carrying capacity for trout in Calaveras Reservoir during the summer and fall period by keeping water elevations as high as possible.
  - d) Maintain adequate water temperatures and dissolved oxygen for trout in the reservoir throughout the summer and fall periods. The concentration of dissolved oxygen in reservoirs is often the limiting factor for trout survival in San Francisco Bay Area reservoirs. DFG recommends targeting a specific dissolved oxygen concentration of 7 mg/L so as to minimize impacts to landlocked steelhead especially during times of lowered surface water elevation (current operations as per DSOD requirements).
  - e) Provide flow releases to the stream channel below Calaveras Reservoir dam to encourage riparian vegetation growth, invertebrate productivity, adequate dissolved oxygen, low water temperatures, and provide some rearing habitat for juvenile steelhead trout and spawning adult steelhead trout.
  - f) Eliminate or minimize the loss of adult and juvenile trout from Alameda Creek through the Alameda Creek Diversion Dam.
  - g) Determine how operation and interim operation of Calaveras Reservoir could alter the operation of San Antonio Reservoir and result in adverse conditions for the adfluvial trout population in San Antonio Reservoir. DFG recommends that impacts to fisheries

upstream and downstream of San Antonio Reservoir be avoided as much as possible. If avoidance is not possible, impacts should be minimized and mitigated.

- A mitigation plan that assesses the potential impacts of the SFPUC's proposal to rebuild Calaveras Dam with a wider core that would accommodate enlargement of the dam in the future. The NOP states that although the "SFPUC does not reasonably foresee the need for a larger dam beyond one that restores the reservoir's historic capacity; the dam would be designed to allow potential future reuse of dam components without requiring otherwise more extensive dam removal and rebuilding if an enlargement were ever undertaken in the future." DFG recommends that the Calaveras Reservoir dam not be built to accommodate future size increases based on DFG's concern that future increases of the dam's surface water elevation could potentially extirpate the adfluvial population of steelhead trout as well as that of the foothill yellow-legged frogs. Raising the surface water elevation will likely also have serious impacts to the California red-legged frog, CTS, foothill yellow-legged frog, western pond turtle, Alameda whipsnake, Calliope silverspot butterfly, and a number of other special status plants and animals.
- A specific plan to screen as per DFG screening criteria at the new intake tower/adit(s) at Calaveras Reservoir and at the intake of the diversion at the Alameda Creek Diversion Dam so as to be in compliance with Fish and Game Code Section 6100.
- A specific plan to provide fish passage at the new Calaveras Reservoir dam and the Alameda Creek Diversion Dam so as to be in compliance with Fish and Game Code Sections 5901.

### **THE DPEIR RELIES UPON SPECULATIVE MITIGATIONS FOR SIGNIFICANT IMPACTS TO SPECIAL-STATUS SPECIES**

It is speculative to rely upon the proposed Habitat Reserve Program speculative to mitigate for impacts to special-status species and habitat, since the amount and quality of habitat to be acquired and preserved is not yet defined, nor is it assigned to specific WSIP impacts.

The DPEIR discusses possible future flows to support rainbow/steelhead trout. The DPEIR references the flows studies being conducted by the Alameda Creek Fisheries Restoration Workgroup. At this point these are just studies, not a commitment on the part of SFPUC to provide adequate flows for steelhead or resident trout. Similarly, SFPUC plans to incorporate flow strategies into its Alameda Watershed Habitat Conservation Plan are speculative at this point.

### **The DPEIR fails to adequately consider water recycling and conservation alternatives**

The DPEIR claims it is not feasible for the WSIP to meet 2030 purchase requests with reasonably foreseeable water conservation, recycled water and groundwater projects. The DPEIR underestimates the potential for water conservation and recycling, as numerous other municipalities have shown that an aggressive conservation and recycling program is possible. The proposed levels of water conservation (4%) and recycling (3%) in the DPEIR are unreasonably low.

Also, there is a discrepancy between the conservation and recycling goals set by the SFPUC and its wholesale customers in the Bay Area Water Users Association (BAWSCA). The BAWSCA Water Supply Master Plan from 2000 requires that wholesale customers employ their best efforts to use all sources of water owned or controlled by them, including groundwater. The SFPUC has identified numerous conservation, recycling, and groundwater possibilities that are available to wholesale customers, but the DPEIR does not adequately analyze these alternatives.