

15 Responses to Individual Comments

15.1 Federal Agencies

FEDERAL AGENCIES

FEDERAL AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT PEIR

Comment Letter Format	Comment Letter ID	Name of Commenter	Title	Organization/ Affiliation	Page
Email	F_NPS-GGNRA	Brian O'Neill	General Superintendent	National Park Service, Golden Gate National Recreation Area	15.1-1
Email	F_NPS-Yos	Michael Tollefson	Superintendent	National Park Service, Yosemite National Park	15.1-4
Mail	F_USBR	Richard J. Woodley	Regional Resources Manager	U.S. Department of the Interior, Bureau of Reclamation	15.1-6
Mail	F_USDAFS	Tom Quinn	Forest Supervisor	U.S. Department of Agriculture, Forest Service	15.1-8
Email	F_USFWS	G. Mendel Stewart	Manager	U.S. Department of the Interior, Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex	15.1-11

National Park Service, Golden Gate National Recreation Area, Brian O'Neill, General Superintendent, 11/06/07

F_NPS-GGNRA-01 The commenter requests that the reference to Cañada Road be deleted. In response to this comment, the Draft PEIR is revised as follows (Vol. 2, Chapter 4, p. 4.2-7, first paragraph):

In 1969, the CCSF granted two easements over the vast majority of the Peninsula watershed to the Department of the Interior. The easements were granted to the federal government in order to obtain a change in the route of Interstate 280 (I-280) (and an increase in the federal share of costs) to a less environmentally damaging location further east of Crystal Springs Reservoir. The approximately 19,000-acre Scenic Easement covers the lands west of Crystal Springs and San Andreas Reservoirs. The approximately 4,000-acre Scenic and Recreation Easement applies to lands in the vicinity of I-280. ~~Cañada Road demarcates these easements: t~~The CS/SA Transmission project (PN-2), Lower Crystal Springs Dam project (PN-4), and the Pulgas Channel and sediment catch basin components of the Pulgas Balancing Reservoir project (PN-5) are within the Scenic Easement, while the Pulgas Balancing Reservoir itself is within the Scenic and Recreation Easement. The easements cover nearly all of the CCSF-owned Peninsula watershed lands and place restrictive covenants on use of the lands that are unrelated to the SFPUC's overall management of the land for utility purposes. The provisions of the easement include:

F_NPS-GGNRA-02 Due to an agreement established between the SFPUC and the GGNRA, the commenter requests that the GGNRA be considered a stakeholder agency during the planning phases for the subsequent WSIP projects. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for detailed discussion of the issues raised by this comment. The GGNRA's request to be consulted and notified has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration during the project-level CEQA review for the following projects: Crystal Springs/San Andreas Transmission Upgrade (PN-2), HTWTP Long-Term Improvements (PN-3), Lower Crystal Springs Dam Improvements (PN-4), and Pulgas Balancing Reservoir Rehabilitation (PN-5).

F_NPS-GGNRA-03 The commenter expresses concern regarding the potentially significant but mitigable impacts related to existing land uses, visitor access and experience, visual character, wetland and aquatic resources, historic resources, and traffic safety hazards, as well as the unavoidable significant impacts on sensitive biological and historic resources. Please refer to

Section 14.4, Master Response on PEIR Appropriate Level of Analysis

(Vol. 7, Chapter 14, Section 14.4.2) for detailed discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. The Draft PEIR generally addresses the potential types of land use, visual/aesthetic, biological resource, historic resource, and recreation impacts identified by the commenter, and they are discussed on the following pages of the Draft PEIR:

Land Use: Impact 4.3-2 (Vol. 2, Chapter 4, p. 4.3-26) indicates that permanent displacement or long-term disruption of existing land uses would not be expected under any of the Peninsula projects, because these projects would not involve the acquisition of additional land, with the possible exception of the Crystal Springs/San Andreas Transmission Upgrade project (PN-2). In general, the lands that would be affected by WSIP projects are already owned by the City and County of San Francisco (CCSF) and are currently used for or designated for use as water infrastructure. Only those projects requiring the acquisition of non-CCSF-owned land would have the potential to cause permanent land use changes. The programmatic impact analysis in the Draft PEIR determined that a potentially significant land use impact could result from the Crystal Springs/San Andreas Transmission Upgrade project, but identifies this impact as potentially significant and unavoidable since facility locations have not yet been determined. As noted in the impact discussion, if it is determined during subsequent project development and project-level environmental review that land acquisition is required, this impact could be mitigated to a less-than-significant level by implementing facility siting studies (Mitigation Measure 4.3-2; Vol. 4, Chapter 6, p. 6-7), which may identify alternative sites and designs to avoid land use impacts.

Visual/Aesthetics: Impact 4.3-4 (Vol. 2, Chapter 4, p. 4.3-41 and Table 4.3-4, p. 4.3-34) identifies potentially significant permanent impacts on scenic vistas or visual character under all projects of concern to the commenter: Crystal Springs/San Andreas Transmission Upgrade (PN-2), HTWTP Long-Term Improvements (PN-3), Lower Crystal Springs Dam Improvements (PN-4), and Pulgas Balancing Reservoir Rehabilitation (PN-5). The Draft PEIR indicates that all of these projects, except for the HTWTP Long-Term Improvements, are located in the Peninsula Watershed Management Plan (WMP) boundary and therefore will be subject to WMP design guidelines. In addition, all four projects will be required to implement Draft PEIR mitigation measures addressing architectural design, landscaping plans, landscape screens, and tree removal (Measures 4.3-4a through 4.3-4d; Vol. 4, Chapter 6, p. 6-7) to reduce potential visual impacts to a less-than-significant level.

Biological Resources: Impact 4.6-1 (Vol. 2, Chapter 4, p. 4.6-50) identifies potentially significant impacts on wetlands and aquatic resources for three projects of concern to the commenter: Crystal Springs/San Andreas Transmission Upgrade (PN-2), Lower Crystal Springs Dam Improvements (PN-4), and Pulgas Balancing Reservoir Rehabilitation (PN-5).

Implementation of SFPUC Construction Measure #8, which requires performance of a biological screening survey, will determine if sensitive wetland and aquatic resources are present; if such resources are present, Mitigation Measures 4.6-1a and 4.6-1b (Vol. 4, Chapter 6, p. 6-11) will be implemented as necessary to reduce identified impacts to a less-than-significant level.

Historic Resources: Impact 4.7-3 (Vol. 2, Chapter 4, p. 4.7-74) identifies potentially significant impacts on historic resources for two projects of concern to the commenter: Crystal Springs/San Andreas Transmission Upgrade (PN-2) and Lower Crystal Springs Dam Improvements (PN-4). Implementation of Mitigation Measures 4.7-3 and 4.7-4a through 4.7-4f (Vol. 2, Chapter 6, p. 6-26) could reduce potential impacts on historic resources to a less-than-significant level, but impacts associated with the Crystal Springs/San Andreas Transmission Upgrade project could remain significant after mitigation.

Recreation: Impact 4.12-1 (Vol. 2, Chapter 4, p. 4.12-25) identifies potentially significant temporary conflicts with established recreational uses during construction of the Crystal Springs/San Andreas Transmission Upgrade project (PN-2); however, implementation of SFPUC Construction Measures #1, #3, #5, and #6 (Neighborhood Notice, Air Quality, Traffic, and Noise) and Mitigation Measure 4.12-1 (Vol. 2, Chapter 4, p. 6-44; Coordination with Facility Managers) would reduce identified temporary conflicts to a less-than-significant level. SFPUC Construction Measures would also reduce potential impacts on recreational uses to a less-than-significant level for the Lower Crystal Springs Dam Improvements (PN-4) and Pulgas Balancing Reservoir Rehabilitation (PN-5) projects.

National Park Service, Yosemite National Park, Michael Tollefson, Superintendent, 10/15/07

F_NPS-YOS-01 The Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.1-1 to 5.3.1-40) provides a comprehensive analysis of the WSIP's impacts on stream flow in the Tuolumne River and water levels in the SFPUC's reservoirs. The impacts of WSIP-induced changes in stream flow and reservoir water levels on the riverine ecosystem are described in Section 5.3.2 (Geomorphology), Section 5.3.3 (Water Quality), Section 5.3.6 (Fisheries), and Section 5.3.7 (Terrestrial Biological Resources). The analysis of WSIP impacts on stream flow was conducted using the SFPUC's Hetch Hetchy/Local Simulation Model (HH/LSM). The HH/LSM uses monthly stream flow monitoring data for the 82-year period from 1920 to 2002, which includes several multiple-year droughts and extremely dry years.

Please refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for detailed discussion of climate change effects, including a literature review on climate change effects on California water supplies and water management and a qualitative assessment of WSIP impacts with consideration of climate change effects.. Please refer to **Section 14.5, Master Response on Water Resources Modeling** (Vol. 7, Chapter 14) for more information on the SFPUC's use of a design drought that is more severe than any droughts in the historical record.

F_NPS-YOS-02 The commenter expresses concern that the WSIP could make archaeological resources within Yosemite Park boundaries vulnerable to damage by "pot hunters." The WSIP does not include the construction of facilities within park boundaries and consequently would not result in damage to archaeological resources related to construction activities. The WSIP could make archaeological resources within the inundation areas of the SFPUC's reservoirs more vulnerable to damage by pot hunters if the WSIP resulted in reservoir drawdowns greater than those that occur under the existing condition, in which case portions of the inundation areas that are currently inaccessible could become accessible to pot hunters.

Two of the SFPUC's reservoirs, Lake Eleanor and Hetch Hetchy Reservoir, lie within Yosemite National Park. As noted in the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.1-30), the WSIP would have essentially no effect on storage and water levels in Lake Eleanor. Consequently, archaeological resources in the Lake Eleanor inundation area would be no more vulnerable to damage under the WSIP than they are under the existing condition.

The Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.1-21 to 5.3.1-24) describes the existing and with-WSIP operations of Hetch Hetchy Reservoir. As shown in Figure 5.3.1-9 (p. 5.3.1-23), storage and water levels in Hetch Hetchy Reservoir fluctuate annually under the existing condition. Storage is typically at its maximum of 360,400 acre-feet in late June or early July, when Hetch Hetchy Reservoir is usually full. The maximum storage level corresponds with a water surface elevation of 3,806 feet above mean sea level. Storage and water levels drop gradually until snowmelt begins in the following April or May. Under most conditions, storage in the reservoir does not fall below 150,000 acre-feet, which corresponds with a water surface elevation of 3,684 feet above mean sea level. The same pattern of filling in the snowmelt period and drawdown for the rest of the year would continue with the WSIP. As under existing conditions, the water level in the reservoir with the WSIP would rarely fall below the elevation of 3,684 feet above mean sea level. Thus, under most conditions, archaeological resources in the Hetch Hetchy Reservoir inundation area would be no more vulnerable to damage with the WSIP than they are under the existing condition. Annual reservoir drawdown would be greater with the WSIP than under the existing condition because of the expected increase in water demand by 2030, but the annual drawdown would not typically expose areas otherwise inaccessible to pot hunters.

As noted in the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.1-24), Hetch Hetchy Reservoir is drawn down to a very low level occasionally under the existing condition. Occasional drawdowns could be even greater with the WSIP. Under the existing condition, the water level could be drawn down to an elevation of 3,573 feet above sea level once in the 82-year hydrologic record. With the WSIP, it could be drawn down to an elevation of 3,562 feet above sea level. Thus, on rare occasions, a portion of the inundation area not accessible to pot hunters under the existing condition would be available to them with the WSIP.

The SFPUC and Yosemite National Park have for many years cooperated to protect water quality and other natural resources in the Hetch Hetchy watershed. Cooperative actions are defined in the Hetch Hetchy Watershed Protection Agreement signed by both parties in 2005. Under the terms of the agreement, NPS staff from the Hetch Hetchy Entrance Station patrol the reservoir perimeter and tributaries within one mile of the reservoir to prevent activities that might contaminate the reservoir water as well as other unauthorized or illegal activities, which would include prevention of pot hunting.

The Hetch Hetchy Watershed Protection Agreement expires in June 2010, and a new five-year agreement would likely be negotiated. The SFPUC and the NPS may choose to specifically mention patrolling to prevent pot hunting in the new agreement.

U.S. Bureau of Reclamation, Richard J. Woodley, Regional Resources Manager, 1106/07

- F_USBR-01 This comment addresses concerns that the Draft PEIR does not adequately address the potential indirect effects of the WSIP on the Central Valley Project (CVP) operated by the U.S. Bureau of Reclamation and the State Water Project (SWP) operated by the Department of Water Resources (DWR) or, in turn, the indirect effects on fisheries, water quality, and/or water users served by the CVP and SWP. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for additional discussion of the WSIP's effects on the San Joaquin River and the Delta analyzed in the PEIR.
- WSIP impacts on flow along the San Joaquin River and Delta region are analyzed in the Draft PEIR under Impact 5.3.1-5: Effects on Flow along the San Joaquin River and the Sacramento–San Joaquin Delta (Vol. 3, Chapter 5, pp. 5.3.1-38 and 5.3.3-39). Related effects on water quality are analyzed under Impact 5.3.3-2: Effects on Water Quality along the San Joaquin River and Sacramento–San Joaquin Delta (Vol. 3, Chapter 5, pp. 5.3.3-19 and 5.3.1-20). Indirect impacts on fisheries and aquatic resources are analyzed under Impact 5.3.6-5: Effects on Fishery Resources along the San Joaquin River (Vol. 3, Chapter 5, pp. 5.3.6-32 to 5.3.6-37). With respect to adverse effects on San Joaquin River and Delta water users, including impacts on SWP and CVP operations, see the discussion under Impact 5.3.4-1: Effects on Tuolumne River, San Joaquin River, and Stanislaus River Water Users, and Impact 5.3.4-2: Effects on Delta Water Users (Vol. 3, Chapter 5, pp. 5.3.4-5 to 5.3.4-11).
- F_USBR-02 Refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14, Section 14.8.3) for additional discussion of potential effects on CVP and SWP operations.
- F_USBR-03 Refer to Draft PEIR Impact 5.3.4-2 (Vol. 3, Chapter 5, pp. 5.3.4-9 to 5.3.4-11), and **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14, Section 14.8.3), for discussions of potential effects on SWP and CVP operations.
- F_USBR-04 This comment states that the Draft PEIR does not apply the informal significance standards for impacts related to water supplies to WSIP-related impacts on the San Joaquin River and the Delta. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14, Section 14.8.3) for pertinent response to this comment.

- F_USBR-05 This comment restates the previous comment. Refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14, Section 14.8.3).
- F_USBR-06 Refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14).

U.S. Department of Agriculture, Tom Quinn, Forest Supervisor, 10/03/07

F_USDAFS-01 The Draft PEIR (Vol. 1, Chapter 3, Section 3.6, pp. 3-33 to 3-39) describes the increased diversion of water from the Tuolumne River that would occur with the WSIP. The Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.1-1 to 5.3.1-40) provides a comprehensive analysis of the impacts of the WSIP on stream flow in the Tuolumne River and water levels in the SFPUC's reservoirs.

F_USDAFS-02 The impacts of WSIP-induced changes in stream flow and reservoir water levels on biological resources are described in the Draft PEIR in Section 5.3.6 (Fisheries) and Section 5.3.7 (Terrestrial Biological Resources).

F_USDAFS-03 As noted in the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.1-29), the WSIP would have almost no effect on water levels in Lake Lloyd and flows in Cherry Creek below Lake Lloyd. Consequently, it would have no effect on recreational users of Lake Lloyd and Cherry Creek. (Please also see Vol. 3, Chapter 5, pp. 5.3.8-23 and 5.3.8-24.)

The commenter notes that, "Effects are projected on recreation due to a decrease in rafting flows." The effects of the WSIP on rafting flows are described in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.8-27 to 5.3.8-32). The effects of the WSIP on the availability of water for river rafting would be minor and were determined to be less than significant.

F_USDAFS-04 The Draft PEIR used available data to characterize the baseline or existing condition. The San Francisco Planning Department has concluded that the existing data are sufficient to make a reasonable assessment of environmental consequences. CEQA Guidelines Section 15151 notes that an "evaluation of environmental effects of a proposed project need not be exhaustive."

The program effects on the Tuolumne River ecosystem would be the consequence of changes in flow attributable to the WSIP. As indicated in the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.1-25), under the existing condition only the minimum required releases are made from O'Shaughnessy Dam in 837 months of the 987-month hydrologic record, or in about 84 percent of the total months. The WSIP would have no effect on river flow in these months and thus would have no effect on the river ecosystem. The primary effect of the WSIP would be to shorten (for a few days) the period during which flows in excess of the minimum required are released from O'Shaughnessy Dam. The analysis in the Draft PEIR concluded that existing data on the river below O'Shaughnessy Dam were sufficient to determine that WSIP-induced flow changes would have a less-than-significant effect on resident fish and a

potentially significant effect on biological resources in the streamside meadow in the Poopenaut Valley. The flow changes might also affect riparian vegetation elsewhere in the reach of the river between Hetch Hetchy and Don Pedro Reservoirs, but any effects would diminish in a downstream direction as tributaries enter the main stem of the river and flow is returned to the river at Early Intake. A proposed mitigation measure calling for managed releases (Measure 5.3.7-2) would reduce the impacts on biological resources in the Poopenaut Valley meadow to a less-than-significant level (Chapter 6, pp. 6-49 and 6-50). The mitigation measure would also lessen the effects on riparian vegetation elsewhere in the reach of the river between Hetch Hetchy and Don Pedro Reservoirs. For additional information regarding potential impacts along the upper Tuolumne River, please refer to **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14).

F_USDAFS-05 The San Francisco Planning Department invited comments from the Stanislaus National Forest on the Draft PEIR through direct mailings of notices and CEQA documentation, including the Notice of Preparation in September 2005 and the Draft PEIR in June 2007. In addition to notifications directly associated with the WSIP, in August 2005 the SFPUC established the Tuolumne River Stakeholders Group, which includes the U.S. Forest Service, to coordinate SFPUC efforts within the Tuolumne River watershed. The SFPUC met with this group in October and December 2005, April and October 2006, March and November 2007, and March 2008.

In addition, the Planning Department's Major Environmental Analysis Division and the SFPUC held several public outreach efforts to inform the general public, regulatory agencies, and special interest groups in all counties potentially affected by the proposed program. Public outreach efforts included four informational meetings during the earlier part of the environmental review process; notification of the public hearings in local newspapers; five public scoping meetings following release of the Notice of Preparation; and six public hearings following the release of the Draft PEIR. Public comments on the Draft PEIR were accepted from June 29, 2007 through October 15, 2007. However, public comments on the Draft PEIR received through December 31, 2007 were addressed in the Comments and Responses document; comments received after December 31, 2007 were included in Appendix M (Vol.8). Further, the SFPUC has dedicated a webpage to the WSIP PEIR that has been continually updated to inform the public of progress and upcoming hearings.

The Draft PEIR describes the resources within the Stanislaus National Forest between Hetch Hetchy and Don Pedro Reservoirs that could be affected by the WSIP in Vol. 3, Chapter 5, Section 5.3. The locations of Stanislaus National Forest resources are shown in the Draft PEIR on Figure 5.2-1 (Vol. 3, Chapter 5, p. 5.2-9) and Figure 5.3.1-1a (Vol. 3, Chapter 5, p. 5.3.1-3). The

Draft PEIR also includes a summary of the Raker Act requirements in Vol. 1, Chapter 2, pp. 2-33 and 2-34, and it is acknowledged that the Raker Act provides regulatory authority to the U.S. Department of Agriculture for the protection of lands in the Stanislaus National Forest. The SFPUC would welcome an opportunity to meet with the Stanislaus National Forest to discuss concerns regarding the WSIP.

F_USDAFS-06 The public comment period on the Draft PEIR lasted for 108 days, from June 29, 2007 through October 15, 2007. In addition, six public hearings were held during this period to receive oral comments on the Draft PEIR, including a meeting in Sonora on September 5, 2007. The San Francisco Planning Department has determined that this extended public review provided ample time for agencies and the public to review and comment on the Draft PEIR. As stated in **Response F_USDAFS-05**, the SFPUC would welcome an opportunity to meet with the Stanislaus National Forest to discuss concerns regarding the WSIP.

The Stanislaus National Forest will be included on the mailing list for the Comments and Responses document.

F_USDAFS-07 The comment expressing the opinion of the Stanislaus National Forest is acknowledged. The commenter expressed support of an alternative “which does not divert additional water which would affect the Stanislaus National Forest.” As described in Vol. 3, Chapter 5, Section 5.3, the Draft PEIR determined that impacts of the proposed program on resources along the Tuolumne River within the Stanislaus National Forest would be less than significant. For information on alternatives that do not include additional diversions from the Tuolumne River, refer to the descriptions of the Year-round Desalination at Oceanside Alternative (Vol. 4, Chapter 9, Section 9.2.4), and Aggressive Conservation/Water Recycling and Local Groundwater Alternative (Without Tuolumne River Supplement) (Vol. 4, Chapter 9, Section 9.2.6). The SFPUC will consider the Final PEIR before making a decision on the proposed program.

U.S. Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex, G. Mendel Stewart, Manager, 09/26/07

- F_USFWS-01 This comment introduces concerns with the Bay Division Pipeline Reliability Upgrade project (BD-1) that are more specifically stated in Comments F_USFWS-02 through F_USFWS-04; please refer to **Response F_USFWS-02** regarding issues related to Bay Division Pipelines (BDPL) Nos. 1 and 2. The commenter's specific concerns with the BDPL Reliability Upgrade project will be addressed in the project-level CEQA analysis for that project. The Draft PEIR includes program mitigation measures that have been identified to minimize program-level, construction-related impacts on biological resources. During the project-level CEQA analysis, the programmatic mitigation measures will be reevaluated, and if applicable, will be either confirmed, refined, or replaced with an equivalent measure. In addition, SFPUC Construction Measure #8 (Vol. 4, Chapter 6, p. 6-5) and Mitigation Measure 4.6-3a (Vol. 4, Chapter 6, p. 6-12) require site-specific biological surveys to identify areas of potential impact on wildlife and habitat. Also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for additional discussion of the issues raised by this comment. This master response provides a discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.
- F_USFWS-02 The commenter is concerned that noise, vibration, and human disturbance during construction and operation would have an adverse impact on wildlife. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for detailed discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. The commenter's specific concerns with the BDPL Reliability Upgrade project (BD-1) will be addressed in the project-level CEQA analysis for that project. Table 6.1 (Vol. 4, Chapter 6, p. 6-14) lists programmatic mitigation measures for special-status species that will be applied to the BDPL Reliability Upgrade project as appropriate, including measures for raptors, California clapper rail, snowy plover, salt marsh harvest mouse, vernal pool invertebrates, California red-legged frog, California tiger salamander, and western burrowing owl. These measures will ensure that construction does not result in significant impacts on special-status species, even though construction may occur during sensitive breeding and nesting periods; as part of the project-level environmental review, these programmatic mitigation measures will be reevaluated and refined as necessary to address site-specific project details to further ensure that potential construction impacts on special-status species would be reduced to less-than—

significant levels. Surveys required under Mitigation Measure 4.6-3a (Vol. 4, Chapter 6, p. 6-12) will refine the list of species that could be affected by each WSIP project, and additional protection, avoidance, minimization, and compensation measures could be added.

It should be noted that the segments of BDPL Nos. 1 and 2 traversing the wildlife refuge would remain in place under the WSIP, since the BDPL Reliability Upgrade project (BD-1) would involve construction of an underground tunnel in this area. BDPL Nos. 1 and 2 may be decommissioned and abandoned in-place, but this determination would be made only after the BD-1 tunnel has been inspected and the warranty has expired (the warranty period could be one to five years). Alternatively, the SFPUC is considering maintaining the transbay sections of BDPL Nos. 1 and 2 (i.e., between Newark and Ravenswood) and associated facilities for potential future use in emergencies or during maintenance of the new tunnel proposed under the BDPL Reliability Upgrade project. Potential impacts on sensitive biological resources in the vicinity of tunnel portals and aboveground segments of BDPL Nos. 1 and 2 across the bay will be evaluated in the project-level EIR.

F_USFWS-03 The commenter is concerned about access issues during the construction and operation phase and consequent impacts on wetlands in the Don Edwards San Francisco Bay National Wildlife Refuge. Please refer to **Response F_USFWS-02** regarding SFPUC plans for the segments of BDPL Nos. 1 and 2 that traverse the wildlife refuge. Since this section of the BDPL Reliability Upgrade project (BD-1) would be an underground tunnel, potential impacts on wetlands would be limited to the tunnel shaft vicinities. As indicated in Draft PEIR Impact 4.6-1 (Vol. 2, Chapter 4, p. 4.6-48), the BD-1 pipeline could affect degraded saline emergent wetland habitat near the valve lots at the edge of San Francisco Bay, especially at the Newark Valve Lot where the staging area would be located for the tunnel segment of the pipeline. The tunnel shaft area would be accessed via a new roadway (about one-quarter mile long) that would extend between the shaft site and Willow Drive to the east. The tunnel shaft site would be located about 500 feet east of the point where BDPL Nos. 1 and 2 emerge and would extend westward above ground. With respect to the Ravenswood tunnel shaft, there is already an access road to the Ravenswood Valve Lot that connects with University Avenue in East Palo Alto. Paved parking areas could be added in this area to accommodate tunnel-related construction equipment.

The BDPL Reliability Upgrade project's potential impacts on wetlands are identified as potentially significant, but the Draft PEIR concludes that these impacts could be mitigated to a less-than-significant level with implementation of several mitigation measures. Please also refer to SFPUC Construction Measure #3 (Vol. 4, Chapter 6, p. 6-4), which calls for preservation of existing vegetation, use of wind erosion control measures, stabilization of site ingress and egress

locations to minimize erosion, and measures to minimize fugitive dust emissions. SFPUC Construction Measure #8 and Mitigation Measure 4.6-3a (Vol. 4, Chapter 6, pp. 6-7 and 6-12) also call for surveys, documentation, protection, avoidance, minimization, restoration, and compensation for impacts on sensitive habitats and those that support special-status species. Mitigation Measures 4.6-1a and 4.6-1b (Vol. 4, Chapter 6, pp. 6-11 and 6-12) identify further specific measures to avoid, minimize, and compensate for impacts on wetlands. The potential impacts on special-status species during construction and maintenance activities would be avoided or minimized through implementation of the programmatic biological resource mitigation measures outlined in Table 6.2 (Vol. 4, Chapter 6, p. 6-16), and through consultation with the CDFG and USFWS in accordance with permit requirements. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for additional discussion of the issues raised by this comment.

- F_USFWS-04 Refer to **Response F_USFWS-02** regarding SFPUC plans for the segments of BDPL Nos. 1 and 2 that traverse the wildlife refuge. The commenter's request to remove the existing BDPL Nos. 1 and 2 to avoid potential impacts associated with leaving these pipelines in place is acknowledged.
- F_USFWS-05 Table 4.17-3 (Vol. 2, Chapter 4, p. 4.17-16) lists the Dumbarton Rail Corridor Project as a cumulative project that would be built during the same time period as construction of the BDPL Reliability Upgrade project (BD-1) (approximately between 2008 and 2010). Potential cumulative impacts cited in Table 4.17-3 include impacts on sensitive habitats and species. Section 4.17 (Vol. 2, Chapter 4, pp. 4.17-51 and 4.17-52) also identifies cumulative bioregional impacts related to the loss of sensitive biological resources that could result from the WSIP in conjunction with other proposed projects. Mitigation Measure 4.6-2 (Vol. 4, Chapter 6, p. 6-12) requires that staging areas for the WSIP projects be coordinated where possible to minimize habitat loss by making repeated use of staging/construction areas and access roads. The project-level EIR for the BDPL Reliability Upgrade project will also include a project-specific cumulative impact analysis and evaluate whether additional mitigation measures are required.

Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for additional discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. Requested coordination of the BDPL Reliability Upgrade project (BD-1) with the San Mateo County Transit District's Dumbarton Rail Corridor Project to minimize the habitat impacts of both projects has been added to Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project.

- F_USFWS-06 The USFWS's interest in acquiring clean dredge material generated by the BDPL Reliability Upgrade project (BD-1) for use in the South Bay Salt Pond Restoration Project has been noted in Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project. Please note that Impact 4.6-1 (Vol. 2, Chapter 4, pp. 4.6-48 and 4.6-49) also identifies the potential for temporary impacts on wetlands associated with the placement of spoils, but indicates that potential use of these spoils as part of the restoration effort could result in a long-term beneficial impact.
- F_USFWS-07 As discussed in **Response F_USFWS-03**, the SFPUC will coordinate with the USFWS on any project that has the potential to affect listed species, including informal or formal consultation and development of a Biological Opinion, as appropriate, for each WSIP project. The USFWS's recommendation to coordinate with the Sacramento Fish and Wildlife Office for endangered species and to contact the wildlife refuge has been added to Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project (BD-1).

15.2 State Agencies

STATE AGENCIES

STATE AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT PEIR

Comment Letter Format	Comment Letter ID	Name of Commenter	Title	Organization/ Affiliation	Page
Mail	S_Caltrans	Tom Dumas	Chief of Office for Metropolitan Planning	California Department of Transportation	15.2-1
Mail	S_CC	Sam Schuchat	Executive Officer	Coastal Conservancy	15.2-2
Mail	S_CDFG1	W.E. Loudermilk	Regional Manager	California Department of Fish and Game	15.2-3
Mail	S_CDFG2	Charles Armor	Regional Manager, Bay Delta Region	California Department of Fish and Game	15.2-4
Mail	S_CSA	Sally Lieber	Assemblywoman, 22nd District	California State Assembly	15.2-18
Mail	S_DWR	Christopher Huitt	Staff Environmental Scientist	California Department of Water Resources, Floodway Protection Section	15.2-19
Mail	S_RWQCBCV	Greg Vaughn	Senior Engineer	Regional Water Quality Control Board, Central Valley Region	15.2-20
Mail	S_RWQCBSF	Keith H. Lichten	Senior Engineer	Regional Water Quality Control Board, San Francisco Bay Region	15.2-25

California Department of Transportation, Tom Dumas, Chief of Office for Metropolitan Planning, 07/23/07

S_Caltrans-01 Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for detailed discussion of the issues raised by this comment. Caltrans's interest in determining which WSIP facility projects would encroach on state facilities and in coordinating required environmental studies for any encroachment permits has been noted in Table C.6 of the Draft PEIR (Vol. 5, Appendix C, p. C-26) for consideration in all project-level CEQA review.

Coastal Conservancy, Sam Schuchat, Executive Officer, 10/01/07

- S_CC-01 The information regarding the Coastal Conservancy's role in the South Bay Salt Pond Restoration Project and the availability of the Final EIR/EIS for that project is acknowledged. This information, however, does not pertain to the adequacy or accuracy of the Draft PEIR. Also, please refer to **Response S_CC-03** and to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for detailed discussion regarding the SFPUC's coordination efforts with other agencies during project planning.
- S_CC-02 The commenter raises concerns similar to those expressed by the U.S. Fish and Wildlife Service regarding the plan to decommission/abandon-in-place the existing Bay Division Pipelines (BDPL) Nos. 1 and 2. Please refer to **Response F_USFWS-02** and **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2).
- S_CC-03 The commenter requests that the SFPUC coordinate with the Don Edwards San Francisco Bay National Wildlife Refuge on the South Bay Salt Pond Restoration Project as the BDPL Reliability Upgrade project (BD-1) proceeds. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for detailed discussion of the issues raised by this comment. The Coastal Conservancy's interest in acquiring clean dredge material generated by the BDPL Reliability Upgrade project for use in the South Bay Salt Pond Restoration Project, particularly within the Don Edwards San Francisco Bay National Wildlife Refuge, has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project.
- S_CC-04 This comment summarizes the Coastal Conservancy's plans to complete a gap in the San Francisco Bay Trail, which encircles San Francisco Bay and San Pablo Bay. Since BDPL Nos. 1 and 2 would be constructed in the vicinity of the Association of Bay Area Government's (ABAG) Bay Trail project, the commenter requests coordination with the SFPUC as the BDPL Reliability Upgrade project (BD-1) proceeds. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for detailed discussion of the issues raised by this comment. The Coastal Conservancy's request for coordination has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project.

California Department of Fish and Game, W.E. Loudermilk, Regional Manager, 10/01/07

- S_CDFG1-01 The Draft PEIR describes the existing institutional agreement associated with releases for the Moccasin Fish Hatchery (Vol. 1, Chapter 2, p. 2-41). Under the agreement between the SFPUC and the California Department of Fish and Game (CDFG), the SFPUC can interrupt water supply to the Moccasin Fish Hatchery at any time to undertake maintenance. The WSIP would not affect or change any terms of this agreement. With implementation of the WSIP, the SFPUC would meet, at a minimum, all current and anticipated legal requirements for the protection of fish and other wildlife habitat, consistent with the WSIP sustainability goal and system performance objectives indicated in Draft PEIR Table 3.2 (Vol. 1, Chapter 3, p. 3-9).
- S_CDFG1-02 Implementation of the maintenance program under the WSIP is not projected to result in impacts on the Moccasin Fish Hatchery, as described in **Response S_CDFG-01**. As described in the Draft PEIR (Vol. 4, Chapter 9), alternatives to the WSIP were identified based on their potential to avoid or reduce the identified impacts of the WSIP while attaining most of the program's basic objectives. Since no impact was identified on the Moccasin Fish Hatchery, CEQA does not require the development of an alternative to provide bypass pipelines or other features that would modify the hatchery operations. Neither the proposed WSIP nor any of the identified alternatives would include any structural changes to facilities east of the Oakdale Portal.

California Department of Fish and Game, Charles Armor, Regional Manager, Bay Delta Region, 10/01/07

S_CDFG2-01 The Draft PEIR (Vol. 2, Chapter 4, p. 4.6-32) describes the authority of the California Department of Fish and Game (CDFG) under Fish and Game Code Sections 1600–1607 to develop mitigation measures and enter into streambed alteration agreements (SAAs) with applicants. During project-level planning, environmental review, and implementation of the various WSIP facility improvement projects, the SFPUC will consult with the CDFG, as appropriate, regarding the need for SAAs. The WSIP would include construction of numerous facility improvement projects and would also alter operations of its regional water system to meet the WSIP goals and objectives (Vol. 1, Chapter 3, p. 3-9). The Draft PEIR includes a program-level impact analysis of the facility improvement projects (Vol. 2, Chapter 4, Sections 4.1 through 4.17, pp. 4.1-1 to 4.17-67). The program-level analysis determined that at least 12, and probably more, of the facility improvement projects would require SAAs (Vol. 5, Appendix C, Table C.6, p. C-26). Final identification of the need for SAAs would occur during project-level CEQA analysis. Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14).

The Draft PEIR (Vol. 3, Chapter 5) describes potential impacts on water resources in the Tuolumne River, Alameda Creek, San Mateo Creek, and Pilarcitos Creek watersheds associated with the proposed modifications to water system operations to meet the WSIP goals and objectives. Under the WSIP, the SFPUC would continue operation of water diversions from streams and rivers at the same locations as under existing conditions, and the diversions would occur in accordance with agreements for minimum instream flows where such agreements exist. The SFPUC has reviewed Section 1600 of the Fish and Game Code and has made a preliminary determination that the altered operation of its existing diversions as proposed under the WSIP would not require SAAs for operations associated with Stone Dam and Early Intake Diversion Dam. As part of WSIP implementation, the SFPUC will coordinate with the CDFG to determine appropriate permit requirements for facilities that could affect stream flows or streambeds within the SFPUC's water supply watersheds, including proposed modifications to the Alameda Creek Diversion Dam (ACDD), which will be assessed as part of the Calaveras Dam Replacement project (SV-2) EIR.

S_CDFG2-02 The WSIP would not cause the SFPUC to re-evaluate or revise the 1987 instream flow agreement. However, as described in the Draft PEIR (Vol. 1, Chapter 3, p. 3-83), the SFPUC is currently conducting studies of the Tuolumne River

between O'Shaughnessy Dam and Early Intake that may lead to revision of the 1987 agreement. The flows specified in the 1987 instream flow agreement are shown in Table 5.3.1-2 of the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.1-13); the SFPUC currently releases a minimum stream flow from Hetch Hetchy Reservoir in accordance with the 1987 agreement and would continue to do so under the WSIP. At the time of the 1987 agreement, the SFPUC and the U.S. Fish and Wildlife Service (USFWS) agreed that certain supplemental flows might be provided if determined necessary by a subsequent study to enhance conditions for resident trout, but the SFPUC disagreed with the results of the study at that time; the USFWS has not yet made the determination whether and when such flows might be required.

Plans for the SFPUC's current studies were reviewed by the Tuolumne River Stakeholder Group, which includes the CDFG, USFWS, National Park Service, U.S. Forest Service, Tuolumne County, Groveland Community Services District, Bay Area Water Supply and Conservation Agency, Tuolumne River Trust, and recreation and whitewater rafting interests. Studies of stream hydrology and geomorphology are in progress, and two preliminary reports have been published. A study of fish habitat is planned and will include the use of the USFWS's Instream Flow Incremental Methodology or similar method for relating flow and the extent and value of fish habitat.

When the 1987 agreement was executed, the focus of concern was the maintenance of minimum instream flows in the summer for the benefit of resident trout. The agreement did not address streamside meadows, the ecological health of which is probably more influenced by seasonal high flows than seasonal minimum flows. As discussed in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-28 to 5.7-31), the summertime release of more water for resident trout would reduce the total amount of water available for release from Hetch Hetchy Reservoir during the spring high-flow period, which could adversely affect streamside meadows.

S_CDFG2-03 The studies described in **Response S_CDFG2-02** will consider the life histories of native resident fish and include an analysis using the Instream Flow Incremental Methodology or similar method for relating flow and the extent and value of fish habitat. The studies will take some years to complete, and limited information (on geomorphology) was available for use in the Draft PEIR. Please refer to **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14) for more information on the adequacy of existing data to analyze the impacts of the WSIP on fisheries and other biological resources.

The National Park Service is currently carrying out studies of the streamside meadows in the Poopenaut Valley, which will provide better information on special-status species. As described in the Draft PEIR, once data from the studies

are available, the information could be used to refine the implementation of Mitigation Measure 5.3.7-2, Controlled Releases to Recharge Groundwater in Streamside Meadows; this biological resources measure calls for monitoring groundwater and vegetation as a means of mitigating potential impacts on riparian resources in the upper Tuolumne River (see Vol. 4, Chapter 6, pp. 6-49 and 6-50). Although the commenter suggests a more robust and comprehensive protocol, the Draft PEIR analysts concluded that groundwater recharge and the resulting vegetation response will be the fundamental metrics for measuring meadow and riparian health, which in turn determines habitat for other elements of the ecosystem. The SFPUC will continue to work with the CDFG, USFWS, National Park Service, and U.S. Forest Service on upper Tuolumne River ecosystem studies.

- S_CDFG2-04 Implementation of system operations to meet 2030 purchase requests under the WSIP would result in a reduction in the average total volume of water released from O'Shaughnessy Dam during the spring snowmelt period and a delay of a few days in the initial release. The Draft PEIR concluded that this change in flow pattern could have a significant adverse effect on terrestrial biological resources of the Poopenaut Valley, but that it would have a less-than-significant adverse effect on resident native trout below Hetch Hetchy Reservoir (Vol. 3, Chapter 5, Impact 5.3.7-2, pp. 5.3.7-21 and 5.3.7-22, and Impact 5.3.6-2, pp. 5.3.6-26 to 5.3.6-28). Accordingly, Mitigation Measure 5.3.7-2 (Vol. 4, Chapter 6, pp. 6-49 and 6-50) was specifically designed to lessen or eliminate the potential significant adverse effects of the WSIP on terrestrial biological resources in the Poopenaut Valley. Because the effects of the WSIP on resident native fish were determined to be less than significant, no mitigation measures are proposed to reduce impacts on fish.

The San Francisco Planning Department is required by statute to monitor, or delegate an agency to monitor, any mitigation measures to which the SFPUC commits pursuant to the Planning Department's responsibilities as a lead agency for CEQA compliance (Section 21081.6 of the California Public Resources Code). The primary purpose of CEQA mitigation monitoring is to ensure that mitigation measures are in fact implemented; however, the state's guidelines for tracking CEQA mitigation measures notes that the information gathered in the course of monitoring may help refine or make mitigation measures more effective. Following certification of the Final PEIR, the SFPUC will be required to adopt a mitigation monitoring and reporting program (MMRP) at the same time as it adopts the CEQA findings, prior to approving and adopting the WSIP. The MMRP will have dual purposes: to track mitigation measures in accordance with statutory requirements, and to gather the information necessary to evaluate the effectiveness of Mitigation Measure 5.3.7-2 and refine its implementation if needed.

As noted in **Responses S_CDFG2-02** and **S_CDFG2-03**, the SFPUC has begun a program of study intended to improve understanding of the relationship between flow in the Tuolumne River below O'Shaughnessy Dam and the riverine ecosystem. The studies will include an Instream Flow Incremental Methodology analysis or similar analysis that will determine the availability and quality of native fish habitat under different flow conditions. In planning the fish habitat studies, the SFPUC will continue to work with the Tuolumne River Stakeholder Group, which includes the CDFG. The fish habitat studies will provide information that will enable an assessment of the effects on native fish resulting from the flow shaping and pulse releases that constitute Mitigation Measure 5.3.7-2. Also, data from the studies will be used to determine whether the 1987 instream flow agreement needs to be modified.

In addition to the SFPUC's studies, the National Park Service is conducting groundwater-level and special-status species studies in the Poopenaut Valley. Data from these studies will provide baseline information on ecological conditions in the Poopenaut Valley. As noted in Measure 5.3.7-2, the data from these ongoing studies could be useful in augmenting the baseline data and in refining the implementation of the measure.

The commenter makes reference to Fish and Game Code Section 5937 and the California Endangered Species Act. Operations at Hetch Hetchy Reservoir are currently in compliance with these statutes and would continue to be in compliance under the WSIP.

S_CDFG2-05 Please refer to Section **14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Sections 14.7.3 and 14.7.4) for a discussion of Federal Energy Regulatory Commission (FERC) flow requirements. This comment, which notes that evidence suggests current FERC flow requirements may not be sufficient to protect the Chinook salmon run, is acknowledged. The fact that the CDFG has written to FERC requesting additional flows is also acknowledged.

The commenter opines that the effects of the WSIP and other past, present, and possible future actions on the anadromous fish populations of the Tuolumne River below La Grange Dam are cumulatively significant. The analysis in the Draft PEIR concluded that long-term WSIP-induced flow changes in the Tuolumne River below La Grange Dam could have a significant adverse effect on anadromous fish in that reach of river, and concluded that implementation of Mitigation Measures 5.3.6-4a and 5.3.6-4b would reduce these impacts to a less-than-significant level (Vol. 4, Chapter 6, pp. 6-48 and 6-49). The cumulative analysis in the Draft PEIR assumes that Mitigation Measures 5.3.6-4a and 5.3.6-4b would be effective and would reduce the impacts of the WSIP on anadromous fish to a less-than-significant level. The cumulative analysis in the

Draft PEIR also includes a discussion of the New Don Pedro Project, the 1995 FERC Settlement Agreement (as stated in the comment), and the FERC relicensing scheduled for 2016. With this assumption and in consideration of the FERC agreement, the WSIP's contribution to cumulative impacts would not be cumulatively considerable, as explained in more detail in the Draft PEIR (Vol. 3, Chapter 5, Impact 5.7.2-2, pp. 5.7-33 to 5.7-44).

The commenter provides technical information on the decline of Chinook salmon populations in the Tuolumne River and makes the case that the decline is attributable to limiting factors associated with the Tuolumne River rather than other limiting factors such as ocean harvests and water diversions in the Delta. Information is presented on the relationship between spring flow below La Grange Dam and salmon escapement 2.5 years later. The San Francisco Planning Department acknowledges receipt of the technical information. Please refer to **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.2) for further discussion of the decline of Chinook salmon.

This same comment also provides technical information on the relationship between water temperature and adult salmon brood year production. The commenter points out that water temperature depends on the temperature and magnitude of releases from La Grange Dam, and that lower water temperatures result in higher salmon production.

The commenter's assertion that the WSIP could cause anadromous fish populations of the Tuolumne River to drop below self-sustaining levels and further reduce the range of the federal threatened Central Valley steelhead is acknowledged. As noted above, the Draft PEIR concluded that long-term WSIP-induced flow changes in the Tuolumne River below La Grange Dam could have a significant adverse effect on anadromous fish in that reach of river if left unmitigated. The analysis in the Draft PEIR indicates that implementation of Mitigation Measures 5.3.6-4a and 5.3.6-4b would reduce these impacts to a less-than-significant level (Vol. 4, Chapter 6, pp. 6-48 and 6-49).

- S_CDFG2-06 For the reasons discussed in **Response S_CDFG2-05**, the commenter expressed the preference that the SFPUC obtain additional water from sources other than the Tuolumne River. The comment is acknowledged. It should be noted that the Draft PEIR analyzes impacts based on increased Tuolumne River diversions under 2030 purchase request conditions, and that lower purchase requests (i.e., water demand), smaller increases in diversions, and therefore less severe impacts would be expected in the interim. Refer to Section 13.4, Phased WSIP Variant (Vol. 7, Chapter 13) for additional discussion on this issue. In 2014, when FERC reconsiders the requirements for Project 2299, the SFPUC may need to revise its operations and/or its operational agreements with the licensees in order for

Project 2299 to meet all FERC-ordered requirements. At the same time, if the SFPUC approves the WSIP or any portion/modification of it analyzed in the PEIR, the SFPUC would continue to implement mitigation measures identified in the PEIR, consistent with the CEQA findings and the MMRP.

In addition, as required by CEQA, the Draft PEIR (Vol. 4, Chapter 9) analyzes alternatives that would avoid or substantially lessen the significant adverse effects of the WSIP. The analysis includes two alternatives that would not increase average annual diversions from the Tuolumne River—the Aggressive Conservation/Water Recycling and Local Groundwater Alternative (no supplemental Tuolumne River water) and the Year-round Desalination at Oceanside Alternative—as well as three alternatives that would substantially reduce future increases in diversions from the Tuolumne River—the No Program Alternative, No Purchase Request Increase Alternative, and Aggressive Conservation/Water Recycling and Local Groundwater Alternative (with supplemental Tuolumne River water). Please also refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14), which describes how this alternative would reduce future increases in Tuolumne River diversions compared to the WSIP. As described in Section 11.2 of the Comments and Responses document (Vol. 6, Chapter 11, p. 11-2), the ultimate decision on whether to approve and implement the WSIP or any alternative, portion, or modification of the WSIP will be made by the SFPUC. Also refer to Section 13.4 of this document for additional discussion regarding the Phased WSIP Variant.

S_CDFG2-07 The commenter's reference to the mitigation measure to reduce impacts on fisheries below La Grange Dam is incorrect; the correct reference should be Measure 5.3.6-4a, not Measure 5.4-3a. Please refer to **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.8) and **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for further discussion of Mitigation Measure 5.3.6-4a regarding the avoidance of flow changes below Don Pedro Reservoir through the pursuit of a water transfer agreement that is based on conserved water.

The commenter indicates concern that this mitigation measure could potentially be transferring WSIP impacts to another watershed; however, this is a misinterpretation of the measure. Based on this comment, the text of Mitigation Measure 5.3.6-4a (Vol. 5, Chapter 6, p. 6-48, first sentence) is clarified as follows:

Measure 5.3.6-4a: The SFPUC will pursue a water transfer arrangement with MID/TID and/or other water agencies such that the water acquired is developed through actions that result in reduction of demand on Don Pedro Reservoir as a result of conservation, improved delivery efficiency, inter-agency water transfer of conserved water, or use of an alternative supply such as groundwater.

The SFPUC acknowledges the commenter's request "to implement and mandate enforceable water recycling/conservation strategies or upgrades for its wholesale customers and their constituents who elect not to use feasible water recycling/conservation strategies or upgrades." As described in the Draft PEIR (Vol. 1, Chapter 2, p. 2-43), the SFPUC currently holds individual agreements with its wholesale customers; these agreements provide terms for the rate schedule, operating costs, and supply assurance and also require wholesale customers to employ best efforts to use all sources of water owned or controlled by them. Regarding the SFPUC's authority to require or impose mandatory conservation, the SFPUC does have the regulatory authority to implement conservation programs in the retail customer service area; however the SFPUC's ability to influence the wholesale customers is limited to its contractual agreements with them. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for detailed discussion of this issue. The Modified WSIP Alternative would include increased conservation, recycling, and groundwater use in the wholesale customer service areas. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for more information.

S_CDFG2-08 The commenter's reference to the mitigation measure to reduce impacts on fisheries below La Grange Dam is incorrect; the correct reference should be Measure 5.3.6-4b, not Measure 5.4-3b. Please refer to **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.9) for further discussion of Mitigation Measure 5.3.6-4b regarding fishery habitat enhancement.

S_CDFG2-09 Refer to **Response S_CDFG2-07**, above.

S_CDFG2-10 Refer to **Response S_CDFG2-08** and **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.9) for further discussion of Mitigation Measure 5.3.6-4b regarding the proposed lower Tuolumne River fishery mitigation conclusion.

The San Francisco Planning Department acknowledges the recommendation that the SFPUC coordinate with the National Marine Fisheries Service, USFWS, and CDFG to develop mitigation measures for the lower Tuolumne River fishery.

S_CDFG2-11 The commenter correctly summarizes the Division of Safety of Dams (DSOD) restriction on Calaveras Reservoir in terms of restricted capacity. The commenter also correctly summarizes the proposal under the WSIP to restore the reservoir to its historical operating level prior to DSOD restrictions to enable the SFPUC to meet the WSIP goals and objectives. The commenter then describes the flow releases under the 1997 Memorandum of Understanding to provide habitat for resident trout and other native fish species, and states that current plans regarding

fish migration barrier improvements at the BART weir would mean these flows would need to be re-assessed for anadromous steelhead and other stream-dependent native species. Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for a detailed discussion of potential future-occurring anadromous steelhead in the Alameda Creek watershed and the release/bypass flows designed to provide sufficient habitat for steelhead life stages. Additionally, refer to the **Response S_CDFG2-15**, below, regarding the revision of mitigation measures to provide habitat for other native stream-dependent species in addition to resident rainbow trout.

The commenter proposes mitigating the effects of the future flow releases by instituting a program of screening as well as bullfrog and non-native centrarchids control to protect California red-legged frog, California tiger salamander, and foothill yellow-legged frog. The San Francisco Planning Department acknowledges this comment. The Draft PEIR (Vol. 2, Chapter 4, p. 4.6-1), however, describes the program-level impacts of the Calaveras Dam Replacement project operations specific to that project in order to explain the nature and magnitude of potential WSIP effects on species and habitats and to frame appropriate broad mitigation strategies where necessary. A more detailed, site-specific impact analysis will be conducted as part of the project-level EIR for the Calaveras Dam Replacement project (SV-2), which will more fully address this concern.

The commenter also suggests that the environmental review for the Calaveras Dam Replacement project (SV-2) should include an assessment of operations to ensure water elevations are sufficient for passage of rainbow trout between Calaveras Reservoir and Arroyo Hondo during critical upstream and downstream migration periods. Under the WSIP, Calaveras Reservoir would be restored to pre-DSOD storage levels and water elevations would typically be increased. This is unlikely to present a passage impediment to migrating resident rainbow trout (adult and juvenile). A more detailed, site-specific impact analysis will be conducted as part of the project-level EIR for the Calaveras Dam Replacement project, which will more fully address this concern.

- S_CDFG2-12 This comment consists of a summary of Draft PEIR Mitigation Measures 5.4.5-3a and 5.4.1-2 (Vol. 4, Chapter 6, pp. 6-51 to 6-53). The commenter provides an accurate summary of these measures. As described in Section 13.2 of the Comments and Responses document (Vol. 7, Chapter 13, p. 13-3), subsequent to the publication of the Draft PEIR, the SFPUC has modified the project description of the Calaveras Dam Replacement project to include construction of bypass facilities at the ACDD; this has resulted in minor changes to the text of this mitigation measure to acknowledge these proposed project revisions. Please refer to Chapter 16 of the Comments and Responses document (Vol. 7) for the specific changes.

- S_CDFG2-13 The commenter's reference to the mitigation measure to reduce impacts on fisheries below the ACDD is incorrect. The correct reference should be Measure 5.4.5-3a, not Measure 5.4.3-3a. This biological resources measure (Vol. 4, Chapter 6, Measure 5.4.5-3a, pp. 6-52 and 6-53) calls for the SFPUC to develop and implement an operational plan to sustain minimum flows in Alameda Creek below the diversion dam. These minimum flows would be established to benefit resident trout. The commenter notes that steelhead could be restored to the watershed above the BART weir in the future, and that the mitigation flows outlined in Measure 5.4.5-3a would need to be reassessed to provide adequate protection for anadromous steelhead and to comply with Fish and Game Code Section 5937. Mitigation Measure 5.4.5-3a would reduce impacts related to resident trout spawning and egg incubation to a less-than-significant level, but is not designed to protect anadromous steelhead or habitat. For a detailed discussion of potential future-occurring steelhead in the upper watershed and protective measures designed to support anadromous steelhead life stages and habitat, please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14).

The commenter also states that an objective of Mitigation Measure 5.4.5-3a should include providing sufficient bypass flows to support populations of California red-legged frog and foothill yellow-legged frog. In response to this comment, Measure 5.4.5-3a (Vol. 4, Chapter 6, p. 6-52, next to last paragraph, first sentence) is revised as follows:

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~~ bypass 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 for resident trout as well as breeding habitat for other native stream-dependent amphibians.

- S_CDFG2-14 This comment accurately summarizes Draft PEIR Mitigation Measure 5.4.5-3b (Vol. 4, Chapter 6, p. 6-54). The commenter goes on to suggest additional measures to be incorporated into Measure 5.4.5-3b, including decommissioning and removal of the ACDD, retrofitting the ACDD for fish passage, and adaptation of the measure, if necessary, in response to results of analysis and monitoring.

Measures 5.4.5-3a and 5.4.5-3b are designed to mitigate potential impacts on resident trout due to implementation of the WSIP. Measure 5.4.5-3a includes a detailed monitoring plan and is thus designed to adapt to changing conditions. Measure 5.4.5-3b, which includes modification of ACDD operations, would be implemented if Measure 5.4.5-3a fails to sustain the resident trout population in Alameda Creek below the ACDD. Decommissioning and removal of the ACDD,

however, is not proposed as part of either of these mitigation measures because the analysis in the Draft PEIR did not conclude that this would be necessary to mitigate the impacts of the WSIP. The ACDD is an existing structure and part of the existing conditions; as such, it is considered part of the environmental baseline for the WSIP, and mitigation of impacts associated with existing conditions is not required under CEQA. However, as described in Section 13.2 (Vol. 7, Chapter 13), subsequent to publication of the Draft PEIR, the SFPUC has proposed to incorporate modification of the ACDD to provide a new bypass structure needed to implement bypass stream flows as part of the Calaveras Dam Replacement (SV-2) project. For a detailed discussion on proposed project revisions to the Calaveras Dam project, adaptive management, and monitoring and protective measures for fisheries in Alameda Creek, please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14).

The commenter also states that the 10-year monitoring period is too long a time before screening of the diversion tunnels at the ACDD is implemented, and that screening should take place concurrently with the Calaveras Dam Replacement project (SV-2). Comment acknowledged. This impact and the mitigation measure will be reevaluated and refined at a project level of detail as part of the EIR for the Calaveras Dam Replacement project

S_CDFG2-15 Mitigation Measure 5.4.1-2, Diversion Tunnel Operations (Vol. 4, Chapter 6, pp. 6-51 and 6-52) is included in the Draft PEIR as a feasible approach to reducing flow impacts in Alameda Creek below the diversion dam; however, as explained in the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.1-35), this measure could help reduce the impact but would not fully mitigate it. The reestablishment of the diversions from Alameda Creek to Calaveras Reservoir that would occur under the WSIP is necessary to achieve the SFPUC water supply objective, and full mitigation could not be accomplished without foregoing the needed diversions. Therefore, Impact 5.4.1-2 would remain significant and unavoidable even with implementation of Measure 5.4.1-2.

The commenter notes that Mitigation Measure 5.4.5-3a (Vol. 4, Chapter 6, p. 6-52) commits to bypass flows only after December 1, and expresses concern that the release schedule for bypass flows described in Measure 5.4.5-3a will not sufficiently augment surface flows in Alameda Creek due to increased infiltration from depleted groundwater caused by the increased diversions. The commenter recommends further study to determine whether sufficient water will be available for different life stages of fish and aquatic wildlife. As described in the Draft PEIR, Measure 5.4.5-3a includes the requirement for the SFPUC to complete site specific studies to determine flow requirements to support spawning and egg incubation for resident. However, as described above in Response S_CDFG2-13, measure has been revised to address breeding habitat for other native stream-

dependent species. In addition, this impact and associated mitigation measure will be reevaluated at a project level of detail during environmental review of the Calaveras Dam Replacement project (SV-2), which may include more detailed mitigation requirements. Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for more discussion of adaptive measures regarding bypass flows for fishery resources as well as studies being conducted in Alameda Creek to determine bypass and release flows to support steelhead and resident trout.

In response to this comment, Mitigation Measure 5.4.5-3a has been expanded to address other wildlife species in addition to fish, and the following excerpts from the Draft PEIR are revised as follows:

(Vol. 3, Chapter 5, p. 5.4.6-19, third full paragraph, third sentence):

Measure 5.4.5-3a, Minimum Flows for Resident Trout on Alameda Creek, calls for developing and implementing an operational plan to provide minimum bypass flows below the diversion dam to support habitat for rainbow trout and other native stream-dependent species from December through April.

(Vol. 4, Chapter 6, p. 6-52, next to last paragraph, first sentence):

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 bypass 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 for resident trout as well as breeding habitat for other native stream-dependent amphibians.

(Vol. 4, Chapter 6, p. 6-53, first paragraph, last sentence):

The operational plan will allow for adapting minimum flow amounts to support resident trout spawning and egg incubation and other native stream-dependent species based on the monitoring results and best available scientific information.

- S_CDFG2-16 The commenter accurately notes that under existing conditions, the SFPUC attempts to capture all runoff from the upper San Mateo Creek watershed, and only rarely releases water to the lower San Mateo Creek from Lower Crystal Springs Dam. As noted in the Draft PEIR, releases under the WSIP would continue to be infrequent and would be of about the same magnitude as those occurring under existing conditions (Vol. 3, Chapter 5, p. 5.5.1-14). Because the WSIP would have little or no effect on existing releases to lower San Mateo Creek, it would also have a less-than-significant impact on fisheries and streamside terrestrial biological resources. For this reason, no mitigation

measures are proposed in the Draft PEIR to address biological conditions in the lower creek.

The proposed improvements to Lower Crystal Springs Dam are included as one of the WSIP facility improvement projects, and its potential environmental effects are addressed at the program level in the Draft PEIR (Vol. 2, Chapter 4). A project-level CEQA analysis of the Lower Crystal Springs Dam Improvements project (PN-4) is in progress, and potential impacts on San Mateo Creek will be evaluated in more detail as site-specific project information is developed. In addition, various permits from the CDFG and other agencies will be needed before construction can proceed. The CDFG may choose to raise the issue of additional releases of water from Lower Crystal Springs Reservoir in the context of project-level CEQA compliance and permit applications.

The commenter's opinion with respect to the need to protect fish in San Mateo and Pilarcitos Creeks, as well as in Alameda Creek, is acknowledged.

S_CDFG2-17 The commenter requests clarification of fisheries impacts from the Lower Crystal Springs Dam Improvements project (PN-4) through potential hydrological disconnects between habitat units. The comment states that the project could result in passage impediments for *O. mykiss* migrating between the reservoir and tributaries to spawn as well as for out-migrating smolts due to the lack of a defined active channel.

Draft PEIR Section 5.5.5 (Vol. 3, Chapter 5, pp. 5.5.5-1 to 5.5.5-9) and Impact 5.5.5-1 (pp. 5.5.5-6 and 5.5.5-7) discuss impacts on fishery resources due to implementation of WSIP water supply and system operations, and more specifically, the Crystal Springs Dam Improvements project. Based on the hydrologic modeling results presented in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.5.1-14 to 5.5.1-16), it is unlikely that implementation of the WSIP, including the Crystal Springs Dam Improvements project, would result in hydrological disconnects that would impede passage for *O. mykiss* migrating between the reservoir and upstream habitat. In addition, the hydrologic modeling indicated that the average monthly storage in Crystal Springs Reservoir would be greater under proposed WSIP operations than under existing conditions. Increased reservoir storage would provide an increase in the volume of habitat available for resident fish species inhabiting the reservoir, including both warmwater and coldwater fish species. The increase in storage elevation under the WSIP could also provide greater opportunities for connectivity and migration of fish between the reservoir and upstream tributary habitat. As a result of these factors, increased reservoir storage under proposed operations is considered a beneficial impact on fishery resources.

However, model projections show that restoring water storage levels in Crystal Springs Reservoir could cause a potential loss of stream channel and potential spawning area in San Mateo Creek. The Draft PEIR indicates that upstream areas may provide suitable replacement habitat, and this prospect is being evaluated in the project-level CEQA review for the Lower Crystal Springs Dam Improvements project. However, in the absence of site-specific information on the availability and feasibility of replacement habitat, this impact is considered potentially significant and unavoidable at the program level of analysis as a conservative determination in the Draft PEIR.

The Draft PEIR identifies Mitigation Measure 5.5.5-1, Create New Spawning Habitat Above Crystal Springs Reservoir (Vol. 4, Chapter 6, p. 6-62), as a strategy for surveying and creating suitable spawning habitat, but at a programmatic level of analysis, the feasibility of this measure remains unknown and thus the impact is considered potentially significant and unavoidable. This impact and mitigation measure will be evaluated in more detail during the project-level CEQA review for the Lower Crystal Springs Dam Improvements project (PN-4) when more site-specific information and project details are available to identify the nature and magnitude of the impact and to reevaluate the appropriateness and effectiveness of the mitigation measure. Project-level analysis may determine that this impact can be reduced to a less-than-significant level. Refer to Section 14.4, Master Response on PEIR Appropriate Level of Analysis (Vol. 7, Chapter 14, Section 14.4.2) for a discussion regarding the difference between project-level and program-level analysis.

- S_CDFG2-18 The WSIP would include the diversion of additional water from Pilarcitos Creek to meet increased water demand in the Coastside County Water District service area. As the commenter correctly notes, the Draft PEIR indicates that the WSIP would have significant adverse impacts on surface water quality, fisheries, and terrestrial biological resources in Pilarcitos Reservoir and along Pilarcitos Creek as a result of increased diversions. To reduce these impacts to a less-than-significant level, the Draft PEIR identified Mitigation Measure 5.5.3-2 (Vol. 4, Chapter 6, p. 6-56). Under Measure 5.5.3-2, the SFPUC would develop an operations plan for the Pilarcitos watershed facilities that would closely resemble operations under existing operations. After completion of the Draft PEIR, the SFPUC attempted to develop the protocols necessary to implement Measure 5.5.3-2, but it became apparent that more practical measures would be preferred and replacement mitigation measures were identified; please refer to Vol. 7, Chapter 13, Section 13.3 for a discussion of the updated and refined analysis of resources in the Pilarcitos watershed and a description of the replacement mitigation measures. The replacement mitigation measures would reduce the impacts of the WSIP in the Pilarcitos Creek watershed to a less-than-significant level, including impacts on San Francisco garter snake and California red-legged frog.

The commenter's opinion with respect to the need for removal or modification of Stone Dam and the restoration of Pilarcitos Creek is acknowledged. However, the purpose of the replacement mitigation measures is to prevent degradation of Pilarcitos Creek and associated resources attributable to the WSIP relative to the existing condition, not to improve the creek relative to the existing condition. The SFPUC is currently participating in the Pilarcitos Creek Restoration Workgroup with the CDFG and other stakeholders to assess existing conditions and develop a strategy for creek restoration (see Vol. 3, Chapter 5, p. 5.2-21), but these activities are independent of the WSIP CEQA process. The CDFG's concurrence with the NMFS recommendations for steelhead restoration in Pilarcitos Creek is acknowledged.

- S_CDFG2-19 The San Francisco Planning Department acknowledges receipt of the technical information contained in the appendix to the CDFG letter. The information provides further support of the conclusion in the Draft PEIR that long-term WSIP-induced flow reductions in the Tuolumne River below La Grange Dam could have a significant adverse (but mitigable) impact on anadromous fish. Please refer to **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14) for discussion of fishery impacts in the lower Tuolumne River.

California State Assembly, Sally Lieber, Assemblywoman, 22nd District, 10/01/07

- S_CSA-01 This comment, which expresses an opinion regarding the importance and urgency to rebuild the regional water system's infrastructure, is acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for an expanded discussion on the overall need for the WSIP and of the potential consequences of not implementing the proposed program.
- S_CSA-02 This comment, which expresses concern regarding additional Tuolumne River diversions and requests that additional studies of alternatives that minimize diversions from the Tuolumne River be conducted, is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for more discussion and analysis of the environmentally superior alternative. Please also see **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.6.2) for more information regarding the SFPUC's adherence to the minimum required flows with or without the WSIP.
- S_CSA-03 This comment opposing additional diversions from the Tuolumne River and supporting additional conservation is acknowledged. The comment praising BAWSCA and its member agencies for reducing residential usage is also acknowledged. Refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) regarding water conservation and recycling projects proposed by the SFPUC in San Francisco and by the SFPUC's wholesale customers in their respective service areas.
- S_CSA-04 This comment, which expresses support for agricultural conservation to reduce diversions from the Tuolumne River, is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for more discussion of a water transfer agreement based on conserved water to avoid flow changes below Don Pedro Reservoir.
- S_CSA-05 This comment, which stresses the immediate need for infrastructure repair of the system, is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3) for more discussion.
- S_CSA-06 This comment expresses support for the environmentally superior alternative and for implementation of the WSIP; comment acknowledged.

California Department of Water Resources, Floodway Protection Section, Christopher Huitt, Staff Environmental Scientist, 07/23/07

S_DWR-01 Based on the information available during preparation of the Draft PEIR, it is uncertain, at a programmatic level of analysis, whether the San Joaquin Pipeline System project (SJ-3) would encroach on a designated floodway for the San Joaquin River or its tributaries, as identified in the State Adopted Plan of Flood Control. However, the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-25) acknowledges that pipeline projects, including the San Joaquin Pipeline System project, would be subject to encroachment permits from the local flood control district or other appropriate local agency. The potential for encroachment of a designated floodway will be analyzed as part of project-level CEQA review for each WSIP project, including a discussion of the encroachment permitting requirements of the Reclamation Board if appropriate. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for information on the appropriate level of detail of an impact analysis at the program level versus the project level and for information regarding the SFPUC's coordination efforts with other agencies.

Regional Water Quality Control Board, Central Valley Region, Greg Vaughn, Senior Engineer, 10/17/07

S_RWQCBCV-01 This comment requests that the discussion of beneficial uses of surface waters be expanded to indicate that beneficial uses are designated in the State's Water Quality Control Plans for surface waters and ground water basins. In response to this comment, the Draft PEIR is revised as follows:

(Vol. 2, Chapter 4, p. 4.5-9, end of first full paragraph)

These agencies also implement the Waste Discharge Requirements (WDR) Program, which regulates discharges of waste to land under the California Water Code as well as discharges of waste into waters of the state that are outside federal jurisdiction, as defined under the Clean Water Act.

(Vol. 2., Chapter 4, p. 4.5-9, end of second full paragraph)

The San Francisco Bay RWQCB adopted its Basin Plan in 1995, and most recently revised the plan in December 2006. ~~November 2004. A general update to the plan was approved by the San Francisco Bay RWQCB in 2005 and by the SWRCB in April 2006. The update is undergoing review by the Office of Administrative Law.~~ The Central Valley RWQCB adopted its Basin Plan in 1998, and most recently revised the plan in October 2007~~September 2004.~~

S_RWQCBCV-02 In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-9, third paragraph) is revised as follows:

~~Beneficial uses of surface waters~~ serve as a basis for establishing water quality objectives and discharge prohibitions to attain ~~beneficial use goals~~ the goal of achieving the highest water quality consistent with the maximum benefit to the people of the state. Beneficial uses are designated in Basin Plans for surface waters and groundwater basins, and in the case of the San Francisco Bay Basin, wetlands. Table 4.5-1 lists the designated beneficial uses for those water bodies that could be affected by the WSIP. ~~project activities, as defined in the Basin Plans.~~

The Draft PEIR is organized as follows: Vol. 2, Chapter 4 pertains to the environmental setting and impacts associated with the WSIP facility improvement projects, and Vol. 3, Chapter 5 pertains to the environmental setting and impacts associated with the WSIP water supply and system operations. Since the issues related to the Tuolumne River are addressed in Chapter 5, the requested supplemental information on the Tuolumne River and groundwater basin has been added to Vol. 3, Chapter 5. Therefore, in

response to this comment, the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.3-1, second full paragraph) is revised as follows:

The Tuolumne River flows from the crest of the Sierra Nevada westward to its confluence with the San Joaquin River. The San Joaquin River flows north to the Sacramento–San Joaquin Delta. Water from the Delta discharges to the San Francisco Bay Estuary and the Pacific Ocean. The Tuolumne River system and downstream water bodies are shown in Figure 5.1-1. Beneficial uses of the Tuolumne River, as designated in the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, include the following:

- Source to (New) Don Pedro Reservoir: Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Hydropower Generation (POW); Water Contact Recreation (REC-1); Non-water Contact Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); and Wildlife Habitat (WILD)
- New Don Pedro Reservoir: MUN (Potential); POW; REC-1; REC-2; WARM; COLD; and WILD
- New Don Pedro Dam to San Joaquin River: MUN (Potential); AGR; REC-1; REC-2; WARM; COLD; Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and WILD

The following reference is added to the end of Section 5.3.3 (Vol. 3, Chapter 5, p. 5.3.3-21):

State Water Resources Control Board (SWRCB), California Regional Water Quality Control Board, Central Valley Region, *Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins*, Fourth Edition, Revised October 2007 with approved amendments.

In addition, the following text is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.5-1, end of the second full paragraph):

The Tuolumne River flows from the crest of the Sierra Nevada westward to its confluence with the San Joaquin River. The San Joaquin River flows north to the Sacramento–San Joaquin Delta. The Tuolumne River system and downstream water bodies are shown in Figure 5.3.1-1. Unless otherwise designated by the California Regional Water Quality Control Board, all groundwaters in the Central Valley region are considered to be suitable or potentially suitable, at a minimum, for municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.

S_RWQCBCV-03 In response to this comment regarding state regulation of activities in wetlands, the Draft PEIR is revised as follows:

(Vol. 2, Chapter 4, p. 4.5-12, insert new first paragraph under the heading Construction in Waters of the State and of the United States)

The Regional Water Quality Control Board (RWQCB) has regulatory authority over construction in waters of the United States and waters of the state, including activities in wetlands, under both the Clean Water Act and the State of California's Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Under the Clean Water Act, the RWQCB has regulatory authority over actions in waters of the United States through the issuance of water quality certifications under Section 401 of the Clean Water Act, which are issued in conjunction with permits issued by the Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. When the RWQCB issues a Section 401 certification for a project, the project is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of the water quality certification. Activities in areas that are outside the jurisdiction of the Corps (e.g., isolated wetlands, vernal pools, or stream banks above the ordinary high water mark) are regulated by the RWQCB under the authority of the Porter-Cologne Act. Activities that lie outside of Corps jurisdiction may require the issuance of either individual or general waste discharge permits.

(Vol. 2, Chapter 4, p. 4.6-32, fourth full paragraph)

The state's authority to regulate activities in wetlands and water at the project sites resides primarily with the ~~State Water Resources Control Board (SWRCB)~~ California Regional Water Quality Control Board (RWQCB), which regulates construction in waters of the United States and waters of the state, including activities in wetlands, under both the Clean Water Act and the State of California's Porter-Cologne Water Quality Control Act. The RWQCB ~~SWRCB, acting through the nine Regional Water Quality Control Boards,~~ must certify that a Corps permit action meets state water quality objectives (Section 401, Clean Water Act).

S_RWQCBCV-04 The commenter correctly summarizes the general analysis presented in Impact 4.5-1 (Vol. 2, Chapter 4, pp. 4.5-21 to 4.5-28) regarding water quality degradation due to erosion and sedimentation.

SFPUC Construction Measure #3, described in the Draft PEIR (Vol. 1, Chapter 3, p. 3-80) identifies the *minimum* measures that would be taken to reduce adverse effects related to sedimentation and erosion. The

San Francisco Planning Department and SFPUC acknowledge the recommendation of the commenter to consider scheduling and phasing of construction activities as a feasible and effective best management practice to limit areas and periods of disturbance to the maximum extent practicable and to minimize the area of disturbed soil during the wet season.

S_RWQCBCV-05 The biological impact analysis in the Draft PEIR considers the requirements of the Porter-Cologne Water Quality Control Act. In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.6-37, third significance criterion) is revised as follows:

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act and as protected under the Porter-Cologne Water Quality Control Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Evaluated in this section)

S_RWQCBCV-06 As noted in **Response S_RWQCBCV-03**, the Draft PEIR has been revised to indicate that the RWQCB's authority over wetlands of any type, including areas that are outside of Corps jurisdiction under the Clean Water Act.

In response to this comment, the mitigation measure for wetland impacts is revised as follows:

(Vol. 4, Chapter 6, p. 6-11, Measure 4.6-1b, first paragraph)

Measure 4.6-1b: If the wetland delineation indicates that the WSIP project will affect jurisdictional wetlands or aquatic resources, then, in accordance with state and federal permit requirements, the SFPUC will avoid and minimize direct and indirect impacts such as erosion and sedimentation, alteration of hydrology, and degradation of water quality. As a first priority, the SFPUC will implement (1) avoidance measures, For unavoidable impacts, the SFPUC will implement (2) minimization of unavoidable impacts, (3) restoration procedures, and (4) compensatory creation or enhancement to ensure no net loss of wetland extent or function.

The San Francisco Planning Department and the SFPUC acknowledge that for all impacts on wetlands, the SFPUC will be required to demonstrate to the RWQCB that they have avoided and minimized impacts to the maximum extent practicable before considering compensation measures.

S_RWQCBCV-07 This comment corroborates information presented in a footnote in the Draft PEIR (Vol. 2, Chapter 4, p. 4.6-31), where the current regulatory environment regarding wetlands is discussed.

S_RWQCBCV-08 Section 5.2 of the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-6) includes a brief summary of the Clean Water Act, with the intent of providing an overview of the regulations generally governing the SFPUC's water supply and system operations as they would be affected by the WSIP. Additional description of sections of the Clean Water Act relevant to the construction and operation of the facility improvement projects under the WSIP are provided in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.5-9 to 4.5-17 and pp. 4.6-31 to 4.6-32), including mention of Section 401 of the Clean Water Act.

The following text is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-6, end of the fourth full paragraph) to augment the description of the Clean Water Act:

Under Section 401 of the Clean Water Act, every applicant for a federal permit for any activity that may affect waters of the state must obtain a water quality certification that the proposed activity will comply with state water quality standards.

S_RWQCBCV-09 The commenter accurately summarizes the analysis presented in Impact 5.3.7-2 (Vol. 3, Chapter 5, pp. 5.3.7-15 to 5.3.7-22) regarding impacts on alluvial features that support meadow and riparian habitat along the Tuolumne River below Hetch Hetchy Reservoir. The commenter also notes the importance of baseline studies to assess the effectiveness of pulse flows per Mitigation Measure 5.3.7-2 (Vol. 4, Chapter 6, p. 6-50). This corroborates the requirements of the mitigation measure, which states that the SFPUC will gather "baseline data regarding the extent, species composition and condition of the existing meadow vegetation..."

S_RWQCBCV-10 Please refer to **Section 4.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for additional discussion of climate change to augment the discussion presented in Section 5.7.6 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-92 to 5.7-96). Section 4.11 provides more detailed and up-to-date information on climate change as it relates to the SFPUC regional water supply and the proposed WSIP.

Regional Water Quality Control Board, San Francisco Bay Region, Keith H. Lichten, Senior Engineer, 10/03/07

S_RWQCBSF-01 Please refer to **Response S_RWQCBCV-01**.

S_RWQCBSF-02 Refer to **Response S_RWQCBCV-02** for a description of Draft PEIR text revisions related to beneficial uses. In addition, in response to this comment, additional information is added to Table 4.5-1 (Vol. 2, Chapter 4, p. 4.5-10) as follows:

**TABLE 4.5-1
DESIGNATED BENEFICIAL USES**

Water Body	Designated Beneficial Uses
San Joaquin Region	
San Joaquin River	MUN (potential), AGR, IND, MIGR, REC-1, REC-2, WARM, SPWN, WILD
California Aqueduct	MUN, AGR, IND, REC-1, REC-2, WILD
Delta-Mendota Canal	MUN, AGR, REC-1, REC-2, WARM, WILD
Sunol Valley Region	
Alameda Creek	AGR, COLD, GWR, MIGR, REC-1, REC-2, SPWN, WARM, WILD
Arroyo Hondo	COLD, FRSH, MUN, REC-1, REC-2, SPWN, WARM, WILD
Calaveras Reservoir	COLD, MUN, REC-1 (limited), REC-2, SPWN, WARM, WILD
San Antonio Reservoir	COLD, MUN, REC-1 (limited), REC-2, SPWN, WARM, WILD
<u>Niles Cone Groundwater</u>	<u>MUN, PROC, IND, AGR</u>
Bay Division Region	
Guadalupe River	COLD, MIGR (potential), REC-1 (potential), REC-2, SPWN (potential), WARM, WILD
<u>Santa Clara Valley Groundwater</u>	<u>MUN, PROC, IND, AGR (potential)</u>
Peninsula Region	
San Mateo Creek	COLD (potential), FRSH, RARE, REC-1 (potential), REC-2 (potential), SPWN, WILD
Crystal Springs Reservoir	COLD, MUN, RARE, REC-2, SPWN, WARM, WILD
San Andreas Reservoir	COLD, MUN, RARE, REC-1 (limited), REC-2, SPWN, WARM, WILD
<u>San Mateo Plain Groundwater</u>	<u>MUN, PROC, IND, AGR (potential)</u>
San Francisco Region	
Lake Merced	COLD, MUN (potential), REC-1, REC-2, SPWN, WARM, WILD
<u>Westside Groundwater</u>	<u>MUN, PROC (potential), IND (potential), AGR</u>
San Francisco Bay	
San Francisco Bay, Lower	COMM, EST, IND, MIGR, NAV, RARE, REC-1, REC-2, SHELL, SPWN (potential), WILD
San Francisco Bay, South	COMM, EST, IND, MIGR, NAV, RARE, REC-1, REC-2, SHELL, SPWN (potential), WILD

Beneficial Uses Key:

MUN (Municipal and Domestic Supply); AGR (Agriculture); REC-1 (Body Contact Recreation); REC-2 (Noncontact Recreation); WARM (Warm Freshwater Habitat); COLD (Cold Freshwater Habitat); MIGR (Fish Migration); SPWN (Fish Spawning); WILD (Wildlife Habitat); NAV (Navigation); GWR (Groundwater Recharge); FRSH (Freshwater Replenishment); RARE (Preservation of Rare and Endangered Species); SHELL (Shellfish Harvesting); COMM (Ocean, Commercial, and Sport Fishing); EST (Estuarine Habitat); IND (Industrial Service Supply); PROC (Industrial Process).

Note: Beneficial uses for specific wetland sites affected by the WSIP facility improvement projects in the San Francisco Bay region will be determined as needed based on the process described in the San Francisco Bay Basin Plan.

S_RWQCBSF-03 Refer to **Response S_RWQCBCV-03**.

S_RWQCBSF-04 The information regarding the RWQCB's ongoing development of a Municipal Regional Urban Runoff Phase I NPDES Stormwater Permit that will replace the municipal stormwater permits in Alameda, Santa Clara, and San Mateo Counties is acknowledged.

In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-13, second full paragraph) is revised as follows:

The C.3 requirements are similar for all counties. However, local municipalities are phasing in these requirements, and specific procedures and application requirements may differ from one municipality to another. Reconstruction projects located within ~~Projects completed in~~ a public street or road right-of-way, such as some pipeline projects proposed as part of the WSIP, are exempt from the C.3 requirements where ~~when~~ both sides of the right-of-way are developed.

S_RWQCBSF-05 Refer to **Response S_RWQCBCV-04**.

S_RWQCBSF-06 The commenter correctly summarizes the analysis in Impact 4.5-2 (Vol. 2, Chapter 4, p. 4.5-29) and the associated Mitigation Measure 4.5-2 (Vol. 4, Chapter 6, pp. 6-9 and 6-10) regarding the depletion of groundwater resources. The commenter also notes the potential relationship between Impact 4.5-2 and wetland habitat.

The commenter states that Mitigation Measure 4.6-1a (Vol. 4, Chapter 6, p. 6-11) should be expanded to include an evaluation of indirect effects on aquatic and riparian habitat for the New Irvington Tunnel project (SV-4). During preparation of the project-level EIR, baseline surveys will be identified and carried out based on the defined footprint, the project description and construction methods, and more complete and current ecological information that would better identify indirect impacts. The "three step review process" cited by the commenter and recommended for inclusion is explicitly required by CEQA Guidelines Section 15370 and does not need to be restated in the text. To clarify, however, the Draft PEIR (Vol. 4, Chapter 6, p. 6-11, second full paragraph) is revised as follows:

Measure 4.6-1b: If the wetland delineation indicates that the WSIP project will affect jurisdictional wetlands or aquatic resources, then, in accordance with state and federal permit requirements, the SFPUC will avoid and minimize direct and indirect impacts such as erosion and sedimentation, alteration of hydrology, and degradation of water quality. As a first priority, the SFPUC will implement (1) avoidance measures. For unavoidable impacts, the SFPUC will implement (2) minimization of unavoidable impacts, (3) restoration procedures, and

(4) compensatory creation or enhancement to ensure no net loss of wetland extent or function.

S_RWQCBSF-07 The commenter correctly summarizes the analysis in Impact 4.5-3 (Vol. 2, Chapter 4, pp. 4.5-31 to 4.5-33) regarding construction dewatering discharges.

In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-31, last paragraph) is revised as follows:

For projects that are subject to the Construction General Permit (described in Impact 4.5-1, above), the discharges could possibly be made in accordance with this permit, provided it could be demonstrated that the water is uncontaminated. ... Discharge to a local sanitary sewer system would comply with the requirement of the local permitting agency. Other General Permits in the San Francisco Region under which dewatered groundwater may be discharged include the following General NPDES Permits:

- General NPDES Permit for VOC Cleanups (Order No. R2-2004-0055)
- General NPDES Permit for Fuel Cleanups (Order No. R2-2006-0075)
- General NPDES Permit for Groundwater Dewatering (Order No. R2-2006-0075)

Before discharging under any general permit, the SFPUC must submit a completed Notice of Intent that includes a dewatering plan with appropriate treatment and monitoring specifications. The SFPUC should also allow at least 60 days for the RWQCB review and acceptance of the Notice of Intent and dewatering plans.

S_RWQCBSF-08 The San Francisco Planning Department acknowledges the RWQCB's recommendation that the SFPUC evaluate the potential to plumb blowoff valves, crossover facilities, and other potable water discharge locations to treatment plants and sanitary sewers, where feasible, rather than draining to a surface water body. During project-level environmental review of the individual WSIP facility improvement projects, more detailed and site-specific analysis of this impact will be conducted to determine the applicability and feasibility of these measures on a project-by-project basis.

S_RWQCBSF-09 The commenter summarizes the analysis in Impact 4.5-6 (Vol. 2, Chapter 4, pp. 4.5-49 to 4.5-54) regarding the degradation of water quality due to altered drainage patterns or an increase in impervious surfaces. In response to the clarification indicated by the commenter, the Draft PEIR (Vol. 2, Chapter 4,

p. 4.5-50, first and second full paragraphs under “Other Projects”) is revised as follows:

With the exception of San Francisco and San Joaquin County, the municipal stormwater permits for the counties within the WSIP study area require new development and redevelopment projects that involve the creation or replacement of impervious surfaces to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows; the applicability of countywide MS4 stormwater management controls to the WSIP will be determined on a project-by-project basis as part of project-level review of individual WSIP projects. In each county, projects subject to these controls that involve the creation or replacement of one or more acres of impervious surfaces were required to comply with the new development and redevelopment requirements as of February 15, 2005. Projects subject to countywide MS4 stormwater management controls that involve the creation or replacement of 10,000 square feet or more of impervious surfaces were required to comply with the requirements by August 15, 2006. These thresholds apply to individual projects and are not applied to a cumulative set of projects if the locations of the cumulative set of projects under a single program are noncontiguous and/or are not part of a single common plan of development. To the extent that projects subject to countywide MS4 stormwater management controls are part of a single common plan of development that cumulatively exceeds 10,000 square feet of new or replaced impervious surface, the smaller amount of impervious surface from each sub-project would require appropriately sized stormwater treatment BMPs, such as the WSIP. ~~The applicability of the municipal stormwater permit requirements to specific projects would depend on the amount of impervious surface that would be created or replaced.~~

In addition, projects subject to countywide MS4 stormwater management controls that involve land disturbance of more than one acre would be required to include post-construction erosion and sediment control BMPs in the SWPPP prepared for the project (Described in the Setting and in Impact 4.5-1). For projects subject to countywide MS4 stormwater management controls, the post-construction erosion and sediment control BMPs for projects located in Alameda, Santa Clara, and San Mateo Counties and creating or replacing more than one acre of impervious surface must also comply with requirements in the Hydrograph Modification Management Plans for those counties. Post-construction BMPs could include minimizing land disturbance or the amount of impervious surfaces; treating stormwater runoff using infiltration, detention/retention, or biofilters; using efficient irrigation systems; ensuring that interior drains are not connected to a storm sewer system; and using appropriately designed and constructed energy dissipation devices. These measures would be designed to ensure that drainage patterns are not changed in a way that results in offsite erosion or flooding, and must be consistent with all

local post-construction stormwater management requirements, policies, and guidelines. Coverage under the General Construction Permit cannot be terminated until the site is in compliance with all local stormwater management requirements and a post-construction stormwater management plan is in place, as described in the SWPPP.

The commenter's concern that watershed management actions pertaining to onsite stormwater collection and drainage systems be continued for the life of the system/facility at all SFPUC facilities is acknowledged.

- S_RWQCBSF-10 Please refer to **Response S_RWQCBCV-05**.
- S_RWQCBSF-11 Refer to **Responses S_RWQCBCV-03, S_RWQCBCV-06, and S_RWQCBSF-07**.
- S_RWQCBSF-12 Refer to **Responses S_RWQCBCV-03 and S_RWQCBCV-07**.
- S_RWQCBSF-13 Refer to **Response S_RWQCBCV-08**.
- S_RWQCBSF-14 The comment requests that: (1) the Alameda Creek sediment transport setting discussion in the Draft PEIR include discussion of Leopold's "effective work concept," which concludes that a change in discharge or sediment load may initiate changes in channel morphology; (2) potential changes in both the timing of sediment input and water flows along Alameda Creek downstream of the diversion dam be assessed, since they have the potential to affect channel shape and sediment transport; and (3) continuous modeling over the period of record be used for the assessment in the PEIR.

The Draft PEIR includes an assessment of impacts on geomorphology in Alameda Creek (Vol. 3, Chapter 5, pp. 5.4.2-1 to 5.4.2-4), which includes projected changes in sediment transport and channel formation resulting from stream flow changes associated with WSIP implementation. The assessment is based on generalized channel bed/bedrock characteristics and historical operations and stream flow. Based on the qualitative analysis presented in the Draft PEIR and discussed further below, the geomorphic impacts would be less than significant, and therefore the requested additional detailed quantitative analysis is not necessary for CEQA purposes.

Current geomorphic surfaces within the creek downstream of the Alameda Creek Diversion Dam (ACDD) have been heavily influenced by the construction of the dam in 1932. Since that time, flow in Alameda Creek downstream of the diversion dam has been regulated by diversions through the Alameda Diversion Tunnel to Calaveras Reservoir. Operational records for the ACDD are not readily available, except for recent (post-2002) operations, as shown in Section 5.4.1 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.4.1-7 to

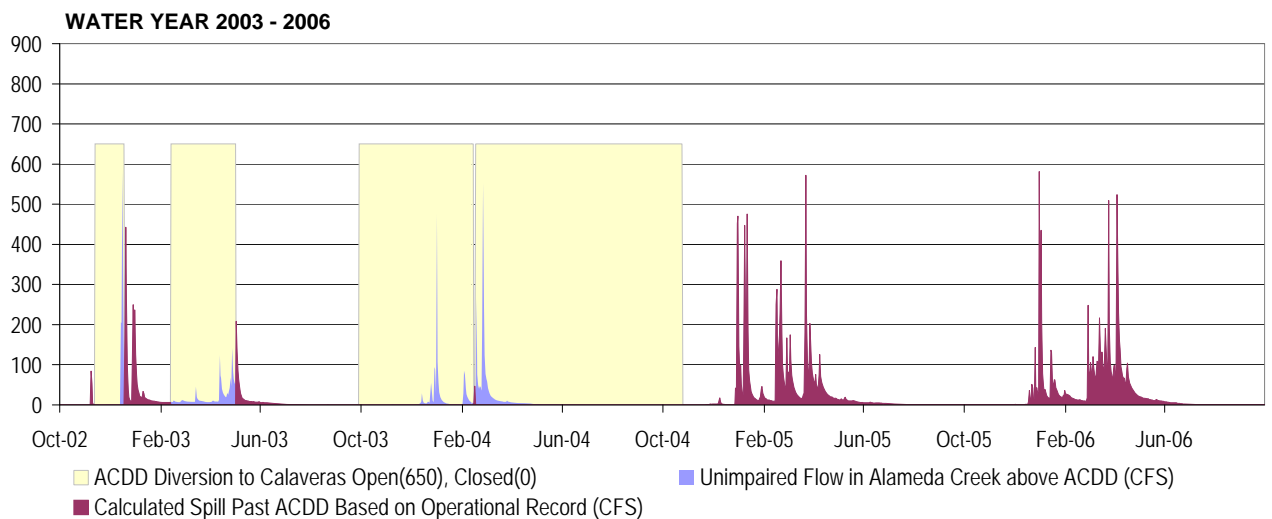
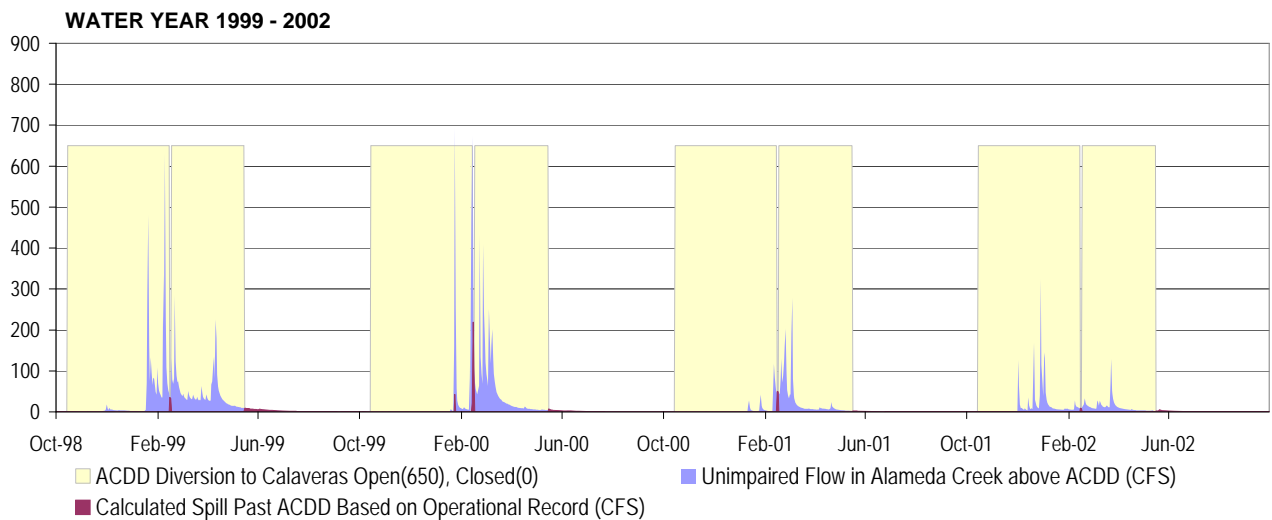
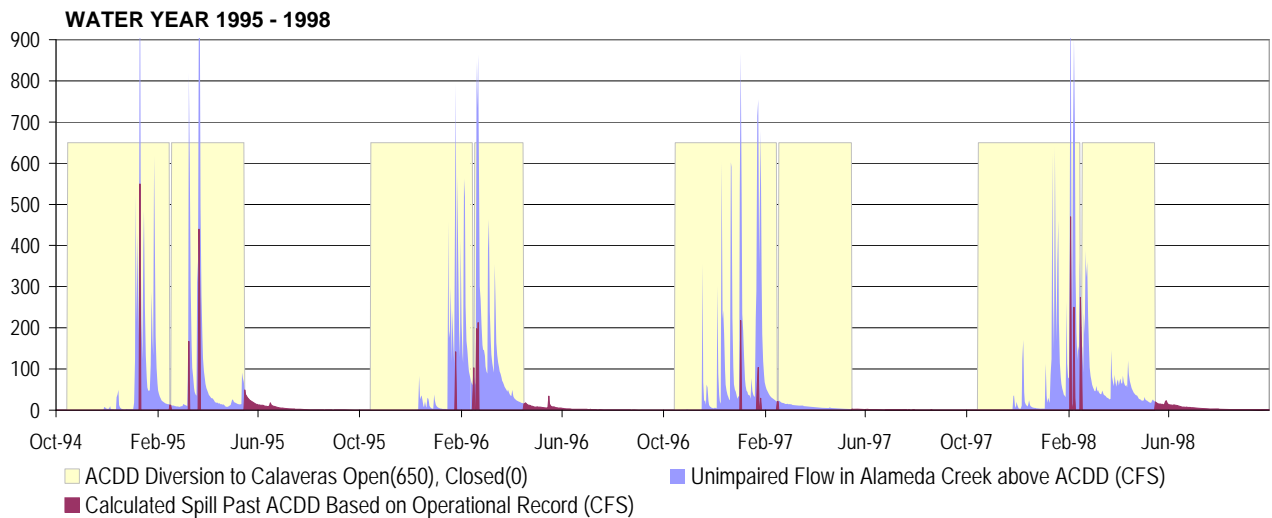
5.4.1-13). As noted in this section, prior to the Division of Safety of Dams (DSOD) restrictions on operation of Calaveras Reservoir (pre-2002), the SFPUC operational procedure was to divert flows of up to 650 cubic feet per second (cfs) from Alameda Creek above the diversion dam to Calaveras Reservoir for the majority of the wet season, and annually to sluice/flush sediment from behind the dam into the downstream reach of Alameda Creek. Since implementation of the DSOD-restricted operating condition in Calaveras Reservoir, diversions to Calaveras Reservoir have continued during drier years; however, the frequency of diversion as well as the quantities of water diverted have been substantially reduced due to the reduced capacity of the reservoir. Accordingly, more flow currently bypasses the dam and sediment loading/transport downstream of the dam has increased from pre-2002 operations.

Figure 15.2-1 shows changes in flow conditions at the ACDD over the period of available gage record, incorporating operational variations that have occurred pre- and post-DSOD restrictions. The blue area of the figure represents inflow from upper Alameda Creek to the diversion dam; the maroon area represents the calculated flow below the diversion dam; and the yellow area indicates when the diversion gates were open to allow flows to be diverted to Calaveras Reservoir.

The SFPUC began implementing the DSOD restriction in water year 2002, which means that it discontinued operating Calaveras Reservoir at its full historical capacity in the autumn of 2001. However, due to hydrological/meteorological conditions, diversions from Alameda Creek to Calaveras Reservoir continued in 2002, partially in 2003, and again in 2004. Diversions did not occur in 2005 or 2006, both above-normal hydrologic years when Calaveras fill limits were met entirely from reservoir watershed flows; diversions were initiated again in 2007, a dry year, and early in 2008 (not shown on the chart).

Since implementation of the DSOD restriction, the frequency and magnitude of diversions have become more variable, with reduced overall diversions to Calaveras Reservoir, particularly during wetter years; this has resulted in more flow in Alameda Creek downstream of the diversion dam as compared to the unrestricted pre-DSOD condition.

As noted by the commenter, these more frequent moderate flows occurring during the current operating condition have likely mobilized and transported sediment in Alameda Creek downstream of the diversion dam that would not have been mobilized by the lesser flows under the unrestricted pre-2002 condition. However, it should be noted that implementation of the DSOD restriction has not resulted in a cessation of all diversions; under the



SOURCE: SFPUC Water System Improvement Program

Notes:

- Assumes that under pre-DSOD restriction conditions, diversion gates were opened on 10/15 and closed on 4/15 each year
- Assumes a two day sluice in February of each year except in 2002

SFPUC Water System Improvement Program . 203287

Figure 15.2-1
Flow Conditions at Diversion Dam
under Various Operational Scenarios—
pre- vs. post-DSOD Restrictions

DSOD-restricted condition, winter flow conditions in Alameda Creek below the ACDD are similar to pre-DSOD operations in lower-flow years. Therefore, sediment supply and movement characteristics similar to those under historical (pre-2002) conditions continue to occur in lesser rainfall years.

As stated above, the creek channel, in its current form, is largely a result of ACDD operations since the dam was built in 1932. Operational records for the diversion dam are not available for that entire period. However, it may be assumed that SFPUC management practices and policies, water demands, hydrology, and maintenance activities have resulted in a range of operating conditions over that time period.

Implementation of the WSIP would result in changes in flow and sediment delivery below the ACDD. However, with respect to diversion dam operations, with the exception of the bypass flows included as protective measures under the Calaveras Dam Replacement project (SV-2) as described in Section 13.2 (Vol. 7, Chapter 13), the WSIP would represent a return to historical operations. Channel form and sediment characteristics found downstream in Alameda Creek are largely a result of the historical operation of the diversion dam, not of the current, temporarily restricted operating condition. Current operations of the diversion dam, while different from pre-2002 operations, are likely within the range of operations performed over the last 76 years. Similarly, the current range of flows and sediment delivery to Alameda Creek below the dam are likely within the historical range that has resulted in the creek channel in its present form. Therefore, a return to near-historical operations is not expected to significantly alter the geomorphology below the ACDD, since these conditions have formed over several decades under variable hydrologic and operating conditions that have not differed significantly from those currently occurring.

Thus, operational variability, the continued diversions above the ACDD (albeit at a reduced rate), and the fact that current geomorphology downstream of the diversion dam is a result of over 70 years of managed flows have all contributed to the widely varying patterns of sediment transport and geomorphic processes. The sediment supply and flow rates that would occur under the WSIP would likely be within the historical range. The proposed return to historical diversion patterns would change the timing of sediment load to Alameda Creek below the diversion dam compared to the existing condition. However, due to the sluicing/flushing procedure, the quantity and particle-size distribution of sediments would not be altered considerably.

It should be noted that in and below the Sunol Valley, sand/gravel extraction activities and the recent removal of the Niles and Sunol Dams have had, and would continue to have, a larger effect on sediment transport and stream geomorphology than any changes in flows and sediment transport from the upper Alameda Creek watershed. Mining activities in the Sunol Valley have altered both the groundwater table and creek form in the vicinity of the quarries. The drawn down groundwater table in the quarry reach currently reduces flow in Alameda Creek by increasing surface water loss to groundwater, reducing the capacity of the creek to transport sediment, particularly at lower to moderate flows. The channelization of the creek has likely increased the velocity of higher flows through the reach, altering the timing and character of sediment deposited and transported in the quarry reach. Farther downstream, within Niles Canyon, the Sunol and Niles Dams have recently been removed, exposing sediments deposited in the former backwaters of the dams. Studies performed for the removal of the dams estimated that the sediment stored in the former backwaters would migrate downstream over the course of several decades, redistributing throughout Niles Canyon and eventually farther downstream.

In addition to these factors, implementation of Mitigation Measures 5.4.1-2 and 5.4.5-3 (Vol. 4, Chapter 6, pp. 6-51 to 6-53) and bypass flows included as protective measures under the Calaveras Dam Replacement Project would act to dampen the change in flow regime from current intermittent diversion characteristics to the future condition with much more sustained diversion. Mitigation Measure 5.4.1-2 would require that the SFPUC not divert excess flow, that is, diversion would be limited only to the water necessary to fill Calaveras Reservoir. Once the reservoir is full, diversion gates would be closed and flow during the remainder of the season would continue over the dam, carrying suspended sediments with it. Once the diversion gates are closed, the full flow in Alameda Creek would continue past the diversion dam. The magnitude of these flows, if any, would depend on year-to-year hydrological and meteorological conditions.

In summary, channel shape and sediment characteristics in Alameda Creek below the diversion dam have been significantly influenced by the historical operation of the dam. The current operating condition of the diversion dam, which continues to divert flow to Calaveras Reservoir in a reduced capacity and to annually sluice/flush sediments, is expected to be within the range of operating conditions that have occurred since construction of the dam. While the current, restricted operating condition may provide a steadier supply of sediment and higher flow rates in Alameda Creek below the diversion dam than historical operating conditions, it is not expected to have significantly altered Alameda Creek geomorphology over the short timeframe and variable operating conditions that have occurred since the 2001 DSOD restriction was

implemented. Based on the above analysis, continuous modeling over the period of record is not necessary to identify this programmatic impact.

Please refer to **Response L_ACWD-13** (Vol. 7, Chapter 12, Section 12.3) for further discussion of geomorphology in Alameda Creek.

S_RWQCBSF-15 The commenter states that the Draft PEIR does not include an evaluation of potential water quality impacts associated with the sluicing of sediment from behind the ACDD. As explained below, such an analysis was not undertaken because the WSIP is expected to improve water quality below the ACDD compared with existing conditions.

The Draft PEIR (Vol. 3, Chapter 5, p. 5.4.2-2) states that the SFPUC uses the sluice gates to discharge approximately 900 cubic yards per year of accumulated sediment from behind the ACDD. This activity is largely sediment flushing to remove sand and gravel that has settled behind the diversion dam.

This SFPUC flushing operation is intended to remove accumulations of coarse sediment to protect the facility, maintain storage capacity (and thus diversion capacity) above the diversion dam, and support downstream geomorphic processes by passing the sediment. Sediment flushing of the diversion dam typically occurs in February, at which time the sluice gates are opened to flush coarse sediments from upstream of the dam. Operations normally occur over a 48-hour period during high-flow events (necessary to develop the velocity to mobilize coarse sediments behind the dam). Flushing operations occur whether or not any flows from the creek are being diverted to the diversion tunnel. The sluice gates remain closed except during the flushing procedure. In the infrequent event that creek flows exceed the tunnel capacity (650 cubic feet per second), excess creek waters flows over the top of the dam. As described in the Draft PEIR (Vol. 1, Chapter 2, p. 2-24), if water is not diverted via the diversion gates to the reservoir, the entire volume of the creek flows over the top of the dam. These SFPUC sediment flushing activities and sluice gate operations would continue, unchanged, under the WSIP.

It is likely that more sediment would be transported to Calaveras Reservoir with the WSIP than under current conditions because of the increased flows diverted to Calaveras Reservoir. Many of these sediments would settle out in the reservoir, reducing the overall quantity of sediments in the creek. Therefore, less sediment would be available for transport (either in flows over the dam or via sluicing/flushing operations) down both the upper and lower reaches of Alameda Creek. It is unclear whether this is the case in reality, because the sluice gates may have been left open for longer than 48 hours to

allow flows to pass at those times when diversions were not occurring during post-2002-conditions.

Operation of the proposed bypass structure at the ACDD as part of the Calaveras Dam Replacement project (SV-2) would maintain the transport of sediment during periods of low-flow to some extent and would transport finer-grained material. This would act to reduce the amount of the slug passed during sluicing/flushing.

Thus, it is likely that downstream sediment transport, deposition, and turbidity associated with sluicing/flushing operations would decrease with the WSIP compared to existing conditions. The following water quality information is provided for informational purposes.

No water quality data are available for Alameda Creek immediately below the diversion dam for use in analyzing the direct water quality impacts associated with sediment flushing behind the dam. However, water quality data collected by the Alameda County Water District (ACWD) and analyzed for total dissolved solids (TDS) were examined to identify the general characteristics of TDS farther downstream in Alameda Creek (see Draft PEIR, Table 5.4.3-4, Vol. 3, Chapter 5, p. 5.4.3-6). Samples were collected at approximately five-day intervals near Sunol in Alameda Creek, above Arroyo de la Laguna, from 1997 through 2005, on a total of 270 days.¹ This sampling location is about 10 miles downstream from the ACDD, and the water quality of Alameda Creek at this location is affected by numerous upstream inflows and land uses, including the diversion dam, Calaveras Dam, Welch Creek, Turner Dam, and gravel mining operations and quarries.

Review of the ACWD data at Sunol indicate that high levels of TDS occurred on numerous occasions during this period. The TDS levels were largely independent of season and flow. Because high TDS levels were recorded throughout the year and under a wide range of flow conditions, it is not evident if the elevated TDS levels are related to natural watershed processes (e.g., erosion) and/or land use activities in the watershed. There is no correlation between the TDS levels and the SFPUC's annual 48-hour sediment flushing operation at the ACDD that typically occurs in February. Therefore, it is assumed that implementation of the WSIP would not affect TDS levels, and the water quality impact would be less than significant.

Settleable material may include fine alluvial sediments. The settling of fine material onto spawning gravels can cause decreased survival and emergence of

¹ Note that there are several periods of data gaps. The ACWD has indicated that these data may not have been subject to the rigorous QA/QC procedures required for scientific studies, and therefore should not be used for purposes other than to indicate general conditions, unless otherwise specified by the ACWD (see **Response L_ACWD-14**).

salmonid eggs and alevin (newly hatched fish in larval stage not yet emerged from the nesting area). If the sluice gates are closed suddenly and not incrementally during sediment flushing operations, stream depth and flow velocity can change substantially over a short period of time. If this occurs during or after rainbow trout spawning, areas where fish have spawned may become dewatered or otherwise unsuitable for the development of embryos or fry through the settling of fines onto the spawning gravels. If releases are gradually reduced at a rate that does not exceed the typical flow reductions occurring under the natural hydrograph, these effects on spawning grounds would be substantially avoided. A more detailed analysis of this potential effect on fishery habitat below the ACDD will be conducted as part of the EIR for the Calaveras Dam Replacement project (SV-2). However, under the WSIP, increased diversions to Calaveras Reservoir would transport more settleable material to the reservoir than is currently carried with sediments transported to Alameda Creek. Therefore, the volume of materials to be sluiced/flushed from the ACDD under the WSIP is likely to be reduced compared with current conditions, which would result in a less-than-significant water quality impact with respect to settleable materials.

Suspended material would consist of the same material present in the channel, alluvial sediments, and waters of Alameda Creek. The 48-hour sediment flushing operation is assumed to have a less-than-significant water quality impact with respect to suspended material, because flushing operations occur during high-flow events when suspended material is typically elevated, and would therefore add minimally to the overall suspended sediment load and turbidity in the flows.

The ACWD turbidity data described above show that turbidity was below 50 NTU approximately 95 percent of the time. Turbidity exceeded 50 NTU on 14 days (see table below). Elevated turbidity was largely associated with elevated flow rates and occurred throughout the December through March period, and is an existing phenomenon within the watershed resulting from high wet-weather flows and erosion in the watershed. Furthermore, although the WSIP would increase the volume of sediment flushed and transported downstream, it would not create an additional sediment load in the Sunol Valley. These sediments would presumably have a similar fate once past the ACDD as under existing conditions, which is that the sediments would be transported downstream at a rate determined by the carrying capacity of the creek. The 48-hour sediment flushing operation is assumed to have a less than significant water quality impact with respect to turbidity because operations occur during high flow events when turbidity is typically well above 50 NTU.

**TURBIDITY IN ALAMEDA CREEK NEAR SUNOL,
ABOVE ARROYO DE LA LAGUNA (1997–2005)**

Date	Turbidity (NTU)	Flow (cfs)	Date	Turbidity (NTU)	Flow (cfs)
12/2/1997	100	18	1/18/2000	141	80
12/12/1997	100	301	1/25/2000	93.4	250
12/15/1997	182	83	2/15/2000	81.5	30
1/12/1998	1,000	600	2/29/2000	65.7	650
2/16/1998	117	1,500	3/6/2000	56.8	730
2/24/1998	171	2,300	3/5/2002	112	10
2/9/1999	1,000	1,000	2/26/2004	347	350

These ACWD TDS data may not have been subject to the rigorous QA/QC procedures required for scientific studies, and therefore should not be used for purposes other than to indicate general conditions, unless otherwise specified by the ACWD.

SOURCE: ACWD, 2006.

As noted above, compared to the existing condition, more sediment would be directed toward Calaveras Reservoir with the increased diversions, and therefore the sluicing/flushing procedures under the WSIP would decrease potential water quality impacts with respect to settleable material, suspended material, and turbidity. The implementation of bypass flows included as protective measures under the Calaveras Dam Replacement project (SV-2), as well as Mitigation Measure 5.4.5-3a, Minimum Flows for Resident Trout on Alameda Creek (Vol. 4, Chapter 6, pp. 6-52 and 6-53), would result in the transport of fine sediments past the ACDD during those periods when flow is present in upper Alameda Creek.

In response to this comment, new text is added to the Draft PEIR (Vol. 3, Chapter 5, Impact 5.4.3-3, p. 5.4.3-11, following the third paragraph under “Reach 1”) as follows:

Settleable Materials, Suspended Materials, and Turbidity.

Sections 5.4.1.1 and 5.4.2.1 describe the SFPUC flushing activities intended to remove accumulations of coarse sediment to protect the facility, maintain storage capacity (and thus diversion capacity) above the Alameda Creek Diversion Dam, and support downstream geomorphic processes by passing sediment. The flushing procedure involves opening the sluice gates to flush coarse sediments from upstream of the diversion dam. Sediment flushing discharges approximately 900 cubic yards of sediment from behind the diversion dam each year, and typically occurs in February. This sediment typically consists of sands and gravels. Operations normally occur over a 48-hour period during high-flow events to develop the necessary velocity to mobilize the coarse sediments behind the dam. Flushing operations occur whether or not flows from the creek are being diverted to the diversion tunnel. The sluice gates remain closed year-round, except during the sluicing procedure. If water is not diverted via the diversion gates to the reservoir, the entire volume of the creek flows through the sluice gates in

the dam or over the top of the dam. It is assumed that these SFPUC sediment flushing activities and sluice gate operations would continue under the WSIP.

Three water quality parameters—settleable materials, suspended materials, and turbidity—could be affected by changes in the Alameda Creek Diversion Dam operations and sediment flushing procedures. It is likely that more sediment would be transported to Calaveras Reservoir with the WSIP than under current conditions because of increased flows diverted to Calaveras Reservoir. Many of these sediments would settle out in the reservoir, reducing the overall quantity of sediments in the creek. Therefore, less sediment would be available for transport (either in flows over the dam or via sluicing/flushing operations) down Alameda Creek compared to the existing condition. Therefore, the sluicing/flushing procedures under the WSIP would have less-than-significant water quality impacts with respect to settleable materials, suspended materials, and turbidity.

- S_RWQCBSF-16 Please refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for additional discussion of climate change to augment the discussion in Section 5.7.6 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-92 to 5.7-96). Section 14.11 provides more detailed and up-to-date information on climate change as it relates to the SFPUC regional water supply and the proposed WSIP.

15.3 Local and Regional Agencies

LOCAL AND REGIONAL AGENCIES

LOCAL AND REGIONAL AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT PEIR

Comment Letter Format	Comment Letter ID	Name of Commenter	Title	Organization/ Affiliation	Page
Mail	L_ACCDA	Bruce Jensen	Senior Planner	Alameda County Community Development Agency	15.3-1
Email	L_ACFCWCD	Kwablah Attiogbe	Environmental Services	Alameda County Flood Control and Water Conservation District	15.3-3
Mail	L_ACWD	Paul Piraino	General Manager	Alameda County Water District	15.3-8
Email	L_BAWSCA1	Arthur Jensen	General Manager	Bay Area Water Supply and Conservation Agency	15.3-23
Hand-delivered, PH	L_BAWSCA2	Arthur Jensen	General Manager	Bay Area Water Supply and Conservation Agency	15.3-47
PH Sonora	L_BAWSCA3	Nicole Sandkulla	Senior Water Resources Engineer	Bay Area Water Supply and Conservation Agency	15.3-48
PH Modesto	L_BAWSCA4	Nicole Sandkulla	Senior Water Resources Engineer	Bay Area Water Supply and Conservation Agency	15.3-49
PH SF1	L_BAWSCA5	Steven Miller	Lawyer	Bay Area Water Supply and Conservation Agency	15.3-50
PH SF2	L_BAWSCA6	Arthur Jensen	General Manager	Bay Area Water Supply and Conservation Agency	15.3-51
Mail	L_BCDC	Sara Polgar	Planner	San Francisco Bay Conservation and Development Commission	15.3-52
Mail	L_Brisbane	Randy Breault	Director of Public Works	City of Brisbane	15.3-60
Mail	L_Burlgme	Syed Murtuza	Director of Public Works	City of Burlingame Public Works Department	15.3-61

LOCAL AND REGIONAL AGENCIES THAT SUBMITTED COMMENTS ON THE DRAFT PEIR (Continued)

Comment Letter Format	Comment Letter ID	Name of Commenter	Title	Organization/ Affiliation	Page
Mail	L_CalWater	Thomas Salzano	Water Resources Planning Supervisor	California Water Service Company	15.3-62
Mail	L_CCWD	Leah Orloff	Senior Water Resources Specialist	Contra Costa Water District	15.3-63
Email	L_CoastsideCWD	Joe Guistino / Cathleen Brennan	Interim General Manager / Water Resources Analyst	Coastside County Water District	15.3-64
Mail	L_DalyCty	Patricia Martel	City Manager	City of Daly City	15.3-74
Mail	L_DSRSD	Bert Michalczyk	General Manager	Dublin San Ramon Services District	15.3-86
Mail	L_EBMUD	William Kirkpatrick	Manager of Water Distribution Planning	East Bay Municipal Utility District	15.3-87
Mail	L_EBRPD	Chris Barton	Senior Planner	East Bay Regional Park District	15.3-88
Mail	L_FosterCty	Ramon Towne	Director of Public Works	City of Foster City	15.3-104
Email	L_Fremont	Rene Dalton		City of Fremont, Transportation and Operations Department	15.3-106
Mail	L_Hayward	Robert Bauman	Director of Public Works	City of Hayward Department of Public Works	15.3-108
Mail	L_Hillsb	Cyrus Kianpour	City Engineer	Town of Hillsborough	15.3-109
Mail	L_LAHCDF	Dorothy Price	President	Los Altos Hills County Fire District	15.3-111
Mail	L_LosAltosH	Craig Jones	Mayor	Town of Los Altos Hills	15.3-112
Email	L_Menlo1	Kent Steffens	Director of Public Works	City of Menlo Park	15.3-113
PH Fremont	L_Menlo2	Kirsten Keith	Employee	Menlo Park Planning Commission	15.3-117
PH Palo Alto	L_Menlo3	Kelly Fergusson	Mayor	City of Menlo Park	15.3-118
PH Modesto	L_MID	Walt Ward	President of the Board of Directors	Modesto Irrigation District	15.3-119
Email	L_MID-TID1	Walter Ward / Robert Nees	Assistant General Manager / Assistant General Manager	Modesto Irrigation District / Turlock Irrigation District	15.3-120

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Mail	L_MID-TID2	Walter Ward / Robert Nees	Assistant General Manager / Assistant General Manager	Modesto Irrigation District / Turlock Irrigation District	15.3-130
Mail	L_Millbr	Ronald Popp	Director of Public Works	City of Millbrae	15.3-131
Mail	L_Milpts	Thomas Williams	City Manager	City of Milpitas	15.3-132
Mail	L_MtnVw	Cathy Lazarus	Public Works Director	City of Mountain View	15.3-142
Email	L_Newark	John Becker	City Manager	City of Newark	15.3-143
Mail	L_PaloAlto	Yoriko Kishimoto	Mayor	City of Palo Alto	15.3-144
Mail	L_PHWD1	Daniel Seidel	President	Purissima Hills Water District	15.3-149
PH Palo Alto	L_PHWD2	Daniel Seidel	President	Purissima Hills Water District	15.3-152
Mail	L_RdwdCty	Peter Ingram (sent by Chu Chang)	Community Development Services Director	Redwood City	15.3-153
Mail	L_SanJose	Mansour Nasser	Deputy Director, Water Resources Division	City of San Jose	15.3-162
Email	L_SBruno	Barbara A. Brenner	Stoel Rives, Attorney at Law	City of San Bruno	15.3-166
Email	L_SClara1	Gloria Sciara	Development Review Officer	City of Santa Clara Planning Division	15.3-174
Mail	L_SClara2	Robin Saunders	Director of Water and Sewer Utility	City of Santa Clara Water and Sewer Utilities	15.3-175
Mail	L_SCVWD1	Keith Whitman	Deputy Operation Officer	Santa Clara Valley Water District, Water Supply Management Division	15.3-176
PH Palo Alto	L_SCVWD2	Amy Fowler	Staff Member	Santa Clara Valley Water District	15.3-177
Mail	L_SFBayTrl	Laura Thompson	Project Manager	San Francisco Bay Trail	15.3-178
PH SF1	L_SFCPC1	Christina Olague	Commissioner	San Francisco City Planning Commission	15.3-181
PH SF1	L_SFCPC2	Michael Antonini	Commissioner	San Francisco City Planning Commission	15.3-183

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PH SF1	L_SFCPC3	Kathrin Moore	Commissioner	San Francisco City Planning Commission	15.3-184
PH SF2	L_SFCPC4	Kathrin Moore	Commissioner	San Francisco City Planning Commission	15.3-185
PH SF2	L_SFCPC5	Michael Antonini	Commissioner	San Francisco City Planning Commission	15.3-186
Email	L_SFLandmarks	Robert Cherny	Vice President	Landmarks Preservation Advisory Board	15.3-188
Mail	L_SJVAPCD	Arnaud Marjollet	Permit Services Manager	San Joaquin Valley Air Pollution Control District	15.3-195
Mail	L_SLDWWKC	Daniel Nelson, Thomas W. Birmingham, and James Beck	Executive Director, General Manager, and General Manager	San Luis & Delta-Mendota Water Authority, Westlands Water District, and Kern County Water Agency	15.3-196
Email	L_Snnyvl	Jamie McLeod / James Craig	Associate Planner / Superintendent of Field Services	City of Sunnyvale	15.3-199
Mail	L_StanCoERC	Raul Mendez	Senior Management Consultant	Stanislaus County Environmental Review Committee	15.3-201
Email	L_Stanford	Clifford (Mike) Goff	Director of Utilities	Stanford University	15.3-202
Email	L_TCCC	George Segarini	President & CEO	Tuolumne County Chamber of Commerce	15.3-204
Email	L_TUD1	Peter J. Kampa	General Manager	Tuolumne Utilities District	15.3-205
Mail	L_TUD2	Barbara Balen	Board President	Tuolumne Utilities District	15.3-214
PH Sonora	L_TUD3	Peter J. Kampa	General Manager	Tuolumne Utilities District	15.3-215
Mail	L_Tuol1	Mark Thornton	Chairman, Tuolumne County Board of Supervisors	Tuolumne County	15.3-216
Email	L_Tuol2	Mark Thornton	District 4 Supervisor, Tuolumne County	Tuolumne County	15.3-225
Mail	L_Zone7	G.F. Duerig	General Manager	Alameda County Flood Control and Water Conservation District, Zone 7	15.3-229

Alameda County Community Development Agency, Bruce Jensen, Senior Planner, 10/15/07

- L_ACCDA-01 This comment identifies some of the topical areas where potential impacts could result from implementation of WSIP facility improvement projects; it acknowledges that mitigation is identified in the Draft PEIR to reduce the levels of impact significance, and that, in some cases, the Draft PEIR makes a conservative determination that these effects would be potentially significant and unavoidable. During subsequent project-level environmental review of the individual projects, it may be determined that these effects can be avoided or mitigated to a less-than-significant level; however, if during the project-level environmental review the impacts are determined to be significant and unavoidable, it will be necessary to adopt a Statement of Overriding Considerations.
- L_ACCDA-02 Regarding Alameda County requiring the SFPUC to apply for a Finding of General Plan Conformance under California Government Code Section 65402, the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9) acknowledges that the SFPUC will notify local agencies of proposed plans and meet consistency determination requirements pursuant to Section 65402(b). It should be noted that these consistency determinations are advisory to the SFPUC rather than binding. As stated in the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9), approval of the WSIP would not trigger this requirement, but the requirement would be triggered by implementation of the individual WSIP projects. Therefore, these determinations would be made by the pertinent jurisdictions following preparation of project-specific CEQA documentation and notification by the SFPUC pursuant to state law (Vol. 2, Chapter 4, p. 4.2-16).
- The commenter's topics of concern (land use, biology, visual resources, growth inducement, etc.) will be addressed as part of project-level CEQA review. The program-level impacts in Alameda County related to these topics are discussed in the Draft PEIR under the Sunol Valley and Bay Division Regions (Vol. 2, Chapter 4, pp. 4.3-7 to 4.4-50; pp. 4.6-37 to 4.6-74; pp. 4.16-8 and 4.16-16; and Vol. 4, Chapter 7, p. 7-1).
- The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9) acknowledges that individual projects could, in select cases, require encroachment permits from local agencies. The need for local conditional use permits will be determined during project-level CEQA review.
- L_ACCDA-03 Appendix B (Vol. 5, p. B-15) lists the significance criteria used in the Draft PEIR to determine the significance of impacts on mineral resources. They include whether the project would: (a) result in the loss of availability of a

known mineral resource that would be of value to the region and the residents of the state; or (b) result in the loss of availability of a locally important mineral resource recovery site delineated in a local general plan, specific plan, or other land use plan. The Draft PEIR (Vol. 5, Appendix B, p. B-16) concludes that, at a program level, none of the WSIP projects would result in the loss of mineral resources or make them inaccessible. Furthermore, the construction of pipelines and other public engineering projects is excluded from Surface Mining and Reclamation Act regulation. Therefore, impacts related to the loss of mineral resources would not be applicable to the WSIP projects. However, the effects of each WSIP project on current mining patterns and access to mineral resources will be considered during project-level CEQA review, as acknowledged by the commenter. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for detailed information regarding the intent of the programmatic impact analysis.

Alameda County Flood Control and Water Conservation District, Kwablah Attiogbe, Environmental Services, 10/1/07

- L_ACFCWCD-01 In response to this comment regarding conversion factors for degrees Celsius and Fahrenheit, the following is added to the list of conversion factors provided at the back of the glossary in the Draft PEIR (Vol. 1, Glossary, p. xxxviii):

Temperature

Degrees Celsius ($^{\circ}\text{C}$) = $5/9 \times (^{\circ}\text{F} - 32)$

Degrees Fahrenheit ($^{\circ}\text{F}$) = $9/5 \times (^{\circ}\text{C}) + 32$

- L_ACFCWCD-02 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.2).
- L_ACFCWCD-03 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.2).
- L_ACFCWCD-04 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3).
- L_ACFCWCD-05 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.6). In addition, refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for additional discussion of climate change to augment the discussion presented in Section 5.7.6 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-92 to 5.7-96). Section 14.11 provides more detailed and up-to-date information on climate change as it relates to the SFPUC regional water supply and the proposed WSIP.
- L_ACFCWCD-06 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.4). The general location of the Alameda Creek Fishery Enhancement project (SV-1) is described in Draft PEIR Table 3.10 (Vol. 1, Chapter 3, p. 3-50); however, because the precise location has not yet been identified, this project location is not shown in Figure 3.5a (Vol. 1, Chapter 3, p. 3-57).
- L_ACFCWCD-07 While implementation of the WSIP would result in increased diversions from Alameda Creek compared to the existing condition, the proposed level of diversions would be similar to the historical level of diversions that occurred for about 70 years prior to the 2001 Division of Safety of Dams restriction on Calaveras Dam. As described in the Draft PEIR (Vol. 1, Chapter 2, p. 2-10),

the SFPUC considers the current reduced storage level in Calaveras Dam and associated reduced diversion level as an impaired operating mode that puts the regional system at risk of being unable to adequately meet existing customer water demands in the event of an emergency or a prolonged drought. The restoration of storage capacity in Calaveras Reservoir and associated increased diversions from Alameda Creek are needed to meet existing customer water demand during drought or other emergency conditions and to provide both delivery and seismic reliability; it is also needed to maximize the use of local water supplies. This component of the WSIP is not driven by the need to meet the projected increase in purchase requests.

This comment incorrectly implies that 2000 Association of Bay Area Governments (ABAG) data (probably referring to *Projections 2000*) were used to develop the demand projections. ABAG's *Projections 2002* was used as the source of many of the population projections and most of the employment projections used in the demand model. The use of *Projections 2002* was appropriate as it was the current projections series at the time. The Draft PEIR (Vol. 4, Chapter 7, sidebar on p. 7-22, and pp. 7-22 through 7-26, and Vol. 5, Appendix E.3) reviews changes in the ABAG projections series since *Projections 2002* was issued and compares the later projections to the assumptions used in projecting 2030 water demand. Also refer to **Responses SI_PacInst-76** and **SI_PacInst-77**.

L_ACFCWCD-08 This comment incorrectly implies that water use and water efficiency were not reviewed and analyzed. The SFPUC, in conjunction with its wholesale customers, conducted extensive studies as part of the WSIP planning effort, including technical studies on conservation and recycled water use potential and water demand studies that included a detailed evaluation of existing water use in order to establish base-year conditions. These studies are described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3.16 to 3-22, and Vol. 5, Appendix E.2); in addition, **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) presents an expanded discussion of existing and planned conservation.

As described above in **Response L_ACFCWCD-07**, the need for additional water diversions from Alameda Creek and the associated restoration of storage in Calaveras Reservoir is driven primarily by the need to meet existing customer demand during drought or other emergency conditions and to increase both delivery and seismic reliability. Nevertheless, the Draft PEIR (Vol. 4, Chapter 9) provides a detailed evaluation of aggressive conservation and water recycling as part of the alternatives analysis. However, all alternatives analyzed in the Draft PEIR, including the

aggressive conservation and recycling alternatives, rely on the restoration of Calaveras Reservoir to its historical capacity and associated increased diversions from Alameda Creek.

- L_ACFCWCD-09 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.4).
- L_ACFCWCD-10 The Draft PEIR (Vol. 2, Chapter 4, p. 4.5-25) acknowledges that pipeline projects may be subject to encroachment permits from the local flood control district or other appropriate local agency. The ACFCWCD's request that pipeline crossings conform to specific design requirements is acknowledged. In addition, the need for any encroachment permits is noted in **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) and added to Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration during the project-level CEQA review for individual WSIP projects. As described in Section 14.4.3, identification of specific local agency requirements is not needed to determine a level of impact significance for this programmatic analysis; this issue will be addressed in the project-level environmental documentation for each WSIP project as appropriate.
- L_ACFCWCD-11 Implementation of the WSIP would include releases from Calaveras Dam and/or bypasses at the Alameda Creek Diversion Dam in order to comply with the 1997 California Department of Fish and Game Memorandum of Understanding. The releases would be designed and implemented to provide a beneficial impact on downstream fisheries. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for discussion of notification and coordination with the ACFCWCD.
- L_ACFCWCD-12 The commenter requests that the significance determinations in the Initial Study checklist for the following topic areas be changed from "Less than Significant" to "Potentially Significant": Transportation and Circulation (5a), Biological Resources (12a, 12b, 12c, 12d), and Hydrology and Water Quality (14b, 14c). However, the Initial Study checklist (Draft PEIR, Vol. 5, Appendix B) classifies all but one of these items as "Less than Significant with Mitigation Incorporated," while 14c is classified as "Less than Significant." Item 14c is classified as "Less than Significant" because it assumes implementation of SFPUC Construction Measure #3 (Onsite air and water quality measures) as well as compliance with applicable stormwater control regulations; this impact is discussed in the Draft PEIR as Impact 4.5-1 (Vol. 2, Chapter 4, pp. 4.5-21 to 4.5-28. The significance determinations for the other items in this checklist identified by the commenter were classified assuming the mitigation measures will be applied

and therefore already acknowledge that the impact is potentially significant. The mitigation measures will be incorporated into the Mitigation Monitoring and Reporting Program, which the SFPUC will be required to adopt as part of the CEQA findings from the certified Final PEIR; thus, in effect, the final decision-makers will not have the option of rejecting the measures as infeasible, as is the case with mitigation measures identified in the PEIR text. The “Less than Significant with Mitigation Incorporated” determination indicates that the impact is potentially significant but would be reduced to a less-than-significant level when mitigation measures contained in the Draft PEIR are implemented. The checklist’s “Less than Significant” determination can indicate that the impact is potentially significant but would be less than significant with implementation of SFPUC Standard Construction Measures and applicable regulations. These determinations correspond to the Draft PEIR’s “Potentially Significant, Mitigatable” (PSM) and “Less than Significant” (LS) significance determinations. These determinations are defined in Sections 4.1 and 5.1 of the Draft PEIR (Vol. 2, p. 4.1-5, and Vol. 3, p. 5.1-18).

- L_ACFCWCD-13 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Sections 14.9.2 and 14.9.4).

In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.1-4, third full paragraph, last sentence) is revised as follows:

A flow control structure known as the BART weir (owned by the ACFCWCD and located where the BART and railroad tracks cross Alameda Creek in Fremont) provides ~~grade-control~~ structural protection of the footings of the BART and railroad bridge crossing and is a barrier to fish passage along this reach.

- L_ACFCWCD-14 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3, under the heading Impacts on Stream Flow and Fisheries Downstream of the BART Weir, and Section 14.9.5, under the heading Warmwater Fish Species and their Habitats in Alameda Creek).

- L_ACFCWCD-15 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.2, under the headings Biological Distinctions and Regulatory Status for Steelhead and Rainbow Trout, Anadromous Steelhead in Lower Alameda Creek, and Consideration of Fish Passage at the Niles Gaging Station; and Section 14.9.4).

- L_ACFCWCD-16 Prior to the certification hearing on the PEIR, the San Francisco Planning Department will distribute the Comments and Responses document for review to the public and affected agencies, including the commenter and all other

individuals and organizations that submitted comment letters on the Draft PEIR. In accordance with CEQA Guidelines Section 15088.5(b), recirculation is not required “where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications” to the EIR. The additional information provided in this Comments and Responses documents falls in that category, and recirculation of the PEIR is not warranted.

Alameda County Water District, Paul Piraino, General Manager, 9/26/07

- L_ACWD-01 This comment corroborates information presented in the Draft PEIR—that the ACWD’s 2030 estimated purchase request from the SFPUC of 13.76 million gallons per day (mgd), as shown in Draft PEIR Table 3.3 (Vol. 1, Chapter 3, p. 3-18) and others, is the same as its existing contractual entitlement, or supply assurance, of 13.76 mgd (Vol. 5, Appendix E.1, Table E.1.1). As shown in Table 3.4 (Vol. 1, Chapter 3, p. 3-19) and Table 7.3 (Vol. 4, Chapter 7, p. 7-18), the ACWD’s 2030 purchase estimate represents an increase of approximately 15 percent over its purchases in the 2001 base year of 11.99 mgd. A review of the current Bay Area Water Supply and Conservation Agency’s Annual Survey (BAWSCA, 2007; p. 76) indicates that the ACWD purchased between 511,590,900 and 607,476,100 cubic feet per year (equal to 10.48 to 12.45 mgd) for BAWSCA fiscal years 2002/2003 through 2005/2006.
- L_ACWD-02 This comment, which expresses the ACWD’s support for a high-quality water supply and a reliable storage and conveyance system for the San Francisco Bay Area at a reasonable cost, is acknowledged.
- L_ACWD-03 The commenter’s support of BAWSCA’s proposal regarding the Modified WSIP Alternative, which involves exploring the feasibility of increased agricultural water conservation in the lower Tuolumne River watershed, is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14, Section 14.10.3) for further discussion.
- L_ACWD-04 This comment provides background information related to the Alameda Creek watershed that is generally consistent with the description provided in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.4.1-1 to 5.4.1-4). The Draft PEIR focuses on impacts in the southern Alameda Creek watershed, which is the portion of the overall watershed that would be affected by the proposed program. This comment summarizes the more detailed comments presented in Comments L_ACWD-05 through L_ACWD-25; refer to **Responses L_ACWD-05 through L_ACWD-25** for the specific responses, which address downstream impacts on the ACWD’s water supplies and potential impacts on steelhead.
- L_ACWD-05 The commenter requests clarification on whether the Alameda Creek Fishery Enhancement project (SV-1) would recapture more water than is being released upstream, resulting in downstream flow impacts (ACWD Comment No. 1). Under the WSIP, the SFPUC would release flows upstream from the confluence of Alameda and Calaveras Creeks (i.e., releases from Calaveras Dam and/or bypasses at the Alameda Creek Diversion Dam) in accordance with the 1997 California Department of Fish and Game (CDFG) Memorandum of

Understanding (MOU), and the Alameda Creek Fishery Enhancement project would recapture those flows at a downstream location, also in accordance with the 1997 CDFG MOU. The Alameda Creek Fishery project includes structural and nonstructural alternatives to recapture only those flows released to meet the requirements of the MOU. It could include a water recapture facility downstream of the Sunol Valley Water Treatment Plant (WTP), or could involve SFPUC coordination with other water agencies to develop and implement other means of recapturing MOU flows. The hydrological modeling used in the impact analysis of proposed water supply and system operations in the Draft PEIR assumed only recapture of flow from the creek consistent with the 1997 CDFG MOU.

Therefore, all downstream flow impact analyses in the Draft PEIR considered implementation of the recapture component of the Alameda Creek Fishery Enhancement project (SV-1). As described in Section 13.2 (Vol. 7, Chapter 13), the SFPUC has incorporated project revisions and protective measures for steelhead into the project descriptions of the Alameda Creek Fishery Enhancement (SV-1) and Calaveras Dam Replacement (SV-2) projects which would modify implementation of the 1997 CDFG MOU. Please also refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.1) for a description of protective measures that the SFPUC has incorporated into the Alameda Creek Fishery project.

As noted by the commenter (ACWD Comment No. 2), the BDPL Nos. 3 and 4 Crossovers (BD-2) and Seismic Upgrade of BDPL Nos. 3 and 4 at Hayward Fault (BD-3) projects and part of the Bay Division Pipeline Reliability Upgrade project (BD-1) are located on lands that overlie the Niles Cone Groundwater Basin. The commenter requests an impact analysis for this basin. The Draft PEIR (Vol. 2, Chapter 4, p. 4.5-30) concluded that potential impacts on groundwater resources in this groundwater basin associated with construction of these projects would be less than significant because the projects would not include long-term dewatering (which could deplete groundwater supplies) or interfere substantially with groundwater recharge. In addition, to avoid cross-contamination of aquifers, groundwater dewatering would not be conducted at the Newark Tunnel Shaft to be constructed under the BDPL Reliability Upgrade project (BD-1). Furthermore, temporary dewatering during construction would not be expected to substantially deplete shallow groundwater resources, and impacts related to the depletion of shallow groundwater due to construction dewatering are considered less than significant for all WSIP projects (Vol. 2, Chapter 4, p. 4.5-28).

The commenter is concerned that construction-related discharges to creeks and waterways in the Alameda Creek watershed could affect downstream ACWD water intakes and requests analysis of impacts on these intakes (ACWD Comment No. 3). Impact 4.5-1 in the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-26) identifies potential construction-related water quality impacts due to erosion, sedimentation, or hazardous materials releases, and indicates that projects in the

Sunol Valley would be subject to the National Pollutant Discharge Elimination System (NPDES) permitting requirements of the Regional Water Quality Control Board (RWQCB) and SFPUC Construction Measure #3 (Onsite Air and Water Quality Measures During Construction) (Vol. 2, Chapter 4, p. 4.5-32). The stormwater pollution prevention plan (SWPPP) required under the NPDES permit would specify erosion control measures as well as requirements for providing secondary containment and berming of the diesel or other chemical storage areas to prevent any potential release from reaching an adjacent waterway or stormwater collection system (Vol. 2, Chapter 4, p. 4.5-23). For WSIP facility projects in the Sunol Valley Region, these plans would take into account potential effects on downstream water intakes at ACWD facilities in the flood control channel. Additionally, the ACWD has requested to be notified in the event of a spill or release to any waterway in the Alameda Creek system that could affect water quality. This request is acknowledged. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of SFPUC coordination with other agencies as part of project-level CEQA review.

The commenter is concerned that dewatering and construction-related discharges could adversely affect downstream water users in the Alameda Creek watershed if control measures fail, and requests more evaluation as well as development of a notification plan as mitigation (ACWD Comment No. 4). Impact 4.5-3 in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.5-31 to 4.5-35) addresses potential degradation of water quality due to construction dewatering discharges and states that contractor(s) would be required to obtain necessary permits from the local flood control district or any appropriate local agencies for construction-related dewatering discharges and treated-water discharges.

All of the above potential impacts will be addressed in the project-level CEQA documentation for each WSIP project in the Sunol Valley Region. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for additional discussion of the issues raised by this comment. This master response provides a more detailed discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

- L_ACWD-06 The commenter is concerned that flooding and associated sediment and contaminant releases could affect downstream water users (ACWD Comment No. 5), and requests an evaluation of impacts on the ACWD's diversion and groundwater recharge facilities. Draft PEIR Impact 4.5-4 (Vol. 2, Chapter 4, pp. 4.5-37 and 4.5-38) identifies potentially significant flooding impacts for the Alameda Creek Fishery Enhancement (SV-1), New Irvington Tunnel (SV-4), and San Antonio Backup Pipeline (SV-6) projects because, based on the preliminary project description information available during preparation of the Draft PEIR,

these projects could potentially contribute sediments or contaminants to flood flows. Subsequent project-level CEQA review of these three projects will reevaluate the significance of this impact. At a program level of analysis, the Draft PEIR determined that potential impacts due to these projects (if any) on the ACWD's diversion and recharge facilities would be mitigated through implementation of Measure 4.5-4a (flood protection measures incorporated into SWPPPs) and Measure 4.5-4b (site-specific flooding analysis). During project-level CEQA review, these programmatic mitigation measures would be reevaluated to determine if they are still applicable and if so, then either confirmed, refined or replaced with an equivalent measure.

As stated above, operation of the WSIP facility improvement projects is not expected to exacerbate flooding or generate contaminants that would affect the ACWD's diversion or recharge facilities. A more detailed analysis of potential impacts on these facilities will be provided in the project-level CEQA review for each project. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for additional discussion of the issues raised by this comment. This master response provides more information on the appropriate level of detail of an impact analysis at the program level versus the project level. Also refer to Section 14.4.3 of the master response for discussion of notification and coordination with the ACWD.

- L_ACWD-07 The commenter requests discussion of the possible impacts of discharges on Alameda Creek flow conditions and the ACWD's downstream inflatable dam and diversion operations due to operation of the WSIP facility improvement projects. Draft PEIR Impact 4.5-5 (Vol. 2, Chapter 4, pp. 4.5-45 and 4.5-46) addresses potential discharges to surface water during operation of WSIP projects in the Sunol Valley Region and potential water quality degradation effects. This impact states that the Additional 40-mgd Treated Water Supply (SV-3) and SVWTP – Treated Water Reservoirs (SV-5) projects would require only occasional maintenance-related discharges of treated water, and these discharges would be regulated by the RWQCB under the Regionwide General NPDES Permit for Discharges from Surface Water Treatment Facilities for Potable Supply. Under the San Antonio Backup Pipeline project (SV-6), discharges to San Antonio Creek and Alameda Creek would be dechlorinated, dissipated, and discharged in accordance with NPDES permit requirements and the requirements of other regulatory agencies. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for discussion of notification and coordination with the ACWD.

The Draft PEIR (Vol. 3, Chapter 5, Section 5.4.1) describes potential impacts on Alameda Creek stream flow due to WSIP water supply and system operations; the PEIR analysis of downstream flow conditions and the ACWD's inflatable dam and diversion operations is augmented in **Section 14.9, Master Response**

on Alameda Creek Fishery Issues (Vol. 7, Chapter 14, Section 14.9.3), which includes a discussion of impacts related to flow changes downstream of Niles Canyon. Please also refer to **Response L_ACWD-12**, below, for a discussion of the effects of the WSIP water supply and system operations on downstream flows in Alameda Creek.

L_ACWD-08 The commenter states that the SFPUC should coordinate with the ACWD earlier (during the planning and design phases of facility projects) rather than during the construction phase, as specified in Draft PEIR Mitigation Measure 4.11-1h (Vol. 2, Chapter 6, p. 6-44). Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of coordination with the ACWD. In response to this comment, the ACWD's request for early coordination has been noted in Table C.6 as revised (Vol. 7, Chapter 16) for consideration in the project-level EIR for several facility improvement projects, including the Bay Division Pipeline Reliability Upgrade (BD-1) and Calaveras Dam Replacement (SV-2) projects. Issues such as early coordination with the ACWD, presence of an onsite ACWD inspector, and need for ACWD approval will be considered during the implementation phase for applicable WSIP facility improvement projects as appropriate. This level of detail is not required for a Program EIR or program-level mitigation measures.

L_ACWD-09 The commenter states that the description of the watershed boundary in the Draft PEIR is incomplete and that the PEIR should be revised to include the downstream section of the watershed to San Francisco Bay, including the underlying Niles Cone Groundwater Basin. Figure 5.4.1-1 in the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.1-2) depicts the Alameda Creek watershed boundary based on the delineation performed by CalWater, an Interagency Watershed Mapping Committee, working through the California Resources Agency and California Environmental Protection Agency. By definition, the boundaries of the drainage area as a hydrologic area are defined by hydrographic and topographic criteria that delineate an area of land upstream from a specific point on a river, stream, or similar surface waters. Figure 5.4.1-1 shows the correct Alameda Creek watershed boundary, which, according to this system of delineation, extends downstream only as far as Niles Canyon. In the lower 12 miles of the creek, there is no defined watershed other than a very large urban watershed that covers most of the developed cities along that portion of San Francisco Bay.

It should be noted, however, that the Draft PEIR describes the watershed as extending to the bay (Vol. 3, Chapter 5, pp. 5.4.1-1 to 5.4.1-4). In addition, the Draft PEIR addresses the Niles Cone Groundwater Basin in Section 5.4.4 (Vol. 3, Chapter 5, p. 5.4.4-1). The Draft PEIR provides detailed descriptions of existing conditions and impacts on resources potentially affected by the WSIP, including resources in the downstream section of the watershed as appropriate. Consistent with CEQA guidelines, impacts are addressed at a level of detail commensurate

with the effects that could be attributable to the WSIP. Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3) for further discussion of downstream effects on the Alameda Creek watershed.

L_ACWD-10 This comment, which supports the use of baseline conditions under the operating restrictions for Calaveras Reservoir imposed by the Division of Safety of Dams (DSOD), is acknowledged.

L_ACWD-11 As noted by the commenter, the Draft PEIR uses data from a monthly time-step model—the Hetch Hetchy/Local Simulation Model—to estimate changes in stream flow and reservoir storage levels attributable to the WSIP. While these monthly data may have limitations with respect to identifying day-to-day effects, they were used in the Draft PEIR to provide an overview of the anticipated range of impacts, which were then categorized by hydrologic year types. However, as stated in the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.1-18), patterns from actual flow data were used to supplement the model results in order to provide additional detail and context for assessing potential impacts. Daily data from U.S. Geological Survey gages along Alameda Creek were used to provide a better understanding of stream flow characteristics, as shown in Tables 5.4.1-4 and 5.4.1-5 (pp. 5.4.1-12 and 5.4.1-13) and Figures 5.4.1-9 through 5.4.1-12 (pp. 5.4.1-28 to 5.4.1-31), and these data were used together with the monthly model results to determine impacts on water resources within the Alameda Creek watershed.

For additional information on this issue, please refer to **Section 14.5, Master Response on Water Resources Modeling** (Vol. 7, Chapter 14, Section 14.5.3).

L_ACWD-12 This comment questions the adequacy of the Draft PEIR's analysis of downstream impacts on Alameda Creek flows. This response focuses on impacts related to the WSIP water supply and system operations; please refer to **Response L_ACWD-07** for a discussion of impacts related to WSIP facility improvement projects.

In response to this comment, supplemental analysis of WSIP stream flow effects in lower Alameda Creek was conducted to augment the stream flow analysis presented in the Draft PEIR (Vol. 3, Chapter 5, Section 5.4.1). This supplemental analysis is included in **Appendix N** of this Comments and Responses document (Vol. 8) and summarized in **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3). The commenter correctly summarizes information in the Draft PEIR regarding WSIP-induced flow reductions of approximately 50 percent during normal years and approximately 30 percent during above-normal and wet years (Vol. 3, Chapter 5, Table 5.4.1-11, p. 5.4.1-42); however, it should be noted that these estimates refer to Alameda

Creek below the San Antonio Creek confluence and not to lower Alameda Creek. The supplemental analysis presented in Appendix N provides quantitative estimates of the WSIP's effects in lower Alameda Creek, specifically at the Niles gage; unlike the analysis in the Draft PEIR, this analysis accounts for tributaries downstream of San Antonio Creek as well as other effects contributing to flow conditions at the Niles gage.

Similar to the analysis conducted for the Draft PEIR, the supplemental effort analyzed monthly mean data, which were adequate to determine the general magnitude and timing of potential effects; monthly data were also adequate to determine those instances when no change (no impact) would occur. Model applicability and the use of monthly time-step data for this analysis are further discussed in the **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3).

As quantified in the supplemental flow analysis provided in Appendix N, implementation of the WSIP is estimated to result in flow changes in lower Alameda Creek in wet months (December to May) of normal to wet year types, and these flow changes would range from a -18 percent decrease to a +13 percent increase in flow. Flow in lower Alameda Creek would remain unchanged in the remainder of months (June to November) in normal to wet year types and in all months of below-normal (except for a slight decrease in February) and dry year types. This analysis corroborates the conclusion in Draft PEIR Impact 5.4.1-4 (Vol. 3, Chapter 5, pp. 5.4.1-39 to 5.4.1-43) that flow impacts in lower Alameda Creek would be less than significant because downstream tributaries (such as Arroyo de la Laguna) would substantially dampen the impacts resulting from WSIP-related flow changes in the upper Alameda Creek watershed.

The supplemental analysis indicated that lower Alameda Creek would experience lower average monthly flows in most winter months (December to March) of normal to wet years, ranging from a 2 to 18 percent reduction, with implementation of the WSIP. These months are generally the highest flow months of the year at Niles Canyon. The analysis also indicated that the WSIP would increase flow in lower Alameda Creek during April and May of normal to wet years, ranging from 2 to 13 percent. April and May are generally not the highest flow months of the year, and this increase in flow is therefore not expected to exceed the capacity of existing flood control infrastructure. As a result, the WSIP would generally be beneficial to flood control objectives in lower Alameda Creek.

The ACWD relies on water from the Alameda Creek watershed for approximately 15 percent of its water supply (ACWD, 2008). Flow in the creek is augmented with water from the State Water Project discharged to Vallecitos Creek, which flows into Arroyo de la Laguna near its confluence with Alameda

Creek, and the ACWD then recovers the water in lower Alameda Creek. The ACWD captures water from the creek behind three large, inflatable rubber dams that divert water to recharge ponds, where the water percolates to recharge the underlying Niles Cone Groundwater Basin, and subsequently pumps groundwater from the Niles Cone basin and to provide water supply to its customers.

As noted above, flow rates in lower Alameda Creek under the WSIP are estimated to decrease in most winter months of normal to wet years compared to current flows with Calaveras Reservoir operating under DSOD-restricted conditions. Flow rates would, however, increase in comparison to those under pre-DSOD-restricted conditions. This comparison to the pre-2002 operation of Calaveras Reservoir is relevant because the ACWD management and use of the Niles Cone Groundwater Basin predates the DSOD-restricted operating condition. Therefore, although implementation of the WSIP would alter flows in lower Alameda Creek in winter months of normal to wet years, the projected flows would be greater than the historical conditions in existence when the ACWD recharge facilities were constructed in 1972 to 1989.

The ACWD has operated facilities and made use of groundwater in the Niles Cone Groundwater Basin under historical lower-flow conditions (pre-2002) and under the recent higher-flow condition (post-2002). Flows in lower Alameda Creek under the WSIP would be bracketed within this range of flows. Therefore, the WSIP would have a less-than-significant impact on water supply operations in lower Alameda Creek.

Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of coordination with the ACWD.

- L_ACWD-13 The commenter states that the Draft PEIR should evaluate the significance of potential geomorphology impacts relative to the existing condition. The Draft PEIR determined that the long-term historical condition of the Alameda Creek watershed was relevant to the analysis of geomorphology impacts because the current form of Calaveras, Alameda, and San Antonio Creeks has developed over many years. The geomorphology and sediment transport systems have been substantially altered by dams, weirs, channelization, aggregate mining, induced erosion, vegetation changes, land development, and structures in the channels. These influences have controlled the geomorphologic systems for more than 100 years. The result has been a long period of regulated stream flow, trapping of sediment behind the dams, and changes in channel erosion and aggradation below the dams. In sum, the existing stream geomorphology is the product of substantial, long-term, direct and indirect manipulation of the fluvial system.

The commenter states that the Draft PEIR should include an evaluation of downstream impacts on geomorphology and sediment transport in Niles Canyon. An average of approximately 270,000 tons (160,000 cubic yards) of sediment is transported by Alameda Creek annually (Weiss Associates, 2004a). At the Sunol Dam site, these sediments are about one-quarter to one-third sand and two-thirds to three-quarters gravel. These sediments are transported by high winter flows in the creek; for example, the estimated 3.5-year stream flow of Alameda Creek at the Sunol Dam site (approximately 7,000 cubic feet per second [cfs]) transports a volume of sediment equal to about 25 percent of the average annual sediment load in the creek (Weiss Associates, 2004a). Sediment transport curves developed by Weiss Associates for Alameda Creek near Niles indicate minimal sediment transport with flows of less than 20 cfs; thus, little sediment transport occurs during summer periods. During historical dam operations, summer flows in Alameda Creek were cut off and no sediment transport occurred. Sediment transport increases from 10 to 1,000 tons per day when stream flows increase from 100 to 1,000 cfs. At a flow of 2,000 cfs, estimated sediment loads approach 10,000 tons per day, which include both suspended sediment and bedload transport. At Niles Canyon, there is virtually no bedload transport with stream flows under 1,000 cfs, and 2,500 to 6,000 tons per day with flows of 10,000 cfs (Weiss Associates, 2004a).

In response to this comment, the Draft PEIR Impact 5.4.2-2 (Vol. 3, Chapter 5, p. 5.4.2-3, last paragraph) is revised as follows:

Impact 5.4.2-2: Effects on channel formation and sediment transport along Alameda Creek downstream of the diversion dam and downstream of the San Antonio Creek confluence.

In addition, the following text is added to the description of Impact 5.4.2-2 (Vol. 3, Chapter 5, p. 5.4.2-4, after the first partial paragraph):

Implementation of the WSIP would reduce flow in Alameda Creek downstream of the San Antonio Creek confluence in winter months of normal to wet years, ranging from a -18 percent decrease to a +13 percent increase in flow at the USGS Niles gage station. In the majority of winter months (December to March), flows at this location would decrease, but in April and May the flows would exhibit small to moderate increases. Although implementation of the WSIP would result in additional flow in Alameda Creek in summer months as part of the 1997 CDFG MOU releases, these additional flows would not mobilize significant amounts of sediment and could be recaptured at a location downstream of the Sunol Valley WTP. This net decrease in flow in Alameda Creek below the San Antonio Creek confluence when compared to the existing condition would likely result in a slight decrease in the amount of sediment transported in Niles Canyon and lower Alameda Creek and would therefore decrease sediment and debris loading on lower Alameda Creek facilities.

As noted in Impacts 5.4.2-1 and 5.4.2-3, flows and the resulting impacts on geomorphology upstream of the San Antonio Creek confluence are expected to be within the range of conditions that have been experienced since development of water supply and flood control facilities in the upper and lower Alameda Creek watershed. Therefore, implementation of the WSIP would not significantly alter bed or channel form or introduce substantial new sources of sediment.

As a result of this net decrease in sediment transport in Niles Canyon and the less-than-significant impacts in upper Alameda Creek, the impact related to geomorphologic characteristics and sediment transport along Alameda Creek downstream of the San Antonio Creek confluence would be less than significant. It should also be noted that the Arroyo de la Laguna watershed is the major contributor to sediment supply in Niles Canyon and lower Alameda Creek.

- L_ACWD-14 The commenter cites three concerns regarding the Alameda Creek water quality information presented in Section 5.4.3.1 of the Draft PEIR (Vol. 3, Chapter 5): (1) the reference to field temperature data is incorrect; (2) water quality data may not have been subject to quality assurance/quality control (QA/QC) procedures; and (3) the location of monitoring stations is unclear.

In response to these comments, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.3-4, second full paragraph) is revised to avoid confusion about the monitoring location:

Water quality in Alameda Creek is generally good and is protective of beneficial uses. In terms of aquatic life, the key water quality parameter is temperature, which is directly related to hydrologic flow conditions. **Table 5.4.3-3** summarizes weekly water temperature data collected by the ACWD near Sunol, above Arroyo de la Laguna, from 1997 through 2005. ~~The ACWD continuously samples, analyzes, and monitors the quality of water in Alameda Creek at a special monitoring facility located at the mouth of Niles Canyon near Mission Boulevard and at other key locations throughout the watershed (ACWD, 2007).~~ Average monthly water temperatures show an expected seasonal trend (i.e., cooler during the winter and warmer during the summer).

The footnote in Table 5.4.3-3 (Vol. 3, Chapter 5, p. 5.4.3-5) is revised as follows to identify the source of the field temperature data:

SOURCES: ACWD (raw data provided by Laura Hidas); Merritt Smith Consulting (data reduction). Note that ACWD temperature data may not have been subject to the rigorous QA/QC procedures required for scientific studies, and therefore should be used only to indicate general conditions (unless otherwise specified by the ACWD).

The footnote in Table 5.4.3-4 (Vol. 3, Chapter 5, p. 5.4.3-6) is revised as follows to identify the source of the field temperature data:

SOURCES: ACWD (raw data provided Laura Hidas); Merritt Smith Consulting (data reduction). Note that ACWD TDS data may not have been subject to the rigorous QA/QC procedures required for scientific studies, and therefore should be used only to indicate general conditions (unless otherwise specified by the ACWD).

- L_ACWD-15 The commenter correctly quotes the Draft PEIR, which states: "...most of the summer and fall flows in Alameda Creek below its confluence with Arroyo de la Laguna originate from the South Bay Aqueduct" (Vol. 3, Chapter 5, p. 5.4.3-5). Flows in Alameda Creek below the confluence with Arroyo de la Laguna tend to be warm, because coldwater sources are largely unavailable in these reaches and base flows are low during this time of year, allowing waters to warm towards their natural temperature in equilibrium with meteorological conditions. Further, Arroyo de la Laguna appears to be a source of elevated total dissolved solids (TDS) and chloride, as noted in RWQCB (2008):

Arroyo de la Laguna has an average TDS concentration of 630 mg/L, and an average chloride concentration of 117 mg/L. Above the confluence, Alameda Creek has a much lower average TDS concentration of 280 mg/L and an average chloride concentration of 28 mg/L. Below the confluence, both TDS and chloride in Alameda Creek increase significantly. The average TDS concentration is 437 mg/L and the average chloride concentration is 71 mg/L. (RWQCB, 2008, p. 13/17 Fact Sheet Appendix F-1)

These findings indicate that Arroyo de la Laguna is a considerable source of TDS (and chloride) in Alameda Creek.

In response to this comment, the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.3-5, end of first full paragraph) is revised as follows:

In addition, most of the summer and fall flows in Alameda Creek below its confluence with Arroyo de la Laguna originate from the South Bay Aqueduct. This South Bay Aqueduct water may be warmer and is higher in total dissolved solids (TDS) than the flows in Alameda Creek originating from the Sunol Valley watershed. Summer and fall flows in Alameda Creek and its tributaries are at their seasonal low. Thus, flows in Alameda Creek below its confluence with Arroyo de la Laguna tend to be warmer during these periods, because coldwater sources are largely unavailable in these reaches and base flows are low during this time of year, allowing waters to warm towards their natural temperature in equilibrium with meteorological conditions. In addition, flows in Arroyo de la Laguna appears to be higher in total dissolved solids (TDS) than the flows in Alameda Creek originating from the watershed upstream of Arroyo de la Laguna (RWQCB, 2008).

The following reference is added to the end of Section 5.4.3 (Vol. 3, Chapter 5, p. 5.4.3-12):

Regional Water Quality Control Board - San Francisco Bay (RWQCB). 2008. Final Order No. R2-2008-0011, NPDES Permit No. CAG982001 General Permit for Discharges from Aggregate Mining, Sand Washing, and Sand Offloading Facilities to Surface Waters. February 15. http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2008/february/r2-2008-0011final.pdf

L_ACWD-16 Please refer to **Response S_RWQCBSF-15**.

L_ACWD-17 The commenter expresses concern that the potential effects on the Niles Cone Groundwater Basin due to reductions in flow in Alameda Creek are not adequately addressed, since the Niles Cone relies on flows in Alameda Creek to replenish the groundwater basin. Please refer to **Response L_ACWD-12**, above, **Appendix N** (Vol. 8), and **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3) for discussions of the WSIP's impacts on flow in lower Alameda Creek.

In response to this comment, the discussion of Draft PEIR Impact 5.4.4-1 (Vol. 3, Chapter 5, p. 5.4.4-6) is revised as follows:

Impact 5.4.4-1: Changes in groundwater levels, flows, quality, and supplies.

Compared to current conditions, increased diversions and storage under the WSIP would reduce peak flows in Alameda Creek between the diversion dam and the confluence with San Antonio Creek. Seasonally, the WSIP would reduce flows in the high-flow months and increase flows in the low-flow months due to fishery releases. It would also increase storage in Calaveras Reservoir. The overall effect of these changes in groundwater supplies downstream in the Sunol aquifer areas is expected to be minor (either slightly positive or slightly negative), depending on the year's rainfall and seasonal conditions. The WSIP would reduce potential infiltration in the Sunol groundwater basin by reducing peak flows in wet years. ~~However, impacts on groundwater in the Niles Cone would be dampened by inflow from non-SFPUC watershed streams and aquifers, removal of the Sunol and Niles Dams, and ongoing withdrawals at the infiltration galleries above the water temple; as a result, impacts are expected to be minimal.~~ Impacts on groundwater in the Niles Cone would be less than significant because flows in Alameda Creek downstream of Niles Canyon would be maintained within the range of flows experienced since the Niles Cone began to be managed and utilized as a water supply resource. The program's minor changes in groundwater levels would not affect groundwater quality. This impact would be *less than significant*, and no mitigation measures would be required.

- L_ACWD-18 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.4) for a discussion of the future cumulative scenario for steelhead.
- L_ACWD-19 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Sections 14.9.3, 14.9.4, and 14.9.5) for discussion of fishery issues in lower Alameda Creek.
- L_ACWD-20 The referenced Draft PEIR figure (Figure 5.7-3 in Vol. 3, Chapter 5, p. 5.7-55) has been revised and is included in **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.4) as well as in Chapter 16, Staff-Initiated Text Changes.
- L_ACWD-21 As acknowledged in the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-25), construction activities that could cause erosion, sedimentation, or hazardous materials releases would be subject to permits from the local flood control district or other appropriate local agency, the NPDES permitting requirements of the RWQCB, as well as SFPUC Construction Measure #3 (Onsite Air and Water Quality Measures During Construction). The SWPPP required under the NPDES permit would specify erosion control measures as well as requirements for providing secondary containment and berming of the diesel or other chemical storage areas to prevent any potential release from reaching an adjacent waterway or stormwater collection system.
- The need for encroachment permits is discussed in **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) and noted in Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration during all project-level CEQA reviews. As summarized in Section 14.4, identification of specific local agency requirements is not needed to determine the level of impact significance for this programmatic analysis, but will be addressed in the project-level environmental documentation for each WSIP project. The project-level CEQA review of all Sunol Valley projects will take into account the potential effects on downstream water intakes at the ACWD's facilities in the flood control channel.
- L_ACWD-22 Please refer to **Response L_ACWD-12** regarding effects on ACWD operations and facilities. Refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of notification and coordination with the ACWD.
- L_ACWD-23 The commenter states that the proposed flow releases under Draft PEIR Mitigation Measure 5.4.5-3a are contingent on future studies, and that the Draft PEIR should commit to a minimum level of flow releases to support fisheries. Consistent with CEQA Guidelines Section 15126.4(a) (1) (B), this mitigation measure, assuming it is adopted as part of the Mitigation Monitoring and

Reporting Program, would commit the SFPUC to minimum stream flow releases, and specifies performance standards to mitigate the significant effects of the WSIP (i.e., the flows must meet the minimum flow requirements to support resident trout spawning and egg incubation based on monitoring results and best available scientific information). Subsequent to publication of the Draft PEIR, the SFPUC modified the project description of the Calaveras Dam Replacement project (SV-2), as described in Sections 13.2 and 14.9.1 of this Comments and Responses document (Vol. 7, Chapters 13 and 14, respectively). These modifications address fishery resources in Alameda Creek and minimum flow requirements. Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for further discussion.

L_ACWD-24 Regarding the first point in this comment, Draft PEIR Table 7.2 (Vol. 4, Chapter 7, p. 7-15) shows the percentage of the ACWD's total 2030 demand met by SFPUC purchases; Table 7.3 (p. 7-18) shows the percentage of the ACWD's base-year 2001 demand met by SFPUC purchases; and the customer-specific summary for the ACWD (pp. 7-35 and 7-36) also indicates the percentage of its total water demand that would be met by SFPUC purchases in 2030. The purpose of Table 7.10 (the subject of this part of the comment) is to show how the total projected change in water demand for each customer, as developed by the Demand Side Management Least-Cost Planning Decision Support System model, compares with the projected change in overall employment and population for each customer's service area, irrespective of the source(s) of water supply used by customers to meet their total demand. The column referenced in this comment shows the percentage of total demand (not the percentage of total SFPUC purchases), and provides the reader with a sense of each customer's overall size for context in reviewing the demographic and demand comparisons presented in the table. Given that every table cannot show all attributes of each water customer's water supply, and that information on the percentage of the ACWD's demand met by SFPUC purchases is presented elsewhere in the chapter, no change is needed to Table 7.10.

Regarding the second point in this comment, each customer's current supply assurance is indicated in the customer-specific summaries presented in the Draft PEIR (Vol. 4, Chapter 7, pp. 7-35 to 7-58) and shown in Table E.1.1 (Vol. 5, Appendix E.1, p. E.1-2). As discussed in **Response L_ACWD-01**, the ACWD's recent purchases indicated by the current BAWSCA Annual Survey (for BAWSCA fiscal year 2002/2003 through 2005/2006), and its purchases in the 2001 base year used in the water demand study were somewhat lower than ACWD's contractual supply assurance. The statement in this comment—that in fiscal year 2006/2007 (for which published data are not available) the ACWD purchased its full contractual quantity—is acknowledged. Existing actual use, rather than a contractual maximum, is the appropriate baseline for evaluating the actual change in demand for 2030, and is what the Draft PEIR uses.

The third point in this comment correctly notes that the horizon years of the adopted general plans in the service area do not extend to 2030, the planning horizon for the WSIP. As discussed in Chapter 7, it is the purview of land use agencies and the elected representatives of a jurisdiction to make decisions about land use and the appropriate levels of growth in the jurisdiction. The level of growth approved in *currently adopted* general plans or plan elements, as represented by the population and employment projections in those plans, is shown in Tables 7.8 and 7.9 (Vol. 4, Chapter 7, pp. 7-28 and 7-30). The Draft PEIR acknowledges (p. 7-7) that water agencies' planning horizons are, of necessity, sometimes longer than those of land use planning agencies and the jurisdictions served by the water agencies.¹ Because some of the adopted general plans have a shorter planning horizon than the WSIP, whereas those of ABAG go to 2030, ABAG projections are also included as another point of comparison. Using 2030 instead of 2020 (as suggested in the comment) is preferred because it is the WSIP horizon year.

L_ACWD-25 Refer to **Response L_ACWD-08** regarding early coordination with the ACWD and **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of notification and coordination with the ACWD.

¹ Urban water management plans require a minimum 20-year planning horizon (Water Code, Section 10631, subdivision [a]).

Bay Area Water Supply and Conservation Agency, Arthur Jensen, General Manager, 10/1/07

- L_BAWSCA1-01 This comment summarizes more detailed comments presented in Comments L-BAWSCA1-02 through L-BAWSCA1-53; refer to **Responses L-BAWSCA1-02 through L-BAWSCA1-53**.
- L_BAWSCA1-02 This comment regarding the fundamental need for the WSIP due to the regional system's vulnerability to seismic hazards is acknowledged. The Draft PEIR (Vol. 2, Chapter 4, pp. 4.4-4 to 4.4-13) describes the regional faulting and seismic hazards along the SFPUC regional water system and includes a map of major faults in the vicinity of the system (Figure 4.4-1, Vol. 2, Chapter 4, pp. 4.4-7 to 4.4-8). Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for more discussion.
- L_BAWSCA1-03 This information provided by the commenter regarding seismic hazards is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.3 and 14.1.4) for pertinent discussion.
- L_BAWSCA1-04 The information provided by the commenter regarding potential impacts of earthquakes on BAWSCA customers is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for pertinent discussion.
- L_BAWSCA1-05 The information provided by the commenter, which pertains to the potential economic consequences associated with SFPUC facility failures due to an extended loss of water, is acknowledged. This comment, which does not address the adequacy or accuracy of the PEIR, was submitted by multiple commenters; refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.6) for additional information.
- L_BAWSCA1-06 This information regarding Assembly Bill 1823, the Wholesale Regional Water System Security and Reliability Act, is acknowledged, and corroborates information presented in the Draft PEIR (Vol. 1, Chapter 2, pp. 2-34 and 2-35).
- L_BAWSCA1-07 This information regarding the passage of Measures A and E in the San Francisco November 2002 local election is acknowledged, and corroborates information presented in the Draft PEIR (Vol. 1, Chapter 3, p. 3-10).

- L_BAWSCA1-08 This comment expresses an opinion on the PEIR alternatives that is based on more detailed comments; refer to **Responses L_BAWSCA-09** through **L_BAWSCA-39**.
- L_BAWSCA1-09 The Draft PEIR analyzes the No Program Alternative (Vol. 4, Chapter 9, pp. 9-23 to 9-40) as required by CEQA Guidelines Section 15126.6(e). As described in the Draft PEIR, Section 9.3.1, Comparison of Alternatives (Vol. 4, Chapter 9, pp. 9-84 to 9-95), the No Program Alternative would leave the SFPUC and its customers at significant risk of supply reduction or disruption during an earthquake or other emergency or during a drought, and the Draft PEIR concluded that this is not a feasible or acceptable alternative. The Draft PEIR also demonstrates that the No Program Alternative would not be the environmentally superior alternative, since it could ultimately result in greater environmental effects than the proposed program.
- L_BAWSCA1-10 This comment expresses agreement with the Draft PEIR discussion of the feasibility issues associated with the No Program Alternative. Comment acknowledged.
- L_BAWSCA1-11 This comment describing potential disaster scenarios in the Bay Area is acknowledged. This comment neither relates to any section in the Draft PEIR nor addresses the adequacy or accuracy of the PEIR. However, because this comment was submitted by multiple commenters, a discussion is provided in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.4).
- L_BAWSCA1-12 This comment regarding the consequences of adoption of the No Program Alternative is acknowledged. The Draft PEIR states that the No Program Alternative is not a feasible or acceptable alternative (Vol. 4, Chapter 9, p. 9-85).
- L_BAWSCA1-13 This comment implies that the No Purchase Request Increase Alternative does not meet its stated purpose. The purpose of including the No Purchase Request Increase Alternative in the PEIR alternatives analysis was “to evaluate the consequences of the SFPUC not meeting the future increase requested by its customers in an effort to avoid or minimize the potential growth-inducing effects and secondary effects of growth” (Draft PEIR Vol. 4, Chapter 9, p. 9-41). The Draft PEIR states that this alternative “would have less growth-inducement potential than the WSIP” because the SFPUC would provide less water to the wholesale customers (p. 9-46). The Draft PEIR also acknowledges the possibility that the alternative’s growth-inducement potential could be similar to that of the proposed program (as cited in this comment) because growth can occur without a corresponding increase in water supply, and states that if growth were to decrease in the

Bay Area it would likely increase elsewhere. The PEIR analysis achieved the goal of evaluating the consequences of the SFPUC not meeting the requested increase and, with respect to future growth, acknowledges uncertainties. It was appropriate to include this alternative in the range of alternatives evaluated in the PEIR in order to provide agencies and others with this information and thus to foster informed decision-making and public participation. Moreover, this alternative would meet most of the program objectives (see Table 9.6, beginning on p. 9-14) and would reduce numerous impacts associated with fisheries, terrestrial biology, and stream flow in the Tuolumne River watershed (refer to Table 9.7, beginning on p. 9-17).

- L_BAWSCA1-14 This comment correctly summarizes information presented on the No Purchase Request Increase Alternative. The Draft PEIR summarizes the adverse impacts associated with developing alternative sources of water supply in Table 9.10 (Vol. 4, Chapter 9, p. 9-35); the level of detail with which these impacts are described is consistent with CEQA requirements (CEQA Guidelines Section 15126.6[d]). As indicated in the Draft PEIR (Vol. 4, Chapter 9, p. 9-26), an assessment of the specific projects that each wholesale customer would pursue, and the likelihood that they could successfully implement the projects, would be speculative.
- L_BAWSCA1-15 Regarding characterization of the impacts of “displaced” growth (whereby growth potential reduced in the Bay Area under the No Purchase Request Increase Alternative would cause increased growth pressure elsewhere), the Draft PEIR (Vol. 4, Chapter 9, p. 9-47) states that “growth in these outlying areas would have similar types of environmental impacts [as growth in communities served by the regional system] but of potentially greater magnitude and consequences due to the effects of new development or ‘sprawl’ versus the infill that would occur in the existing Bay Area communities served by the SFPUC’s regional system.”
- L_BAWSCA1-16 This comment, which cites studies that indicate the advantages of “smart growth,” is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_BAWSCA1-17 This comment regarding the advantages of smart growth is acknowledged, but as it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_BAWSCA1-18 This comment, which expresses the commenter’s opinion that planned growth in San Francisco’s neighboring communities is consistent with smart growth principles, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.

L_BAWSCA1-19 This comment on the No Purchase Request Increase Alternative asserts that, “If growth does not occur in the SFPUC service area, it is likely to occur instead on the eastern and southern fringes of the Bay Area, as well as in the communities on the western borders of the San Joaquin Valley,” and requests that the PEIR present additional information on the impacts caused by displaced growth and compare the impacts of such growth to the impacts of “the growth the WSIP will accommodate in San Francisco and its immediately adjacent neighboring communities.”

Information from the Draft PEIR on growth patterns identified under the No Purchase Request Increase Alternative, and the environmental impacts of growth under this alternative, is provided in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-46 and 9-47) and is summarized below.

Growth Patterns Under the No Purchase Request Increase Alternative

The Draft PEIR states that this alternative “would have less growth-inducement potential than the WSIP” because the SFPUC would provide less water to the wholesale customers (p. 9-46). The Draft PEIR also acknowledges the possibility that the alternative’s growth-inducement potential could be similar to that of the proposed program because growth can occur without a corresponding increase in water supply and “it is not expected that [implementation of this alternative] would deter communities from taking actions to support planned growth” (p. 9-47). Some of that growth could occur elsewhere in the form of displaced growth (defined in **Response L_BAWSCA1-15**). The Draft PEIR (p. 9-47) identifies the following areas where such displaced growth could manifest: eastern Contra Costa County, Solano and Sonoma Counties, and parts of the Central Valley.

Indirect Effects of Growth for the No Purchase Request Increase Alternative

To the extent that growth under this alternative still occurred in the wholesale customers’ service areas, the impacts would be as described in the Draft PEIR (Vol. 4, Chapter 7, pp. 7-60 to 7-78).

Regarding displaced growth, the Draft PEIR (Vol. 4, Chapter 9, p. 9-47) states that “growth in these outlying areas would have similar types of environmental impacts [as growth in communities served by the regional system] but of potentially greater magnitude and consequences due to the effects of new development or ‘sprawl’ versus the infill that would occur in the existing Bay Area communities served by the SFPUC’s regional system.”

The implied opinion of the commenter—that the WSIP would result in smart growth (in San Francisco and the Bay Plain) and that the No Purchase Request Increase (or No Program) Alternatives would result in sprawl (in the “outer” Bay Area and the western Central Valley)—is acknowledged.

- L_BAWSCA1-20 Refer to **Response L_BAWSCA-19**.
- L_BAWSCA1-21 Refer to **Response L_BAWSCA-19**.
- L_BAWSCA1-22 Refer to **Response L_BAWSCA-19**.
- L_BAWSCA1-23 Refer to **Response L_BAWSCA-19**.
- L_BAWSCA1-24 Refer to **Response L_BAWSCA-19**.
- L_BAWSCA1-25 The Draft PEIR includes a brief description of San Francisco’s water rights (Vol. 1, Chapter 2, pp. 2-36 and 2-37), a summary of provisions of the Raker Act (Vol. 1, Chapter 2, pp. 2-33 and 2-34), and a description of SFPUC Resolution 93-0084, Defense of Water Rights (Vol. 1, Chapter 2, p. 2-45) to provide background information on the existing conditions and to provide context for understanding the WSIP. The planning horizon for the WSIP is 2030, and none of the WSIP alternatives analyzed in the Draft PEIR contemplate or require San Francisco to abandon its water rights as a condition of implementation within the planning horizon. However, the Draft PEIR analyzes impacts that could result from the adoption of alternatives that limit sales to the wholesale customers, including the possibility that wholesale customers would be expected to pursue supplemental supplies to make up for the 2030 shortfall (Vol. 4, Chapter 9, Section 9.2, pp. 9-4 to 9-84).
- L_BAWSCA1-26 This comment summarizes and draws conclusions based on the more detailed comments L_BAWSCA-13 through L_BAWSCA-25, which argue that the No Purchase Request Increase Alternative is misguided and infeasible. Please refer **Responses L_BAWSCA-13 through L_BAWSCA-25**.
- L_BAWSCA1-27 This comment, which expresses agreement with statements in the Draft PEIR (Vol. 4, Chapter 9, p. 9-53) regarding the feasibility of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative, is acknowledged. While the PEIR identifies technical, institutional, financial, and public acceptance challenges that would need to be overcome in order to implement this alternative, it was nonetheless included in the PEIR because of substantial public and agency interest in

exploring ways to maximize conservation and recycling in place of increasing surface water diversions.

- L_BAWSCA1-28 This comment characterizing per-capita water use and conservation levels in the Bay Area is acknowledged.
- L_BAWSCA1-29 This comment presents the following information for the wholesale customers: water savings associated with existing plumbing codes and conservation programs; how conservation savings are accounted for in the demand projections; conservation measures considered in development of the 2030 purchase estimates; and conservation measures currently being implemented and planned for implementation. This information is acknowledged and is generally consistent with information presented in the Draft PEIR. **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) presents an expanded discussion of existing and planned conservation and recycling for the wholesale (and retail) customers to address misconceptions reflected in comments on the Draft PEIR.
- L_BAWSCA1-30 This comment characterizing the existing diversified water supply portfolios of BAWSCA member agencies is acknowledged.
- L_BAWSCA1-31 This comment characterizing the existing and projected diversified water supply portfolios of BAWSCA member agencies is acknowledged.
- L_BAWSCA1-32 This comment characterizing San Francisco's existing water supplies is acknowledged.
- L_BAWSCA1-33 The commenter is correct in the assertion that the Aggressive Conservation/Water Recycling and Local Groundwater Alternative was designed to address the impacts on the Tuolumne River, Alameda Creek, and Peninsula watersheds. Furthermore, the commenter's assertion that the Modified WSIP Alternative does a "better job at reducing overall identified impacts" is also consistent with the Draft PEIR, since the PEIR identified the Modified WSIP Alternative as the environmentally superior alternative. However, it should be noted that the Draft PEIR provides an analysis of the environmental effects of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative compared to the WSIP (Vol. 4, Chapter 9, pp. 9-55 to 9-59) as required by CEQA; it does not present a direct comparison of impacts with the Modified WSIP Alternative, although it does include a general comparison of alternatives in Section 9.3.1 (pp. 9-84 to 9-95).

- L_BAWSCA1-34 Assuming mitigation measures are implemented, the impacts on fisheries would be the same under the Aggressive Conservation/Water Recycling and Local Groundwater Alternative and the Modified WSIP Alternative.
- L_BAWSCA1-35 The commenter's assertion is correct regarding the recreational experience of hikers along Alameda Creek in the Sunol Regional Wilderness, although the basis of the comparison depends on several assumptions, including whether or not mitigation is applied to reduce impacts to less-than-significant levels. Please refer to **Response L_BAWSCA-34**.
- L_BAWSCA1-36 The commenter's assertion is correct regarding the visual effects along Alameda Creek in the Sunol Regional Wilderness, although the basis of the comparison depends on several assumptions, including whether or not mitigation is applied to reduce impacts to less-than-significant levels. Please refer to **Response L_BAWSCA-34**.
- L_BAWSCA1-37 The information regarding demand hardening is acknowledged, and as indicated by the commenter, it corroborates the description of demand hardening presented in the Draft PEIR. In addition, the commenter states in footnote 5 that the Draft PEIR does not consider the environmental impacts of increased storage as a means "to bolster the drought reliability of the system." The concept of increased storage is discussed in the Draft PEIR as part of the alternatives identification and screening process (Vol. 4, Chapter 9, Table 9.14, pp. 9-106 to 9-110), and concepts involving increased storage, such as enlarging Calaveras Reservoir, were eliminated from further analysis because they did not satisfy the screening criteria sufficiently to warrant additional study (see Vol. 4, Chapter 9, pp. 9-97 to 9-128).
- L_BAWSCA1-38 The information regarding the benefits of greenscapes is acknowledged, as is the assertion that aggressive conservation measures could negatively affect greenscapes. This corroborates information presented in the Draft PEIR as part of the description of demand hardening (Vol. 4, Chapter 9, p. 9-28).
- L_BAWSCA1-39 The commenter's explanation of reasons for increased water use during summer and fall is acknowledged. Since this information does not affect the analysis in the Draft PEIR, no further response is provided.
- L_BAWSCA1-40 The commenter's opinion that the WSIP Variant 3 – 10% Rationing is environmentally and economically superior is acknowledged. The Draft PEIR concludes that the Modified WSIP Alternative would be the environmentally superior alternative. As provided by CEQA Guidelines Section 15064, economic changes resulting from a project are not to be

treated as significant effects on the environment, and therefore economic changes were not considered in the determination of the environmentally superior alternative. Moreover, WSIP Variant 3 – 10% Rationing does not reduce the significant environmental impacts of the proposed WSIP. Please refer to **Response L_BAWSCA-45**, below.

L_BAWSCA1-41 The commenter correctly describes the WSIP level of service objective of limiting rationing to a maximum of 20 percent systemwide during extended droughts. The commenter is correct in stating that such a 20 percent systemwide reduction in water service could result in some customers being required to reduce water service by less than 20 percent and others by more than 20 percent. The Draft PEIR (Vol. 1, Chapter 3, p. 3-14) states that “this systemwide level of 20 percent rationing translates into different percentages of allocation adjustments for each individual SFPUC customer. These percentages are dependent on the allocation plans ... as well as further agreements among the wholesale customers. SFPUC wholesale customer allocation adjustments for a 20 percent systemwide rationing scenario could range from 12 to 40 percent for individual customers.”

L_BAWSCA1-42 The comment regarding the environmental and economic consequences of a 25 percent year-round reduction in water use in the wholesale service area is acknowledged. Both the San Francisco Planning Department and the SFPUC acknowledge that the consequences of a severe water shortage would be substantial. However, as stated in the Draft PEIR, water shortages do not necessarily result in physical changes in the environment (Vol. 4, Chapter 9, p. 9-31). In accordance with CEQA Guidelines Section 15064, “the economic and social changes resulting from a project shall not be treated as significant effects on the environment.” Therefore, the Draft PEIR does not analyze the economic impacts of rationing.

Nonetheless, as requested in comments submitted by BAWSCA on the Notice of Preparation (NOP) for the Draft PEIR, the PEIR (Vol. 4, Chapter 9, pp. 9-28 to 9-31) presented information on the effects of droughts and rationing on customers. The discussion draws from several published sources, including the William Wade report cited in this comment, and the California Department of Water Resources’ *California Water Plan Update 2005* and *Preparing for California’s Next Drought, Changes Since 1987–92*. As described on Draft PEIR p. 9-29 (under the discussion of the No Program Alternative), the experiences among water suppliers and their customers during the 1987–1992 drought varied considerably, as will likely be the case for future droughts. Relative to existing conditions, or future conditions expected to occur if the WSIP is not implemented, the WSIP would lessen the severity of economic effects,

as well as environmental effects, associated with rationing. As described in the Draft PEIR (Vol. 4, Chapter 9, p. 9-13), the need for 20 percent systemwide rationing under the proposed program is projected to occur in 2 years out of the 82-year period of hydrologic record. This compares with 8 years under the existing condition and 10 years under the No Program Alternative. Therefore, implementation of the WSIP would result in fewer years of rationing, relative to the existing condition, and no further analysis or mitigation is required.

- L_BAWSCA1-43 As described in the Draft PEIR (Vol. 1, Chapter 2, pp. 2-18, 2-30, and 2-34), the SFPUC currently operates the regional water system consistent with the Water First Policy, which gives priority to the production and protection of water supply over the production of hydropower generation in the operation of the Hetch Hetchy system. This existing operating strategy would continue under the WSIP (Vol. 1, Chapter 3, p. 3-39, third bullet) and is also assumed to be incorporated into all variants and alternatives analyzed in the PEIR.
- L_BAWSCA1-44 The commenter correctly describes the component of the WSIP's dry-year operations strategy to secure water transfer agreements with the Turlock Irrigation District (TID) and/or the Modesto Irrigation District (MID). The opinion of the commenter regarding the source of the water transfer (i.e., conjunctive use in the Central Valley) is acknowledged. The Draft PEIR (Vol. 4, Chapter 6, p. 6-48) indicates that under Mitigation Measure 5.3.6-4a, conjunctive use of groundwater is a possible supplemental source for the water transfer agreement. Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water transfer** (Vol. 7, Chapter 14, Section 14.3.2) for additional information.
- L_BAWSCA1-45 The commenter correctly cites Table 8.2, footnote a, of the Draft PEIR (Vol. 4, Chapter 8, p. 8-6) regarding WSIP Variant 3 – 10% Rationing. The description and analysis of the variants are included in the PEIR at the request of the project sponsor and are not part of the CEQA requirements. As stated in the Draft PEIR, “the variants are designed to meet or exceed all WSIP goals and objectives but differ with respect to water supply source or drought-year level of service. The variants are not intended to be alternatives to the proposed program that would lessen or avoid environmental impacts as required by the California Environmental Quality Act (CEQA)” (Vol. 4, Chapter 8, p. 8-1). The WSIP Variant 3 – 10% Rationing would not reduce the significant effects of the proposed program. No additional information on the variants is needed for the Final PEIR.

- L_BAWSCA1-46 Please see Section **14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative. Please also refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.2) for a detailed description of the dry-year water transfer assumptions analyzed in the PEIR.
- L_BAWSCA1-47 The information provided in the commenter's Figure 17 regarding the distribution of Tuolumne River runoff is reasonably consistent with similar information presented in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-33 and 5.7-34). The commenter is correct in stating that it is currently unknown what sources of water would be involved in a water transfer agreement between the SFPUC and TID/MID and if those sources of water could be conserved water. Therefore, in the absence of this information, the analysis and modeling conducted for the Draft PEIR used reasonable worst-case assumptions that the water would be taken out of TID/MID storage in Don Pedro Reservoir in order to provide a conservative analysis of potential impacts. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of the proposed water transfer of conserved water. Please also refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.2) for additional details.
- The commenter's opinions on the following topics are acknowledged: (1) the commenter's support for meeting Coastside County Water District's increased demand by pumping from Crystal Springs Reservoir is conditioned on the economic impact of that approach; (2) the commenter's support for increased stream flow in a particular reach of Alameda Creek is not meant to suggest that the commenter disagrees with Alameda County Water District comments; (3) the commenter does not support the notion of permanently fallowing agricultural lands as an ongoing source of water for the Bay Area; (4) the commenter does not believe that greater urbanization of the Central Valley is likely to result in less water use on a per-acre basis; (5) the commenter corroborates the feasibility of the concept in the Modified WSIP Alternative that the dry-year water transfer should involve conserved rather than stored water; and (6) the commenter believes that the use of conserved water can provide benefits to agriculture, the urban Bay Area, and the lower Tuolumne River. Regarding the fifth comment listed above, please see **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for discussion and analysis of the proposed water transfer of conserved water.
- L_BAWSCA1-48 This comment regarding water rights is acknowledged.

- L_BAWSCA1-49 This comment expressing the recommendation of the BAWSCA board of directors is acknowledged. The Final PEIR includes additional discussion and analysis of the Modified WSIP Alternative, including the recommended water transfer based on conserved water. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative. However, because CEQA does not require that the PEIR evaluate the financial aspects of the alternatives, the Final PEIR does not address the feasibility of Bay Area water customers financially supporting water efficiencies in the TID and MID; that issue can be considered in the findings prepared as part of the WSIP approval process.
- L_BAWSCA1-50 This comment describes opportunities for partnerships with agricultural interests to allow more water to flow through the Tuolumne River while still providing water to accommodate San Francisco and its neighboring communities. Comment acknowledged.
- L_BAWSCA1-51 This comment, which expresses BAWSCA's support for the component of the Modified WSIP Alternative that calls for additional water conservation, recycling, and local groundwater in the BAWSCA service area, is acknowledged. The comment indicating BAWSCA's interest in being responsible for this component is also acknowledged.
- L_BAWSCA1-52 This comment, which provides excerpts from the California Water Code related to the SFPUC regional water system and to BAWSCA's statutory authority, is acknowledged.
- L_BAWSCA1-53 The commenter's preference—that BAWSCA coordinate the development of 5 to 10 mgd through regional conservation, local groundwater, or recycled water projects—is acknowledged. The SFPUC will continue to work cooperatively with BAWSCA and the individual wholesale customers to provide reliable water to meet customer's needs, regardless of whether the WSIP or an alternative is ultimately adopted.
- The comment recommending a potential funding mechanism for the regional conservation, local groundwater, or recycled water projects is acknowledged.
- L_BAWSCA1-54 The summary section of the Draft PEIR addresses the issue of aging water system infrastructure (Vol. 1, Summary, p. S-2), and Chapter 2 provides additional details and some examples of historical facility failures (Vol. 1, pp. 2-27 and 2-28). This information is included in the Draft PEIR to provide the reader with sufficient background and context regarding the existing system and problems to understand the purpose and need for the

WSIP; it is not intended to serve as a detailed listing of system failures. Additional discussion of system failures is presented in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2). The examples of regional system failures provided by the commenter are acknowledged, but have not been confirmed.

- L_BAWSCA1-55 The summary section of the Draft PEIR provides the basic information relevant to the program description. Additional details regarding the water service area and customers served by the regional water system are included in Chapter 3 (Vol. 1, pp. 3-5 to 3-7), where it states that the “SFPUC serves about one-third of its water supplies directly to retail customers in San Francisco.” Table 3.1 (p. 3-7) lists the major customers and indicates that the City and County of San Francisco does not receive water supplies from sources other than the SFPUC. No text changes to the Draft PEIR are warranted.
- L_BAWSCA1-56 This comment on the Draft PEIR Summary (Vol. 1, p. S-2) is acknowledged; refer to **Responses L_BAWSCA-30** and **L_BAWSCA-31**.
- L_BAWSCA1-57 In response to this comment, Figure S.3 (Vol. 1, Summary, p. S-5) and Figure 5.1-2 (Vol. 3, Chapter 5, p. 5.1-6) are revised as follows. The label on the right-hand side of the figure should say:
- Annual Average Forecasted ~~Demands~~ Deliveries
- L_BAWSCA1-58 The preliminary schedule for implementation of the WSIP projects is presented in Figure 3.6 of the Draft PEIR (Vol. 1, Chapter 3, p. 3-62). The SFPUC developed this schedule based on priorities related to the vulnerability of a facility to seismic damage, a facility’s importance to system operations, system operational requirements, and projected funding. As discussed in the Draft PEIR (p. 3-61), the project schedule is considered preliminary and was the best available at the time of Draft PEIR preparation. The SFPUC will refine the schedule as the WSIP and related projects are further developed. Project-level CEQA documentation prepared for each WSIP project will address the updated schedule and will include an appropriate analysis of potential cumulative impacts based on the updated schedule. The dates shown on the preliminary schedule reflect construction periods, not project closeout dates.
- L_BAWSCA1-59 The information requested in the comment regarding the presence of historic resources is presented in Draft PEIR Table 4.7-4 (Vol. 2, Chapter 4, beginning on p. 4.7-64).
- L_BAWSCA1-60 The information and concern regarding water quality and public health issues associated with drinking water is acknowledged. As stated in the

Draft PEIR (Vol. 1, Chapter 3, pp. 3-5, 3-8, and 3-9), the fundamental mission and one of the primary goals of the WSIP is to maintain high-quality water.

- L_BAWSCA1-61 The San Antonio Pump Station is located in the Sunol Valley (see Figure 2.2 in Vol. 1, Chapter 2, p. 2-9) adjacent to the Alameda Siphons. Constructed in 1968 and modified in 1992, its purpose is to pump Hetch Hetchy water to the Sunol Valley Water Treatment Plant (WTP), San Antonio Reservoir, or San Antonio Creek. Pumping Hetch Hetchy water to the Sunol Valley WTP, San Antonio Reservoir, or San Antonio Creek is necessary when the water does not meet water quality standards for delivery to customers (SFPUC, 2004). Since this information is not fundamental to the adequacy or accuracy of the Draft PEIR, no changes in the PEIR text are required.
- L_BAWSCA1-62 The Draft PEIR (Vol. 1, Chapter 2, p. 2-12) states that the SFPUC's intertie with the Santa Clara Valley Water District (SCVWD) "serves as a means to transfer water between the SCVWD during an emergency or during periods of planned maintenance work on critical facilities." Thus, the water exchange between the SCVWD and SFPUC described in the next paragraph on that same page is a short-term activity.
- L_BAWSCA1-63 The Draft PEIR (Vol. 1, Chapter 3, p. 3-7) describes aging infrastructure as one of the key reasons the WSIP is needed. The WSIP facility improvement projects (listed in Vol. 1, Chapter 3, pp. 3-23 to 3-25) were selected and designed to address the "operational areas and issues which act as drivers for the WSIP," or, in other words, the facilities that the SFPUC has identified as most critical and in need of major repair. It would be speculative to describe what could happen during a major seismic event, other than as already described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3-15 and 3-16) based on the system performance studies conducted in support of the WSIP. Moreover, the additional information requested by the commenter is not needed to evaluate the impacts of implementing the WSIP. The description of existing system maintenance (Vol. 1, Chapter 2, pp. 2-27 and 2-28) includes examples of how existing operations and maintenance are affected by the aging infrastructure, including reasons why the Irvington, Pulgas, Crystal Springs Bypass, and Stanford Tunnels are difficult to shut down for inspection and maintenance. Additional discussion is provided in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2). Also refer to **Response L_BAWSCA1-54** for examples of recent outages provided by the commenter.

- L_BAWSCA1-64 The commenter is correct in noting the change in the basic service level used to define the WSIP’s seismic reliability system performance objective that occurred between issuance of the NOP and the Draft PEIR. The NOP stated a 215 mgd basic service level and the Draft PEIR stated 229 mgd. The originally estimated basic service level of 215 mgd was based on information developed in the SFPUC *Water Supply Master Plan* (April 2000), but these estimates were updated prior to publication of the Draft PEIR for use in determining the WSIP level of service objectives by applying winter reduction factors to average-day demands. The updated basic service level was developed using customer billing data for winter months in the 1992 to 2005 period (SFPUC, 2006a).
- L_BAWSCA1-65 The WSIP level of service objective of limiting rationing to a maximum of 20 percent systemwide during an extended drought is part of the proposed program as defined by the project sponsor. CEQA does not require the sponsor to justify its selection of project components, only to describe the project’s objectives. The Draft PEIR (Vol. 1, Chapter 3, p. 3-42) describes the SFPUC’s management of water supplies during drought years. Note that modeling performed for the Draft PEIR analysis indicates that drought-year shortages of 20 percent would occur in only 2 years out of the 82-year hydrologic cycle (Vol. 4, Chapter 9, p. 9-13). Also refer to **Response L_BAWSCA1-42** regarding analysis of the impacts of rationing.
- L_BAWSCA1-66 The Draft PEIR (Vol. 1, Chapter 3, p. 3-14, last sentence of last paragraph) states: “SFPUC *wholesale* [emphasis added] customer allocation adjustments for a 20 percent systemwide rationing scenario could range from 12 to 40 percent for individual customers.” No further clarification is needed.
- L_BAWSCA1-67 The statement that the SFPUC “has not committed to any level of increased water conservation or recycling in 2030, and have treated water conservation and recycling in San Francisco as a component of the WSIP” requires clarification. The SFPUC has proposed the WSIP, which includes conservation and recycling in San Francisco. Like the wholesale customers, the SFPUC already implements conservation programs. Refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for additional discussion of conservation in San Francisco.
- L_BAWSCA1-68 This comment stating that Menlo Park Water District receives 100 percent of its water supply from the SFPUC is correct. Refer to **Response L_Menlo1-08** for further discussion.

- L_BAWSCA1-69 Refer to Section **14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14).
- L_BAWSCA1-70 In response to this comment, the text in Item E (Vol. 1, Chapter 3, p. 3-25) of the Draft PEIR is revised as follows:
- E. **Regional Recycled Water Projects** (note that these are different than the project #22, Recycled Water Projects, listed above under A). The SFPUC expects ~~that to consider and develop~~ some recycled water projects that would be located outside of San Francisco will be developed in coordination with other jurisdictions. As these projects are developed and designed, they will be reviewed to determine the appropriate lead agency and level of environmental review.
- L_BAWSCA1-71 In response to this comment, the text in the Draft PEIR (Vol. 1, Chapter 3, p. 3-27) is revised by adding the following as the last paragraph of Section 3.5.1:
- Other water quality regulations of significance to the SFPUC could include the Stage 2 Disinfectants and Disinfection Byproducts Rule, Candidate Contaminant List, California Action Levels, and California Public Health Goals. The SFPUC will address these regulations as appropriate as part of its ongoing operations as well as to ensure consistency with the WSIP water quality levels of service.
- L_BAWSCA1-72 The commenter is correct in noting that if a facility is sized to meet one of several objectives, the facility may be able to operate beyond other minimum levels of performance. As described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3-10 and 3-11), the SFPUC has conducted numerous planning and engineering studies of the regional system with respect to its vulnerability, reliability, and performance, and the Draft PEIR presents only a brief summary of the key studies and relevant results needed to demonstrate that the proposed improvements could meet or exceed the WSIP level of service objectives. More detail regarding the studies, assumptions, and analytical methods used in determining the system performance is not required under CEQA. However, it should be noted that design of the WSIP project facilities is driven by all of the program objectives in combination—seismic reliability, delivery reliability, water quality, and water supply. All four of these goals are factored into the decision on how to size the WSIP’s individual facilities. The commenter is referred to the document *WSIP System Assessment for Levels of Service Objectives* (SFPUC, 2006a) and to the SFPUC memorandum *Water System Improvement Program Facilities Capacity* (SFPUC, 2008b).

- L_BAWSCA1-73 The Draft PEIR (Vol. 1, Chapter 3, p. 3-30, first bullet) provides a definition and description of “Delivery During a Hetch Hetchy Water Quality Event.” On rare occasions, meteorological or other conditions affect the quality of water in the Hetch Hetchy system, and the water does not meet drinking water standards and cannot be delivered to customers without filtration. During such a Hetch Hetchy water quality event, the normal system operations are constrained. The system assessment indicated that while some water could be served to customers (see the “Existing System Performance” column in Table 3.7, p. 3-31), the SFPUC would be unable to deliver the average annual demand.
- L_BAWSCA1-74 The guiding principles for implementing the WSIP’s sustainability and cost-effectiveness goals are listed as system performance objectives in the Draft PEIR, Table 3.2 (Vol. 1, Chapter 3, p. 3-9).
- L_BAWSCA1-75 The commenter’s opinion expressing agreement with the proposed system operations strategy is acknowledged.
- L_BAWSCA1-76 This comment providing additional operating objectives for the SFPUC is acknowledged. The objectives for the proposed program were provided by the SFPUC to the San Francisco Planning Department. Should the SFPUC wish to change or add to the objectives of the program, it will notify the San Francisco Planning Department.
- L_BAWSCA1-77 Please refer to **Response L_BAWSCA-76**. A programmatic analysis of flood-related issues is provided in the Draft PEIR (Vol. 2, Chapter 4, Impact 4.5-4, pp. 4.5-37 to 4.5-41).
- L_BAWSCA1-78 The information regarding the current *Interim Water Shortage Allocation Plan* is acknowledged.
- L_BAWSCA1-79 As stated in the Draft PEIR (Vol. 1, Chapter 3, p. 3-43), the SFPUC will meet, at a minimum, all current and anticipated legal requirements for the protection of fish and other wildlife habitat. The chapter further states: “Although the fishery release requirements that FERC [Federal Energy Regulatory Commission] may impose in 2016 cannot be anticipated at this time, the SFPUC assumes, for purposes of the WSIP, that it will be able to continue its current agreement with TID and MID to pay them to provide all of the additional water, if any, required for the fishery releases.” It would be speculative at this time to provide any further information on anticipated future fishery release requirements.
- L_BAWSCA1-80 The Draft PEIR describes the proposed water delivery operations strategy (Vol. 1, Chapter 3, pp. 3-45 and 3-46), including a strategy to optimize local water storage. The strategy integrates replenishment of local

reservoirs with the need to meet increased purchase requests through 2030 and to institutionalize a planned maintenance program for the regional system facilities. With the increased conveyance capacity and addition of redundant facilities under the WSIP, the SFPUC would meet or exceed the system performance objectives delineated in Draft PEIR Table 3.2 (Vol. 1, Chapter 3, p. 3-9). This includes providing operational flexibility and system capacity to replenish local reservoirs as needed to meet the seismic reliability, delivery reliability, and water supply goals of the WSIP. Under existing conditions, the SFPUC operates the system to replenish local reservoirs to the extent possible, but it currently performs this function to meet a lower demand level and without a regular, planned maintenance program. The facilities sizing proposed under the WSIP is needed to achieve all of the program objectives in combination—seismic reliability, delivery reliability, water quality, and water supply. All four of these goals are factored into the decision on how to size the WSIP’s individual facilities; the replenishment rate of local reservoirs is only one factor and cannot be separated from the other factors.

- L_BAWSCA1-81 The commenter’s opinion expressing agreement with the proposed system operations strategy is acknowledged.
- L_BAWSCA1-82 Regarding existing system maintenance, Section 2.3.6 of the Draft PEIR (Vol. 1, Chapter 2, p. 2-27), states: “Many of the tunnels in the system are important for water delivery to customers and lack redundancy, so it is difficult to shut them down for inspections. These include the Irvington, Pulgas, Crystal Springs Bypass, and Stanford Tunnels. Some of these tunnels have not been inspected for 20 to 30 years.” Additional discussion is provided in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2).
- L_BAWSCA1-83 This comment, which expresses a preference for the components to be included in the San Joaquin Pipeline System project (SJ-3), is acknowledged. More detailed project description information will be developed and identified in the project-level environmental documentation.
- L_BAWSCA1-84 Please refer to **Response L_BAWSCA1-82**. Additional discussion regarding maintenance needs and redundancy is provided in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2).
- L_BAWSCA1-85 Staffing issues are not considered physical environmental effects, and therefore are not analyzed in the Draft PEIR.

- L_BAWSCA1-86 In response to this comment, the Draft PEIR (Vol. 1, Chapter 3, p. 3-82, last paragraph) is revised as follows:
- As the preliminary schedule indicates, construction of projects is expected ~~to begin in 2008 and~~ to be completed by the end of 2014; there would be an intense period of construction from 2009 to 2010, when 18 of the 22 projects would be under construction ~~constructed~~ concurrently.
- L_BAWSCA1-87 Permits, approvals, and other decisions associated with alternatives to the WSIP are listed in Draft PEIR Table 9.4 (Vol. 4, Chapter 9, pp. 9-11 and 9-12), and the table includes the information provided by the commenter.
- L_BAWSCA1-88 The commenter requests that the PEIR present the beneficial seismic safety effects of the WSIP in graphic and tabular format; however, the Draft PEIR already presents this information. Sections 3.4.2 and 3.5.2 (Vol. 1, Chapter 3, pp. 3-15 and 3-27) summarize findings of the seismic vulnerability studies and present the WSIP's seismic reliability goals. Table 3.10 (Vol. 1, Chapter 3, p. 3-49) identifies which WSIP projects address seismic reliability (see Column 3 of this table), while Figure 4.4 (Vol. 2, Chapter 4, p. 4.4-7) graphically depicts the locations of all WSIP projects listed in Table 3.10 in relation to the major faults.
- L_BAWSCA1-89 See **Response L_BAWSCA1-42**.
- L_BAWSCA1-90 The proposed system operations strategy under the WSIP is presented in the Draft PEIR, Section 3.7 (Vol. 1, Chapter 3, pp. 3-39 and 48), which includes a description of proposed reservoir storage levels and operational flexibility needed for the proposed level of system maintenance.
- L_BAWSCA1-91 This comment refers to a statement in the Draft PEIR regarding spills or releases from local reservoirs (Vol., 3, Chapter 5, p. 5.1-17, first paragraph). This statement is part of a discussion on model limitations, and it is presented in the context of explaining how model output of monthly data was used to explain phenomena that may last only a few days. However, the commenter uses this statement out of context to inquire about reservoir operations and downstream flooding.
- Existing operations for system reservoirs are described in Draft PEIR Section 2.3 (Vol. 1, Chapter 2, pp. 2-16 to 2-28), which states that the local reservoirs are managed to maintain sufficient available storage and to minimize uncontrolled spills. While none of the SFPUC reservoirs have specific flood control requirements, the SFPUC operates all dams and reservoirs to avoid downstream flooding. Refer also to **Response BAWSCA1-77**.

- L_BAWSCA1-92 The referenced mitigation tables (Draft PEIR, Vol. 4, Chapter 4, pp. 6-65 to 6-189) are intended to provide a quick reference guide for the reader to understand the significance determination for each project under each impact and the level of mitigation required to support this determination. For example, a determination of “less than significant” may mean that the impact is potentially significant but would be reduced to a less-than-significant level with implementation of mitigation measures and/or SFPUC standard construction measures that would ensure compliance with regulations or policies. In other cases, the impact may simply be less than significant without the need to implement mitigation measures. These tables are not intended to document the level of detail requested by the commenter. The mitigation tables are already over 100 pages long, and the addition of more detailed information would make them even more lengthy and cumbersome. As noted by the commenter, the full citations are included in Chapters 4 and 5 of the Draft PEIR.
- L_BAWSCA1-93 This comment, which states that the potentially unanalyzed impacts of growth are either the same as those analyzed in the Draft PEIR or are so small as to be insignificant, and that over 90 percent of the WSIP’s indirect growth impacts has already been analyzed in the CEQA documents for local jurisdictions’ general plans, is noted. The potential impacts of growth that could occur beyond the projections indicated in local general plans and related land use plans are discussed in the Draft PEIR (Vol. 4, Chapter 7, pp. 7-70 and 7-71).
- L_BAWSCA1-94 As stated in the Draft PEIR (Vol. 4, Chapter 8, p. 8-1), the description and analysis of variants were included in the PEIR at the request of the SFPUC and not to fulfill any CEQA requirement. Because one of the variants was identified as being able to reduce the impacts associated with increased diversions from the Tuolumne River, it was included in the CEQA alternatives analysis in Chapter 9 of the Draft PEIR.
- L_BAWSCA1-95 The commenter cites summary statements in the Draft PEIR regarding the comparison of all the major impacts (significant unavoidable or potentially significant unavoidable) of the variants with those of the proposed program. However, the commenter omits a key phrase from the statement in the Draft PEIR. The complete statement from the Draft PEIR (Vol. 4, Chapter 8, p. 8-77) is as follows: “With the exception of the BARDP [Bay Area Regional Desalination Project] component of Variant 2, all three variants would have the same significant unavoidable or potentially significant unavoidable impacts as the proposed program, *although in some cases, there would be slight differences in severity of the impact.*” The Draft PEIR further states that the greatest differences among the proposed program and the variants are associated with facilities-related impacts of

the BARDP and other facilities-related impacts are minor. It should be noted that the two conclusions stated by the commenter reflect the opinion of the commenter and not the conclusions of the Draft PEIR.

- L_BAWSCA1-96 The information presented in Draft PEIR Table 9.2 (Vol. 4, Chapter 9, p. 9-4) is identical to that in Table 3.5 (Vol. 1, Chapter 3, p. 3-26) and compares existing and proposed regional system levels of service. It does not present a comparison of system performance. Therefore, the descriptor “not defined” is an appropriate depiction of the existing system’s level of service for seismic response. Table 3.6 (Vol. 1, Chapter 3, p. 3-29) provides a comparison of existing and future system performance for seismic response.
- L_BAWSCA1-97 This comment regarding the absence of actual total cost information on the alternatives is acknowledged. The SFPUC has no additional information to provide on total costs at this time; cost is one of the factors that the SFPUC can consider in evaluating the feasibility of alternatives at the time of program approval.
- L_BAWSCA1-98 See **Response L_BAWSCA1-60**.
- L_BAWSCA1-99 Draft PEIR Table 9.7 (Vol. 4, Chapter 9, p. 9-17) includes a column entitled “Proposed Program” that summarizes the impact analysis for the WSIP as presented in Vol. 3, Chapter 5. The three bullet-point summary comparisons presented by the commenter are correct, although the actual number of individual impacts does not necessarily relate to the magnitude or severity of individual impacts.
- L_BAWSCA1-100 The Draft PEIR (Vol. 4, Chapter 9, p. 9-26) states that “the ability of the wholesale customers to develop additional water supplies is uncertain, and further studies would be required to evaluate technical and institutional feasibility.” Part of these further studies would include determining whether and how the SFPUC system infrastructure could be used in concert with alternative supplies, and analysis of the constraints on the regional system for these purposes is beyond the scope of this PEIR. The Draft PEIR provides a thorough analysis of the environmental impacts of the proposed water supply under the WSIP, and, consistent with CEQA Guidelines Section 15126.6, the environmental impacts of the alternative supplies are evaluated at sufficient detail to allow meaningful comparison with the proposed program. With regard to the example provided by the commenter, Draft PEIR Table 9.10 (Vol. 4, Chapter 9, pp. 9-35 and 9-36) summarizes the types of projects and range of environmental impacts that could occur if the wholesale customers were to develop alternative water supplies.

- L_BAWSCA1-101 This comment, which states that some urban water customers are contracting to buy conserved water from agricultural water users, is acknowledged.
- L_BAWSCA1-102 This comment, stating that the wholesale customers expect to provide 13 mgd from conservation and 9 mgd from recycled water and desalination projects by 2030, is acknowledged. These water savings are factored into the 2030 water demand projections and are presented in the Draft PEIR (Vol. 1, Chapter 3, p. 3-18).
- L_BAWSCA1-103 This comment states that the analysis of the Aggressive Conservation/ Water Recycling and Local Groundwater Alternative must consider the existing water demand and supply sources as well as projections for future water demand and water supply diversity. This comment provides comparisons of current and future water supply sources for the San Francisco retail area and the BAWSCA member agencies in the form of pie charts.

The intent of the word “consider” in this comment (i.e., the additional analysis being requested) is unclear. The analysis of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative assumes this water supply diversity will continue, that the wholesale customers—in partnership with the SFPUC and BAWSCA—will actively participate in developing additional recycled water/groundwater/conservation projects, and that the wholesale customers would pursue additional supplemental supply. BAWSCA’s objections to and criticisms of this alternative are raised elsewhere in this submittal (and addressed in other responses). In any case, the assertions regarding water supply diversity do not affect the adequacy of the PEIR.

(Note that the data presented for the BAWSCA agencies’ existing water use by source of supply are for fiscal year 2005/2006, which is not the base year used for the water demand projections. The data presented for the BAWSCA agencies’ 2030 water sources are somewhat inconsistent with the data in the Draft PEIR, indicating that the BAWSCA agencies’ 2030 water supply will total 320.61 mgd, rather than 323 to 325 mgd, as estimated in the demand projections; however, BAWSCA’s purchases from the SFPUC and supply diversity remain the same as presented in the Draft PEIR.)

- L_BAWSCA1-104 This comment, which refers to a critical statement made by other organizations concerning single-family residential per-capita outdoor water use, is acknowledged. The SFPUC estimates of single-family residential per-capita demand for 2030 compiled for the 2006 Sustainable Water

Supply Briefing (SFPUC, 2006b)¹ differ somewhat from those cited in this comment; for additional information on this topic, please refer to **Response SI_PacInst-68** as well as **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2, under the heading Outdoor Water Use, and Section 14.2.3, Table 14.2-12).

- L_BAWSCA1-105 This comment refers to a statement by other organizations that the proposed WSIP ignores conservation, efficiency, and recycling measures. Comment acknowledged. The WSIP includes implementation of 22 to 25 mgd of conservation and recycling in the wholesale area and an additional 8 mgd in the San Francisco retail service area.
- L_BAWSCA1-106 This comment refers to a recommendation by other organizations that the SFPUC conduct a study about maximum potential for conservation and efficiency savings. This comment and the BAWSCA response are acknowledged. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for additional information on this topic.
- L_BAWSCA1-107 According to the SFPUC, the nonresidential sector is responsible for over 80 percent of the projected 2030 demand increase; refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2, under the heading Outdoor Water Use).
- L_BAWSCA1-108 This comment refers to a statement by other organizations that outdoor water use represents over 40 percent of the increase in nonresidential demand. This comment and the BAWSCA response are acknowledged. According to the SFPUC, about 35 percent of the increase in nonresidential demand is due to outdoor water use. Refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2, under the heading Outdoor Water Use).
- L_BAWSCA1-109 This comment, which rebuts a critical statement regarding the demand studies' purported failure to account for the impact of rising prices on water consumption, is acknowledged. For additional information on this topic, please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2, under the heading Consideration of Water Price in WSIP

¹ For more information on this briefing, refer to the introduction to the responses to comments received from the Pacific Institute (SI_PacInst).

Background Studies) and **Response SI_PacInst-62** (Vol. 7, Chapter 15, Section 15.4).

- L_BAWSCA1-110 This comment, which consists of BAWSCA's response to statements regarding evapotranspiration controllers to reduce outdoor water use, states that BAWSCA is currently awaiting the results of a multiyear study on the effectiveness of weather-based evapotranspiration controllers in the Bay Area. Comment acknowledged. For additional information on the Irvine Ranch Water District study, please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3, under the heading Frequently Submitted Comments Addressing Conservation and Recycling).
- L_BAWSCA1-111 This comment, which consists of BAWSCA's response to statements regarding conservation technologies that can reduce residential water demand, is acknowledged. The Draft PEIR acknowledges that additional water savings become more difficult to achieve as more conservation measures are implemented. For additional information on this topic, please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3, under the heading Frequently Submitted Comments Addressing Conservation and Recycling). With respect to the change in single-family residential per-capita demand stated in a previous L_BAWSCA1 comment, refer to **Response L_BAWSCA1-104**.
- L_BAWSCA1-112 Please refer to **Response L_BAWSCA1-04** as well as **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for pertinent discussion of this issue.
- L_BAWSCA1-113 This comment, submitted in support of Comment L_BAWSCA1-23, is an excerpt from a report by the Greenbelt Alliance that provides information about actions taken in Alameda, San Mateo, and Santa Clara Counties to preserve the Bay Area Greenbelt, and estimates the acreage of greenbelt land in each county at high, medium, and low risk of conversion to urban use. This information is acknowledged; as it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_BAWSCA1-114 This comment consists of BAWSCA's *Water Conservation Program's Annual Report FY 2006/7*. Refer to **Response L_BAWSCA1-23**.
- L_BAWSCA1-115 The contents of the report entitled *An Economic Evaluation of the Water Supply Reliability Goal in the SFPUC Water System Improvement Plan* are acknowledged. BAWSCA commissioned this report with the purpose of reviewing the WSIP water supply level of service objective, which would

limit rationing to a maximum of 20 percent systemwide during extended droughts. The report includes recommendations to the SFPUC to review and revise its water supply planning goals, and states the opinion that the SFPUC should consider the economic costs of mandatory rationing. The report does not address the adequacy or accuracy of the Draft PEIR, and therefore no response from the San Francisco Planning Department is required. It can be noted, however, that hydrologic modeling conducted for the Draft PEIR environmental analysis indicates that 20 percent systemwide rationing would only be required for 2 years out of the 82-year period of hydrologic record (or 1 in 41 years) if the WSIP were implemented. **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.6) provides additional discussion of the obligation under CEQA to evaluate the economic impacts of mandatory rationing.

- L_BAWSCA1-116 This comment, which consists of the affidavit of Anson B. Moran, former general manager of the SFPUC, regarding the planning and operation of the SFPUC water facilities during a drought, is acknowledged. The affidavit does not address the adequacy or accuracy of the PEIR, and no response from the San Francisco Planning Department is required.

Bay Area Water Supply and Conservation Agency, Arthur Jensen, General Manager, 9/20/07

- L_BAWSCA2-01 This comment suggests that the PEIR more clearly emphasize the importance of completing the WSIP in order to protect the public health and safety of the Bay Area's residents. For a response to this comment, please refer to **Response L_BAWSCA1-02**. For additional discussion of this topic, also refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3).
- L_BAWSCA2-02 This comment lists the following points in support of the WSIP: (1) several of the SFPUC regional water system's tunnels, reservoirs, and pipelines are located on or cross one or more active fault(s); (2) there is a greater than 60 percent chance of a major earthquake before 2032; and (3) subsequent to a major earthquake, the flow of water to communities could be disrupted for 30 to 60 days. Please refer to **Response L_BAWSCA1-02** for a response to this issue. For additional discussion of this topic, also refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.3).
- L_BAWSCA2-03 This comment, which characterizes water use and existing and future conservation among BAWSCA member agencies, is acknowledged. Please refer to **Responses BAWSCA1-28 and BAWSCA1-29** as well as **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14).
- L_BAWSCA2-04 Please refer to **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.6.5) and **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.6) for clarification regarding current and estimated future municipal and agricultural diversions from the Tuolumne River.

This comment expresses support for the Modified WSIP Alternative, and for opportunities for agricultural conservation along the lower Tuolumne River as a way to offset incremental increases in Tuolumne River diversions while providing water supplies for the Bay Area. Comment acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14, Section 14.10.3) for a discussion of agricultural water conservation in the services areas of TID, MID, and/or another water agency as a means of securing water for the conserved water transfer to the SFPUC. Please also refer to **Responses L_BAWSCA1-47, L_BAWSCA1-49, and L_BAWSCA1-50**.

**Bay Area Water Supply and Conservation Agency,
Nicole Sandkulla, Senior Water Resources Engineer,
9/5/07**

[See Public Hearing Transcript, Sonora, pp. 17–20]

- L_BAWSCA3-01 Please see **Response L_BAWSCA1-02**. Also see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3) for relevant response.
- L_BAWSCA3-02 The issues presented in this comment were also raised throughout the BAWSCA1 letter; refer to the responses to that letter (specifically, regarding an expected decline in residential per-capita water use, see **Response BAWSCA1-28**; regarding the need for the WSIP with respect to earthquake hazards, see **Response BAWSCA1-02**). Please also see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.3) for additional discussion of earthquake hazards.

**Bay Area Water Supply and Conservation Agency,
Nicole Sandkulla, Senior Water Resources Engineer,
9/6/07**

[See Public Hearing Transcript, Modesto, pp. 12-14]

- L_BAWSCA4-01 Please refer to **Response L_BAWSCA1-02** for a response to this comment. For additional discussion of this topic, also refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3).
- L_BAWSCA4-02 Statements presented in this comment were also raised throughout the BAWSCA1 letter; refer to the responses to that letter (in particular, regarding an expected decline in residential per-capita water use, see **Response BAWSCA1-28**).

Bay Area Water Supply and Conservation Agency, Steven Miller, Lawyer, 9/20/07

[See Public Hearing, San Francisco City Hall, September 20, 2007, pp. 9–11]

- L_BAWSCA5-01 Issues presented in this comment were also raised in the L_BAWSCA1, L_BAWSCA2, L_BAWSCA3, and L_BAWSCA4 comment letters. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for response.
- L_BAWSCA5-02 Statements presented in this comment were also made throughout the BAWSCA1 letter; refer to the responses to that letter (in particular, regarding an expected decline in residential per-capita water use, see **Response BAWSCA1-28**).
- L_BAWSCA5-03 Like Comment L_BAWSCA5-02, statements presented in this comment were also made throughout the BAWSCA1 comment letter and in BAWSCA2-04. Please refer to **Responses L_BAWSCA1-47, L_BAWSCA1-49, and L_BAWSCA1-50** for responses to these issues.

Bay Area Water Supply and Conservation Agency, Arthur Jensen, General Manager, 10/11/07

[See Public Hearing Transcript, San Francisco City Hall,
October 11, 2007, pp. 39–42]

- L_BAWSCA6-01 Issues presented in this comment were also raised in the L_BAWSCA1, L_BAWSCA2, L_BAWSCA3, L_BAWSCA4, and L_BAWSCA5 comment letters. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2, 14.1.3, and 14.1.4) for response.
- L_BAWSCA6-02 This comment states that the Draft PEIR does not adequately describe or analyze the Modified WSIP Alternative. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) in response to this comment.
- L_BAWSCA6-03 This comment summarizes BAWSCA's commitment to meeting a portion of its demand through conservation and recycling measures. The comment also expresses support for the environmentally superior alternative, the Modified WSIP Alternative. Please refer to **Response L_BAWSCA1-47** in response to this comment. Also refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional details.
- L_BAWSCA6-04 Statements raised in this comment are similar to those made in **L_BAWSCA1-49**. Please refer to **Responses L_BAWSCA1-49** and **L_BAWSCA1-50** in response to this comment.

San Francisco Bay Conservation and Development Commission, Sara Polgar, Planner, 9/6/07

L_BCDC-01 The commenter's summary of the project description for the proposed Bay Division Pipeline (BDPL) Reliability Upgrade project (BD-1), as described in Draft PEIR Table 3.10 (Vol. 1, Chapter 3, p. 3-52) and Table C.1 (Vol. 5, Appendix C, p. C-4), is correct.

The description of the BDPL Reliability Upgrade project (BD-1) is based on the most accurate information available at the time the Draft PEIR was prepared, and the fixed locations of valve lots and construction activities were not known. Therefore, these items are not described in detail or shown precisely on figures in the Draft PEIR. Section 15142 (b) and (h) (3) and Section 15168 of the CEQA Guidelines do not require that a Program EIR provide a level of detail greater than that of the known program being analyzed (in this case the WSIP). The locations of the valve lots and construction activities for the BDPL Reliability Upgrade project will be identified and analyzed in the project-level EIR.

Draft PEIR Table C.1 (Vol. 5, Appendix C, p. C-4) and the description in the Land Use and Visual Quality section (Vol. 2, Chapter 4, p. 4.3-5, third full paragraph) may be misleading in that they suggest that the locations of the project components are known more accurately than as analyzed in the Draft PEIR, because most of the pipeline alignment for the BDPL Reliability Upgrade project (BD-1) is located adjacent to the existing SFPUC right-of-way for BDPL Nos. 1 and 2. Accordingly, in Table C.1, the project description and the description of existing land uses, facility locations, and land acquisitions are generally known because the BDPL Reliability Upgrade project is proposed to be constructed adjacent to the existing BDPL Nos. 1 and 2. Similarly, the referenced paragraph (Vol. 2, Chapter 4, p. 4.3-5) identifying aboveground facilities refers to the existing setting and aboveground structures associated with the existing BDPL Nos. 1 and 2, not the future BDPL Reliability Upgrade project.

The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-8) states that the bay tunnel portion of the BDPL Reliability Upgrade project (BD-1) would be buried 100 to 150 feet below mean seal level and result in approximately 355,000 cubic yards of bay mud excavation/spoils, and acknowledges that this project could be subject to certain provisions of the SF Bay Plan.

Based on this program-level of information, the Draft PEIR did not determine the extent of BCDC's jurisdictional and permitting authority over the BDPL Reliability Upgrade project (BD-1). BCDC will have the opportunity to review detailed project information and determine jurisdiction during preparation of the project-level EIR for this project. At this stage of project planning, it is

reasonable for the commenter to assume that this project falls under BCDC jurisdiction (worst-case conditions); however, this determination will be made as part of project-level CEQA review. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 15, Section 14.4.2) for detailed information on the issues raised by this comment.

L_BCDC-02 The commenter's description of BCDC's authority to issue permits and to enforce policies within its area of jurisdiction is consistent with that presented in the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-8). Because detailed information about filling or dredging associated with this project was not available during preparation of the Draft PEIR, the PEIR provided a broad overview of land use plans and policies applicable to the WSIP rather than listing individual policies of each plan and evaluating each WSIP project's consistency with these policies. As the commenter notes, SF Bay Plan policies concerning filling, dredging, and public access could be applicable to the BDPL Reliability Upgrade project (BD-1); however, depending on final project plans for the BD-1 tunnel segment and associated shaft structures, other BCDC policies (pertaining to such topics as fish, other aquatic organisms, and wildlife; water quality; and appearance, design, and scenic views) could also be applicable. Since project components had not yet been developed beyond a program level of detail, it was not possible for the Draft PEIR to determine the applicability of these policies.

As stated in the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-10), because the policy language found in a land use plan is susceptible to varying interpretations, it is often difficult to determine whether a proposed project is consistent or inconsistent with such policies. Further, because land use plans often contain numerous policies emphasizing differing legislative goals, the BDPL Reliability Upgrade project (BD-1) may be consistent with the SF Bay Plan, taken as a whole, even though it may appear to be inconsistent with specific policies within the plan. BCDC would typically determine a project's consistency at the project (rather than program) level.

Potential BCDC jurisdiction over the BDPL Reliability Upgrade project (BD-1) is already identified in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration during project-level CEQA review. Based on project-specific information regarding the siting, design, construction, and operation of the BD-1 bay tunnel segment, the project-level EIR for this project will evaluate BCDC's jurisdictional authority and summarize the applicable policies of the SF Bay Plan. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2), for more information on the issues raised by this comment.

As requested by the commenter, the text of the Draft PEIR has been augmented to further describe BCDC's jurisdictional authority and the types of Bay Plan

policies that could be applicable to the BDPL Reliability Upgrade project (BD-1). The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-8, last sentence of the second paragraph) is revised as follows:

**San Francisco Bay Conservation and Development Commission,
San Francisco Bay Plan**

The San Francisco Bay Plan (SF Bay Plan), prepared by the San Francisco Bay Conservation and Development Commission (BCDC) in 1968 in accordance with the McAteer-Petris Act of 1965, is an enforceable plan that guides the protection and use of San Francisco Bay and its shoreline (BCDC, 2005). Under the McAteer-Petris Act, BCDC has the authority to issue or deny permit applications for placing fill, extracting materials, or changing the use of any land, water, or structure within the area of its jurisdiction and to enforce policies aimed at protecting the bay and its shoreline.^{3a} The SF Bay Plan designates shoreline areas that should be reserved for water-related purposes like ports, industry, public recreation, airports, and wildlife refuges. Since its adoption by BCDC in 1968, the SF Bay Plan has been amended periodically to keep pace with changing conditions and to incorporate new information concerning the bay. The new Bay Division Pipeline Tunnel No. 5 proposed under the BDPL Reliability Upgrade project (BD-1) includes approximately five miles of tunnel under the Don Edwards San Francisco Bay Wildlife Refuge, Newark Slough, and San Francisco Bay. The pipeline would be buried between 100 and 150 feet below mean sea level and result in approximately 355,000 cubic yards of bay mud excavation/spoils. As a result, this project could be subject to ~~certain provisions~~ SF Bay Plan policies concerning the placement of fill in the bay, dredging, public access, and other policies and provisions contained in the SF Bay Plan (BCDC, 2005), depending on the final siting, construction, and operation of the BDPL Reliability Upgrade project.

^{3a} BCDC has jurisdiction over all of San Francisco Bay up to mean high tide, areas of marsh up to 5 feet above mean sea level, a shoreline band lying 100 feet inland from the bay, as well as salt ponds, managed wetlands, and certain waterways.

In addition, the following text is added to the Draft PEIR (Vol. 2, p. 4.2-16, fourth full paragraph):

San Francisco Bay Plan

Implementation of the Bay Division Pipeline Reliability Upgrade project (BD-1) includes construction of a tunnel to replace aboveground pipelines located in San Francisco Bay. Depending on the final scope of work undertaken with respect to this project, SF Bay Plan policies could be relevant to the project. The proposed five-mile tunnel under Don Edwards San Francisco Bay Wildlife Refuge, Newark Slough, and San Francisco Bay is generally straight, which provides for ease in constructability, but is also designed to minimize environmental disruption, particularly with respect to protected species. Programmatic

mitigation measures described in Chapter 6, if determined to be applicable, identify measures to protect and restore natural resources and habitats, including special-status species. Compliance with BCDC permitting requirements and consideration of applicable SF Bay Plan policies would also ensure that relevant policies of the SF Bay Plan are addressed and carried out to minimize environmental effects on the bay. The WSIP would, on the whole, be consistent with policies contained in the SF Bay Plan.

- L_BCDC-03** As indicated in **Response L_BCDC-02**, the Draft PEIR impact analysis of the WSIP facility improvement projects does not discuss the individual policies of local and regional plans because their applicability cannot be determined until more detailed information on siting, design, construction, and operation is available for each project. Instead, the Draft PEIR seeks to provide the reader and decision-makers with an overview of the jurisdictional purview and permitting authority of federal, state, regional, and local agencies (Vol. 1, Chapter 3, p. 3-86; Vol. 5, Appendix C, p. C-26), and an overview of policies that could be applicable to the program (Vol. 2, Chapter 4, p. 4.2-1).

The Regulatory and Conservation Planning Framework section in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.6-23 to 4.6-25) describes the federal and state laws pertaining to the protection of endangered species, as defined by the Federal Endangered Species Act, California state law (Fish and Game Code Sections 3511, 4700, 5050, and 5515), and the California Native Plant Protection Act, and other statutes, codes, and policies affording limited species protection under federal and state laws. Whereas BCDC relies on its policies related to fish, other aquatic organisms, and wildlife; tidal marshes and tidal flats; and salt ponds in reviewing permit applications for bay lands within its jurisdiction, the statutes and government codes described in the Draft PEIR identify specific endangered species and set forth legal requirements for the preservation and protection of these species. The BCDC policies cited by the commenter provide guidance for the protection of fish and wildlife and their habitats that are generally consistent with the legal statutory requirements for the protection and preservation of rare or endangered biological resources. However, since these BCDC policies are not laws or statutes, they are not included in the Draft PEIR regulatory discussion.

Potential BCDC jurisdiction over the BDPL Reliability Upgrade project (BD-1) is already identified in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for this project. Although it is premature to list pertinent BCDC plans and policies for the above reasons, the following discussion of BCDC jurisdiction and policies is added to the PEIR (Vol. 2, Chapter 4, p. 4.6-33, before the second full paragraph):

Local Laws, Regulations, and Policies Applying to Natural Resource Protection

The San Francisco Bay Conservation and Development Commission (BCDC) was formed in 1969 under the McAteer-Petris Act to regulate development in and around San Francisco Bay. BCDC developed the San Francisco Bay Plan to guide the wise use of the bay's water and shorelines. In reviewing permit applications for projects within its jurisdiction, BCDC relies on its Bay Plan policies to ensure the protection of habitats and biological resources, including fish, other aquatic organisms, and wildlife, and water quality; as well as policies on uses of the bay and shoreline.

- L_BCDC-04 The commenter requests that the PEIR address whether the additional Tuolumne River diversions under the proposed program would conflict with the freshwater inflow policies in the Bay Plan. Any indirect effects of the WSIP on salinity in San Francisco Bay would be contingent on any WSIP-related changes in salinity due to reduced Delta inflow. The Draft PEIR analysis of impacts on flow and water quality along the Delta region first evaluated the changes in flow that would occur with the WSIP, and then estimated changes in water quality and temperature. The WSIP's impacts on flow in the Delta region are analyzed under Impact 5.3.1-5: Effects on flow along the San Joaquin River and the Sacramento–San Joaquin Delta (Vol. 3, Chapter 5, pp. 5.3.1-38 and 5.3.1-39), and the related effects on water quality are analyzed under Impact 5.3.3-2: Effects on water quality along the San Joaquin River and Sacramento–San Joaquin Delta (Vol. 3, Chapter 5, pp. 5.3.3-19 and 5.3.3-20). Based on the Draft PEIR finding that the WSIP's effects on flow and water quality in the Delta would be less than significant, the WSIP would not result in significant effects on flow farther downstream into San Francisco Bay. In response to this comment, several revisions have been made to Section 5.2 of the PEIR to clarify WSIP consistency with BCDC's freshwater inflow policies.

The following row is added to Table 5.2-1 (Vol. 3, Chapter 5, pp. 5.2-3 to 5.2-5, under the State of California heading):

The following paragraph is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-12, under the State Statutes and Agreements heading, above Porter-Cologne Water Quality Control Act):

McAteer-Petris Act

The McAteer-Petris Act was passed by the state legislature in 1965 to promote responsible planning and regulation of San Francisco Bay. The act designates the San Francisco Bay Conservation and Development Commission (BCDC) as the agency responsible for maintaining and carrying out the provisions of the act and the SF Bay Plan (for additional information on the act, see Chapter 4, Section 4.2, p. 4.2-8).

TABLE 5.2-1
 APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES AND AGREEMENTS

Statute or Agreement / Responsible Agency ^a	Summary Description	Associated Statutes and Plans	Applicability to WSIP Water Supply and System Operations Issues
State of California <u>McAteer-Petris Act / BCDC</u>	Promotes responsible planning and regulation of San Francisco Bay. Establishes BCDC as the agency responsible for carrying out the provisions of the act and of the <u>SF Bay Plan</u> .	<u>San Francisco Bay Plan</u>	Described in Section 5.2.3 and evaluated in Section 5.2.4 for consistency. Analyzed in Section 5.3.3.

The following paragraph is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-12, under the Local and Regional Agencies heading, above City and County of San Francisco):

San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) is the agency responsible for maintaining and carrying out the provisions of the McAteer-Petris Act and the SF Bay Plan. In the public interest, BCDC is authorized to control bay filling and dredging and bay-related shoreline development. Due to the regulatory authority of the State Water Resources Control Board (SWRCB), San Francisco Bay Regional Water Quality Control Board, U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers, BCDC's scope of authority over water quality issues is limited. (For additional information on BCDC's regulatory authority, see Chapter 4, Section 4.2, p. 4.2-8.)

The following paragraph is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-20, above Regional Habitat Conservation Plans):

San Francisco Bay Plan

The SF Bay Plan, completed and adopted by BCDC in 1968, is an enforceable plan that guides the protection and use of San Francisco Bay and its shoreline. For a discussion of the SF Bay Plan's applicability to individual WSIP facility projects, see Section 4.2 (Vol. 2, Chapter 4, p. 4.2-16).

The SF Bay Plan is founded on the belief that water quality in San Francisco Bay will be maintained at levels sufficiently high to protect the beneficial uses of the bay. The SF Bay Plan includes findings and policies related to freshwater inflow and changes in salinity. The freshwater inflow findings contained in the SF Bay Plan stress the importance of maintaining a balance between fresh and saltwater. The related policies assert that the impact of freshwater diversions should be monitored by the SWRCB to ensure compliance with water quality standards.

The second paragraph in Section 5.2.4 of the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-27, under the heading Consistency with Regional Natural Resource Protection Plans) is revised as follows:

Consistency with Regional Natural Resource Protection Plans

WQCPs [water quality control plans] identify water quality issues and prescribe enforceable water quality objectives/criteria for specific water bodies and their tributaries. Because these standards are based on designated beneficial uses of the respective waterways, violation of the water quality objectives/criteria can adversely affect fish, wildlife, and other protected resources. SFPUC operations currently comply with water quality standards contained in the WQCPs, and the WSIP goals and objectives would be consistent with the applicable WQCPs. Further, as future SFPUC operations would be consistent with the water quality standards contained in the WQCPs, SFPUC operations would also be consistent with the SF Bay Plan freshwater inflow policies. The potential impacts of WSIP implementation on water quality in the Tuolumne River watershed and Sacramento–San Joaquin Delta, Alameda Creek watershed, Peninsula watershed, and Westside Groundwater Basin are analyzed in Sections 5.3.3, 5.4.3, 5.5.3, and 5.6, respectively.

- L_BCDC-05 All pertinent BCDC plans and policies, including policies related to the safety of fill materials and sea level rise, will be evaluated as part of the project-level CEQA review for each WSIP facility project, including the BDPL Reliability Upgrade project (BD-1).

The Draft PEIR's Regulatory Framework discussion in Section 4.5, Hydrology and Water Quality (Vol. 2, Chapter 4, p. 4.5-9) addresses federal laws under the Clean Water Act and the California Water Code. Additionally, the Regional Water Quality Control Board regulates water under the federal Porter-Cologne Water Quality Control Act. The policies of local agencies are not discussed in this section because it addresses the statutory requirements and regulations pertaining to water quality. With respect to listing individual BCDC policies in the text of the Draft PEIR, please refer to **Response L_BCDC-02**.

City of Brisbane, Randy Breault, Director of Public Works, 9/27/07

- L_Brisbane-01 This comment, which supports the need of the SFPUC to meet the seismic and reliability goals of the WSIP in a timely manner, is acknowledged.
- L_Brisbane-02 The opinion of the commenter in support of the Modified WSIP Alternative as the preferred alternative is acknowledged.
- L_Brisbane-03 In response to this comment, the City of Brisbane has been removed entirely from Draft PEIR Table 3.11, WSIP Improvement Projects – Affected Jurisdictions (Vol. 1, Chapter 3, p. 3-60). The table is revised as follows:

<u>Affected County and City Jurisdictions</u>	<u>SF-2, Groundwater Projects</u>
Brisbane	✕

- L_Brisbane-04 This comment correctly summarizes information presented in Draft PEIR Chapter 7 and Appendix E and supplements information on the demographic projections used to develop Brisbane and Guadalupe Valley Municipal Improvement District's 2030 water demand; it also provides additional information regarding the City's water conservation and smart growth efforts for future development. This comment is acknowledged.
- L_Brisbane-05 This comment is not inconsistent with, and expands on, demand information for Brisbane and Guadalupe Valley Municipal Improvement District presented in the Draft PEIR (Vol. 5, Appendix E, pp. E.2-5 to E.2-19).
- L_Brisbane-06 This comment provides information on Brisbane's involvement in the South San Francisco–San Bruno Recycled Water Feasibility Study since the *Wholesale Customer Recycled Water Potential Technical Memorandum* was prepared. This comment is acknowledged.

City of Burlingame Public Works Department, Syed Murtuza, Director of Public Works, 9/20/07

- L_Burlgme-01 The 2030 purchase estimate of 4.70 mgd (not 4.68 as stated in this comment) shown in the Draft PEIR (Vol. 1, Table 3.3, p. 3-18 and Vol. 4, Tables 7.2 and 7.3, pp. 7-15 and 7-18) is based on the “Wholesale Customer Best Estimate of Water Purchases from the SFPUC” form submitted by the City of Burlingame (dated November 8, 2004) to the SFPUC, and is also reflected in the *SFPUC 2030 Purchase Estimate Technical Memorandum* (URS, 2004b). This comment indicates that the City of Burlingame has updated its 2030 demand projection since the WSIP planning effort, and that its purchase estimate has increased by approximately 0.35 mgd (to 5.03 mgd). Comment noted. This updated projection does not alter the analysis or conclusions presented in the Draft PEIR. The demand projections and associated purchase estimates will evolve somewhat over time; the City’s change is reflective of this fact.
- L_Burlgme-02 The opinion of the commenter supporting WSIP Variant 3 – 10% Rationing is acknowledged. However, the commenter should note that Draft PEIR Table 8.2 (Vol. 4, Chapter 8, p. 8-5) compares the frequency of rationing that would occur under the proposed program and Variant 3 based on the hydrologic modeling over the 82-year hydrologic record, and the results indicate that the difference between the proposed program and Variant 3 would be slight. As shown on the table, there would be 8 out of the 82 years that systemwide rationing would be required under the WSIP, with 2 years of 20 percent rationing and 6 years of 10 percent rationing. Variant 3 would also require systemwide rationing for 8 of the 82 years, although rationing would be at 10 percent for all 8 years. Thus, the only difference between the proposed program and Variant 3 would be that for 2 years out of 82, the proposed program would required 20 percent systemwide rationing instead of 10 percent.
- The commenter’s statement that Variant 2 would require 20 percent rationing in 5.5 years of an 8-year drought is in error; Variant 2 – Regional Desalination for Drought would have the same frequency of 20 percent rationing as the proposed program, or 3.5 years of an 8-year drought. Variant 1 – All Tuolumne would require 20 percent rationing in 5.5 years of an 8-year drought.
- The Draft PEIR (Vol. 4, Chapter 9, p. 9-27) discusses feasibility issues related to demand hardening and the increasing difficulty of achieving rationing goals as more and more long-term conservation measures are implemented.

California Water Service Company, Thomas Salzano, Water Resources Planning Supervisor, 9/28/07

- L_CalWater-01 This comment, which expresses Cal Water's support of the WSIP goals and objectives, is acknowledged.
- L_CalWater-02 This comment, which expresses support for the WSIP's conjunctive-use program in the Westside Groundwater Basin, is acknowledged.
- L_CalWater-03 This comment, which notes that the projected growth presented in the Draft PEIR is consistent with current projections, that future growth will be redevelopment in existing neighborhoods, and that per-capita water demand has remained constant, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_CalWater-04 This comment, which expresses support for increasing the reliability and availability of locally produced water and for implementation of the Calaveras Dam Replacement project (SV-2), is acknowledged.
- L_CalWater-05 This comment, which describes Cal Water's support for increasing the use of recycled water and its efforts in this regard, is noted.

Contra Costa Water District, Leah Orloff, Senior Water Resources Specialist, 10/1/07

- L_CCWD-01 This comment requests additional information on Delta water quality effects. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for additional discussion of the WSIP's effects on Delta water quality analyzed in the PEIR.
- L_CCWD-02 This comment also requests additional information on Delta water quality effects and potential effects on the CCWD. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for additional discussion of the WSIP's effects on Delta water quality analyzed in the PEIR.

Coastside County Water District, Joe Guistino / Cathleen Brennan, Interim General Manager / Water Resources Analyst, 9/24/07

- L_CoastsideCWD-01 This comment expressing Coastside County Water District's (Coastside CWD) support of the WSIP's goals and objectives is acknowledged.
- L_CoastsideCWD-02 The comment regarding the status of the noncontiguous areas of the Coastside CWD is acknowledged. In response to this comment, revisions have been made to the three identical figures, Figure S.2 (Vol. 1, Summary, p. S-4), Figure 3.2 (Vol. 1, Chapter 3, p. 3-6), and Figure 7.1 (Vol. 4, Chapter 7, p. 7-20); an asterisk has been placed next to the labels to these noncontiguous areas, and the following footnote added:
- Portions of Coastside County Water District not served by the SFPUC regional water system.
- The revised figures can be found in Volume 7, Chapter 16, Staff-Initiated Text Changes.
- L_CoastsideCWD-03 This comment expressing Coastside CWD's support of the WSIP's goals and objectives is acknowledged.
- L_CoastsideCWD-04 The commenter notes that proposed Mitigation Measure 5.5.3-2 would involve the development of a revised operations plan for the SFPUC's facilities in the Pilarcitos Creek watershed (Vol. 4, Chapter 6, p. 6-56). With Measure 5.5.3-2 in place, the SFPUC would operate its Pilarcitos Creek facilities much as it does under existing conditions. After publication of the Draft PEIR, the SFPUC determined that Measure 5.5.3-2 would be technically challenging to implement, and that more practical solutions were available. As described in Vol. 7, Chapter 13, Section 13.3, replacement mitigation measures were developed that would reduce the impacts of the WSIP in the Pilarcitos Creek watershed to a less-than-significant level. The request that the SFPUC coordinate development of revised operations plans in the Pilarcitos Creek watershed with Coastside CWD is acknowledged.
- L_CoastsideCWD-05 Coastside CWD's request to be involved in the development of the adaptive management program for Crystal Springs Reservoir, which will be developed as part of the operations phase of the Lower Crystal Springs Dam Improvements (WSIP facility improvement project PN-4), is acknowledged. The purpose of the adaptive management program is to protect biological resources in and around the reservoir. With the WSIP,

the storage capacity and maximum water surface elevation in Crystal Springs Reservoir would increase compared to the existing condition. The Draft PEIR concludes that biological resources in the zone between the existing maximum water level and the future (with-WSIP) maximum water level could potentially be harmed by inundation (Vol. 3, Chapter 5, Sections 5.5.5 and 5.5.6). The adaptive management program would involve the development of reservoir management practices that take advantage of the increase in reservoir capacity but also protect biological resources around the existing reservoir perimeter (Mitigation Measures 5.5.6-1a and 5.5.6-1b). It is not expected that the portion of the adaptive management program that deals with maximum water surface elevations would have any effect on Coastside CWD's water supply from Crystal Springs Reservoir.

Biological resources around the perimeter of the reservoir could also be harmed during the periodic drawdown of the reservoir during maintenance of the transmission system from the Tuolumne River; therefore, the adaptive management program would address effects on biological resources due to low as well as high water levels. During maintenance of the transmission system, which would typically occur about every five years in November and December, the water needs of San Francisco and its suburban customers would be met from the local reservoirs. Coastside CWD has two water intakes at Crystal Springs Reservoir at elevations of 245 feet and 265 feet above sea level. With the WSIP and during maintenance of the transmission system, the water level in the reservoir could occasionally fall to about the elevation of the higher intake. During such times, Coastside CWD would be able to obtain water from the reservoir using the lower intake.

In response to this comment, Coastside CWD has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of certain WSIP projects. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for a discussion of coordination with Coastside CWD.

L_CoastsideCWD-06 Please refer to **Response L_CoastsideCWD-20**, below.

L_CoastsideCWD-07 The commenter notes that infrastructure limitations prevent Coastside CWD from taking water from Pilarcitos Creek and Crystal Springs Reservoir simultaneously. Accordingly, in response to this comment, the Draft PEIR (Vol. 1, Chapter 2, p. 2-24, last paragraph, next to last sentence) is revised as follows:

.... In the summer months, when Coastside CWD's water demand is at its seasonal maximum, its water supply from Pilarcitos Creek ~~is supplemented by water pumped from Crystal Springs Reservoir.~~ becomes insufficient to meet its needs. At that point, Coastside CWD ceases diversions from Pilarcitos Creek and obtains its water by pumping from Crystal Springs Reservoir.

L_CoastsideCWD-08 As noted by the commenter, the Draft PEIR describes current actions by the SFPUC in making experimental releases in Pilarcitos Creek below Stone Dam (Vol. 1, Chapter 2, p. 2-24, and Chapter 3, p. 3-43). The Draft PEIR also includes a description of the SFPUC's current participation with the Pilarcitos Creek Restoration Workgroup, of which Coastside CWD is a member (Vol. 3, Chapter 5, p. 5.2-21). Coastside CWD's request to be involved with the SFPUC's decisions regarding changes to its physical system and operations in the Pilarcitos Creek watershed is acknowledged.

L_CoastsideCWD-09 This comment expressing Coastside CWD's support for optimizing water storage in the Peninsula watershed is acknowledged.

L_CoastsideCWD-10 This comment stating Coastside CWD's participation in the Pilarcitos Creek Restoration Workgroup, which is preparing the Pilarcitos Creek Integrated Watershed Management Plan, is noted. This information is included in the Draft PEIR under the description of the Pilarcitos Creek Integrated Watershed Management Plan (Vol. 3, Chapter 5, p. 5.2-21).

L_CoastsideCWD-11 As part of its current operations, the SFPUC attempts to limit releases to Pilarcitos Creek after Pilarcitos Reservoir has filled to the amount of water needed by Coastside CWD. This is because the SFPUC prefers to divert water from Pilarcitos Creek to the San Mateo Creek watershed from Pilarcitos Reservoir rather than from Stone Dam. Water diverted at Pilarcitos Reservoir flows by gravity to San Andreas Reservoir, but water diverted at Stone Dam flows to the lower elevation Crystal Springs Reservoir. Ultimately, water in Crystal Springs Reservoir must be pumped to San Andreas Reservoir for treatment and distribution to customers. Energy costs are minimized if the SFPUC's Pilarcitos Creek water is diverted directly to San Andreas Reservoir.

Although it is the SFPUC's goal to limit releases to Pilarcitos Creek after Pilarcitos Reservoir has filled to the amount of water needed by Coastside CWD, this goal may not always be achieved because the two diversions cannot be operated to precisely correspond to runoff resulting from changing hydrologic conditions. Also, during periods when the SFPUC is making experimental releases of water below Stone Dam, the source of the releases is Pilarcitos Reservoir. At such times, releases

from Pilarcitos Reservoir would be at least the sum of Coastside CWD's water needs and the experimental releases.

In response to this comment, the Draft PEIR (Vol. 3, Chapter 5, p. 5.5.1-9, third full paragraph, last sentence) is revised as follows:

... After the reservoir has filled, the ~~only water~~ SFPUC attempts to limit releases from Pilarcitos Reservoir is to that amount requested by Coastside CWD to meet its water needs. However, at times, additional water may be released from Pilarcitos Reservoir and diverted to Crystal Springs Reservoir at Stone Dam or released from Stone Dam (see discussion below regarding experimental releases from Stone Dam to Pilarcitos Creek).

- L_CoastsideCWD-12 Please refer to **Response L_CoastsideCWD-07**.
- L_CoastsideCWD-13 With the WSIP as originally proposed, the SFPUC planned to serve a portion of Coastside CWD's increased water demand with water from Pilarcitos Creek. However, as described in Section 13.3 (Vol. 7, Chapter 13), subsequent to the publication of the Draft PEIR, the SFPUC refined its assumptions for the Pilarcitos facilities operations. Under the WSIP, the SFPUC now plans to supply most of Coastside CWD's increased demand with water from Crystal Springs Reservoir.
- L_CoastsideCWD-14 The commenter notes that, under existing conditions, Coastside CWD already maximizes its use of water from Pilarcitos Creek. During the rainy season, natural runoff in Pilarcitos Creek provides sufficient water to meet Coastside CWD's needs. As runoff decreases in the late spring and early summer, water is released from Pilarcitos Reservoir to supplement natural runoff and to meet Coastside CWD's needs. At some time during some summers, storage in Pilarcitos Reservoir becomes depleted, reservoir releases are curtailed, and insufficient water reaches Stone Dam to meet Coastside CWD's needs. At that time, Coastside CWD ceases diversions from Pilarcitos Creek and is served water from Crystal Springs Reservoir.

As one of the replacement mitigation measures for potential impacts on Pilarcitos watershed resources (see Vol. 7, Chapter 16), the SFPUC would install a pumping station at Pilarcitos Reservoir, which would enable it to access additional storage in the reservoir and to maintain flow in Pilarcitos Creek during the summer of dry years. The purpose of the pumping station would be to maintain sufficient flow in the creek to protect biological resources. It would not likely affect the proposed system operations under the WSIP, including the date on which the

SFPUC would begin supplying Coastside CWD from Crystal Springs Reservoir rather than from Pilarcitos Creek.

As described in the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-21), the SFPUC is a participant in the Pilarcitos Creek Restoration Workgroup, which is developing the Pilarcitos Creek Integrated Watershed Management Plan. Consideration of this plan is included in the determination that the cumulative effects of the WSIP water supply and system operations on the Pilarcitos Creek watershed would be less than significant (Vol. 3, Chapter 5, pp. 5.7-80 to 5.7-84). Also refer to **Responses L_CoastsideCWD-08** and **L_CoastsideCWD-13**.

L_CoastsideCWD-15 The Draft PEIR considers the possibility that the increase in maximum storage capacity of Crystal Springs Reservoir and the altered operations to take advantage of the increased storage capacity (both of which are part of the WSIP) could adversely affect water quality (Vol. 3, Chapter 5, pp. 5.5.3-5 and 5.5.3-6). However, this is a possible effect rather than a certain consequence of the WSIP. The possible effect was identified in two studies conducted for the SFPUC by Merritt-Smith Consulting and other consultants in 2002 and 2006 (see Vol. 3, Chapter 5, Section 5.5.3 for the complete references).

The Draft PEIR describes a chain of events that could increase algae concentrations in Crystal Springs Reservoir. For algae concentrations to increase, two phenomena—neither of them certain—would have to occur. The proportion of Hetch Hetchy water in Crystal Springs Reservoir would have to increase compared to the existing condition, and phosphorous concentrations would also have to increase.

If the proportion of Hetch Hetchy water in Crystal Springs Reservoir increased compared to the existing condition, nitrogen concentrations in the reservoir water could increase. Hetch Hetchy water contains more nitrogen (a plant nutrient) than local runoff because Hetch Hetchy water has been disinfected with chloramine (which contains nitrogen) prior to discharge into Crystal Springs Reservoir. With the WSIP, it is expected that the proportion of Hetch Hetchy water in the reservoir would be about the same as it is under the existing condition most of the time, but it is possible that it could increase at times.

Algae growth in Crystal Springs Reservoir has historically been limited by both nitrogen and phosphorous concentrations. After the SFPUC began disinfecting Hetch Hetchy water with chloramine, and thereby adding nitrogen, phosphorous became the limiting nutrient. Without a change in phosphorous concentrations, a WSIP-induced increase in nitrogen concentrations would have no effect on algae growth. A WSIP-

induced increase in phosphorous concentrations could occur if the increase in water depth attributable to the WSIP resulted in more stable thermal stratification, oxygen depletion in deeper waters, and a consequent release of phosphorous from sediments. If an increase in phosphorous concentration occurred at the same time the amount of Hetch Hetchy water with higher nitrogen concentrations increased, then the WSIP could increase the growth of algae. However, it should be noted that the relationship between nutrient levels and algae growth is extremely difficult to predict, so it is uncertain that the chain of events described above would in fact result in increased algae growth.

If the WSIP is implemented, it would likely be many years, if ever, before it could be determined whether WSIP-induced changes had affected algae concentrations in the reservoir. The SFPUC routinely monitors water quality in its reservoir, but any changes in reservoir water quality attributable to the WSIP are likely to be small and difficult to distinguish from changes attributable to other factors (weather, conditions in the watersheds, etc.). As described in the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-5), the SFPUC's *Peninsula Watershed Management Plan* provides a policy framework for decisions regarding activities that are appropriate on watershed lands. The primary goal of the plan is to maintain and improve source water quality to protect public health and safety, and, as Policy WQ3 specifically states, to minimize nutrient loading to the water supply. Thus, management of nutrient loading and water quality in Crystal Springs Reservoir is part of the SFPUC's ongoing operations and maintenance practices.

The SFPUC shares Coastside CWD's concerns with respect to algae concentrations and, should they become problematic for whatever reason, would take appropriate corrective action in order to maintain high water quality for all of its customers.

- L_CoastsideCWD-16 The Draft PEIR describes current actions by the SFPUC in making experimental releases in Pilarcitos Creek below Stone Dam (Vol. 1, Chapter 3, p. 3-43), due in part to the concerns of the National Marine Fisheries Service. Please refer to **Response L_CoastsideCWD-08**. The SFPUC acknowledges Coastside CWD's request to be involved in any activities that affect Pilarcitos Creek. The SFPUC currently has no plans to modify Stone Dam.
- L_CoastsideCWD-17 This comment correctly points out that the Pilarcitos Creek watershed and Pilarcitos Creek, as delineated in Draft PEIR Figure 5.5.1-1 (Vol. 3, Chapter 5, p. 5.5.1-2), are not within the boundaries of the Golden Gate National Recreation Area. However, while it is true that no recreational

activities are allowed in Pilarcitos Reservoir or in the Pilarcitos Creek watershed, recreational uses are present along Pilarcitos Creek in the vicinity of Half Moon Bay State Beach. The following text changes are made to the Draft PEIR (Vol. 3, Section 5.5.7, p. 5.5.7-3, first full paragraph):

Pilarcitos Creek starts at Pilarcitos Reservoir within the SFPUC Peninsula watershed. No water recreation or access to this reservoir is allowed. The creek runs south until it reaches Highway 92, then runs west ~~through portions of the Golden Gate National Recreation Area (GGNRA) and Rancho Corral de Tierra~~ to its mouth on the Pacific Ocean within Half Moon Bay State Beach. ~~Numerous public trails throughout the GGNRA and Rancho Corral del Tierra provide access to Pilarcitos Creek.~~ No organized recreational activities are established within or adjacent to the creek in the upper watershed. However, trails within Half Moon Bay State Beach run adjacent to and across Pilarcitos Creek, and the public is allowed access to portions of the this stretch of the creek (Bay Area Hiker, 2007).

- L_CoastsideCWD-18 The San Francisco Planning Department acknowledges Coastside CWD's request for involvement in developing the revised operations plans for Pilarcitos watershed facilities, as described in Mitigation Measure 5.5.3-2 (Vol., 4, Chapter 6, p. 6-56). As described in the response to L_CoastsideCWD-04 above, Measure 5.5.3-2 has been replaced by several other mitigation measures (see Vol. 7, Chapter 13, Section 13.3 for more information).
- L_CoastsideCWD-19 This comment, which describes growth management provisions in the Coastside CWD service area, the challenges of projecting population growth, the limitations on use of local water supply sources, and the agency's increased reliance on the SFPUC to meet future water demand, expands on the information presented in the Draft PEIR and is acknowledged.
- L_CoastsideCWD-20 The determination that the WSIP would support a degree of growth above that planned for in the Half Moon Bay 1993 *Local Coastal Program Land Use Plan* (the adopted general plan for the city) is based on a comparison of the 2030 population assumed for the Coastside CWD service area in the demand study with the buildout population presented in the *Local Coastal Program Land Use Plan* (shown in Draft PEIR Table 7.8, Vol. 4, Chapter 7, p. 7-28). This comment regarding growth control and limits on service connections in the Coastside CWD service area is consistent with, and expands on, the information presented in the Draft PEIR (Vol. 4, Chapter 7, pp. 7-40 and 7-41).
- L_CoastsideCWD-21 Please refer to **Response L_CoastsideCWD-07**.

- L_CoastsideCWD-22 As noted in **Response L_CoastsideCWD-05**, Coastside CWD has two water intakes at Crystal Springs Reservoir at elevations of 245 feet and 265 feet above sea level. During maintenance of the transmission system from the Tuolumne River, the water level in the reservoir could occasionally fall to about midway between the two intakes. During such times, Coastside CWD would be able to obtain water from the reservoir using the lower intake.
- L_CoastsideCWD-23 This comment expressing concern about alternatives requiring greater than 20 percent rationing is acknowledged. The commenter is correct in noting that two alternatives analyzed in the Draft PEIR—the No Program Alternative and the Aggressive Conservation/Water Recycling and Local Groundwater Alternative with no supplemental Tuolumne River water—would result in water shortages requiring systemwide rationing greater than 20 percent, as shown in Table 9.5 (Vol. 4, Chapter 9, p. 9-13). The No Program Alternative is included in the PEIR analysis because it is required by CEQA; however, as described in Table 9.6 (p. 9-15), it would not meet most of the WSIP objectives. The Aggressive Conservation/Water Recycling and Local Groundwater Alternative is included in the PEIR because it would avoid the potentially significant impacts associated with the WSIP’s increased diversions from the Tuolumne River. However, this alternative to the WSIP would have feasibility issues associated with demand hardening and would fail to accomplish many of the WSIP objectives, as described in the Draft PEIR (Vol. 4, Chapter 9, p. 9-53 to 9-55).
- L_CoastsideCWD-24 The commenter’s concern about alternatives that would fail or partially fail the seismic reliability objective is acknowledged. These alternatives, as identified in Table 9.6 (Vol. 4, Chapter 9, p. 9-14), include the No Program, No Purchase Request Increase, Aggressive Conservation/Water Recycling and Local Groundwater, and Lower Tuolumne River Diversion Alternatives; none of these alternatives were identified as the environmentally superior alternative.
- L_CoastsideCWD-25 Please refer to **Responses L_CoastsideCWD-13** and **L_CoastsideCWD-14**. As the commenter notes, it is expected that with the WSIP, and on average, Coastside CWD would have to switch from its Pilarcitos Creek water source to its Crystal Springs Reservoir water source at an earlier date than it does under the existing condition.
- L_CoastsideCWD-26 The San Francisco Planning Department acknowledges Coastside CWD’s request for the SFPUC to consider making improvements to both the Pilarcitos facilities and Coastside CWD’s Crystal Springs facilities. At this time, the WSIP does not include any facility improvement

projects related to the Pilarcitos facilities or to Coastside CWD's facilities at Crystal Springs Reservoir. However, as noted in Table 4.17-4 (Vol. 2, Chapter 4, p. 4.17-23), the Draft PEIR's cumulative impact analysis identifies two planned non-WSIP SFPUC projects related to Pilarcitos facilities that address improvement issues and increased reliability: the Pilarcitos Pipeline Inspection, and the Pilarcitos Pipeline Replacement.

L_CoastsideCWD-27 The Draft PEIR provides supporting information on Coastside CWD's water sources (Vol. 5, Appendix H2-3, pp. 1 to 16). The information was compiled from various sources, including the water delivery records maintained by SFPUC operators. References for the sources can be found in Appendix H2-3 (Vol. 5, Appendix H).

Coastside CWD's proportional use of its water sources depends on hydrologic conditions in any particular year. In the five-year period from 2001 through 2005, Coastside CWD obtained an annual average of 0.76 million gallons per day (mgd) from its wells and 1.78 mgd from the SFPUC. Of the water supplied by the SFPUC, an annual average of 0.92 mgd was obtained through diversions from Pilarcitos Creek at Stone Dam, and 0.86 mgd was pumped from Crystal Springs Reservoir. The statement in the Draft PEIR that the commenter refers to, "The SFPUC currently serves Coastside CWD primarily from the Pilarcitos Reservoir" is misleading, because in a recent five-year period the SFPUC has supplied Coastside CWD with almost equal amounts of water from Pilarcitos Creek and Crystal Springs Reservoir.

In response to this comment, the Draft PEIR (Vol. 4, Chapter 9, p. 9-90, second full paragraph, third sentence) is revised as follows:

... The SFPUC currently serves Coastside CWD primarily with about equal quantities of water from the Pilarcitos Reservoir Creek and Crystal Springs Reservoir.

As the commenter notes, Coastside CWD already maximizes its use of Pilarcitos Creek water given its current level of demand (about 1.8 mgd from the SFPUC between 2001 and 2005). Under the WSIP, the SFPUC would supply water to meet Coastside CWD's 2030 estimated purchase request, and some of the additional water would be diverted from Pilarcitos Creek. As a result of the increased diversion, Pilarcitos Creek would be subject to certain environmental impacts. The impacts were described in the Draft PEIR; additional information on the impacts is provided in Vol. 7, Chapter 13, Section 13.3. Under the No Purchase Request Increase Alternative, the SFPUC would not attempt to meet Coastside CWD's full 2030 purchase request. It would divert slightly

more water from Pilarcitos Creek than under the existing condition to meet Coastside CWD's demand but less than it would under the WSIP. Consequently, hydrologic changes, and the environmental impacts that stem from the hydrologic changes, in the Pilarcitos Creek watershed under the No Purchase Request Increase Alternative would be less than those that would occur under the WSIP.

City of Daly City, Patricia Martel, City Manager, 10/1/07

- L_DalyCty-01 This comment is an opening statement regarding the City of Daly City's detailed comments presented in Comments L_DalyCty-03 through L_DalyCty-53; refer to **Responses L_DalyCty-03 through L_DalyCty-53** for the specific responses.
- L_DalyCty-02 This background information on Daly City is acknowledged, and provides additional setting information insofar as it relates to how Daly City could be affected by the WSIP as a wholesale customer as well as by the WSIP facility improvement projects shown in Draft PEIR Table 3.11 (Vol. 1, Chapter 3, p. 3-60).
- L_DalyCty-03 This information regarding Daly City's unmetered pipeline connections to the SFPUC regional system and protection of Daly City's municipal wells from contamination is acknowledged. The Draft PEIR includes a program-level analysis of the contamination of drinking water due to groundwater pumping in the Westside Groundwater Basin (Impact 5.6-5, Vol. 3, Chapter 5, pp. 5.6-31 and 5.6-32). The PEIR states that the SFPUC would develop a drinking water source assessment for each of the conjunctive-use wells, and that impacts related to the potential for contamination of one of these wells would be reduced to a less-than-significant level with implementation of Mitigation Measure 5.6-5, Drinking Water Source Assessments for Groundwater Wells (Vol. 4, Chapter 6, p. 6-59). This measure would require development and implementation of a source water protection program for wells that are considered vulnerable to contamination. The project-level CEQA review of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of this impact and will address site-specific information such as that provided by the commenter.
- L_DalyCty-04 This comment describing Daly City's water pricing structure, per-capita demand, and conservation practices is noted. This information is consistent with, and expands on, information in the Draft PEIR and in this Comments and Responses document (see **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** [Vol. 7, Chapter 14] and **Response L_BAWSCA1-28**).
- L_DalyCty-05 This information regarding Daly City's participation in the conjunctive-use and recycled water programs with the SFPUC is acknowledged. The Draft PEIR includes a program-level description of the In-Lieu Recharge Demonstration Study through 2005 (Vol. 3, Chapter 5, p. 5.6-17). The commenter provides updated information regarding the In-Lieu Recharge Demonstration Study through 2007. This updated information corroborates the information used to assess impacts in the Draft PEIR's program-level analysis of groundwater impacts in the South Westside Groundwater Basin (Impacts 5.6-1, 5.6-3, 5.6-4,

5.6-5, and 5.6-6, Vol. 3, Chapter 5, pp. 5.6-23 to 5.6-32). The project-level CEQA review of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of the conjunctive-use program and will address the information provided by the commenter.

- L_DalyCty-06 This comment, which provides information on Daly City's Tertiary Recycled Water Facility and the provision of recycled water to the Olympic Club, Lake Merced, Daly City's Westlake Park, and San Francisco Golf Club, is acknowledged. The Draft PEIR includes a program-level description of the replacement of irrigation pumping with recycled water (Vol. 3, Chapter 5, p. 5.6-8). This supplemental information corroborates the information used to assess impacts in the Draft PEIR's program-level analysis of groundwater impacts in the South Westside Groundwater Basin (Impacts 5.6-1, 5.6-3, 5.6-4, 5.6-5, and 5.6-6, Vol. 3, Chapter 5, pp. 5.6-23 to 5.6-32). The project-level CEQA review of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of the replacement of irrigation pumping with recycled water produced by the North San Mateo County Sanitation District (a subsidiary to Daly City) and will address the information provided by the commenter.
- L_DalyCty-07 This comment summarizes more detailed comments related to seismic risk, conservation, and 10 percent rationing presented in Comments L_DalyCty-08 through L_DalyCty-10; refer to **Responses L_DalyCty-08** through **L_DalyCty-10** for the specific responses.
- L_DalyCty-08 See **Response L_BAWSCA1-02**.
- L_DalyCty-09 This comment on Daly City's projected conservation savings and implementation of Program B is noted. A minor clarification is that the *SFPUC Wholesale Customer Water Conservation Potential Technical Report* (Table 5-1, p. 5-2 in URS, 2004a) indicates a savings of 0.448 million gallons per day (mgd) under Program B for Daly City.
- L_DalyCty-10 During development of the WSIP, the SFPUC Commission considered both 10 percent and 20 percent rationing scenarios, and, as a policy decision, selected the 20 percent maximum systemwide reduction in water service during drought periods for further study (Draft PEIR Vol. 1, Chapter 3, p. 3-14). Thus, under the WSIP, the SFPUC would establish a level of service of up to 20 percent systemwide rationing during extended droughts. The analysis conducted for the Draft PEIR (Vol. 4, Chapter 8, p. 8-5) determined that the frequency of 20 percent rationing under the proposed program over the 82-year hydrologic record would be approximately once in 41 years. The Draft PEIR (Vol. 4, Chapter 9, p. 9-27) discusses feasibility issues related to demand hardening and the increasing difficulty of achieving rationing goals as more and more long-term conservation measures are implemented.

The information regarding Daly City's water consumption rates is acknowledged.

The opinion of the commenter supporting WSIP Variant 3 – 10% Rationing is acknowledged. See **Response L_Burlgme-02** for clarification of the difference between the proposed program and Variant 3.

- L_DalyCty-11 The commenter's interpretation of Figure S.3 (Vol. 1, Summary, p. S-5) is consistent with that used in the Draft PEIR.
- L_DalyCty-12 This comment, which expresses support for the proposed water supply approach to meet the projected 35-mgd increase in average annual purchase requests, is acknowledged.
- L_DalyCty-13 See **Response L_DalyCty-10**.
- L_DalyCty-14 This comment, which expresses Daly City's expectation that it will continue working with the SFPUC toward implementing the conjunctive-use program under the Regional Groundwater Projects (SF-2), is acknowledged.
- L_DalyCty-15 As discussed in the Draft PEIR (Vol. 1, Chapter 3, pp. 3-23 to 3-25), the SFPUC has identified numerous projects for funding through the WSIP bond measure. In addition to the recycled water projects included as part of the WSIP facility improvement project SF-3, there are regional recycled water projects that the SFPUC expects to consider and develop; these projects would be located outside of San Francisco in coordination with other jurisdictions.
- L_DalyCty-16 This suggestion to use stormwater data developed under the joint Daly City/SFPUC Lake Merced Pilot Stormwater Enhancement Project as a baseline if treated stormwater is used for restoration of Lake Merced water levels under the Local Groundwater Projects (a component of WSIP facility project SF-2) is acknowledged, as is the suggestion to use groundwater sampling data around Lake Merced and in Daly City. The Draft PEIR includes a program-level analysis of water quality impacts related to restoration of Lake Merced water levels (Impact 4.5-5, Vol. 2, Chapter 4, pp. 4.5-47 to 4.5-49); the PEIR analysis concludes that water quality impacts related to the addition of treated stormwater to Lake Merced would be potentially significant for the Groundwater Projects (SF-2), but would be reduced to a less-than-significant level with treatment to remove nutrients from stormwater and implementation of groundwater monitoring in the vicinity of Lake Merced (as specified in Mitigation Measure 4.5-5). The suggested stormwater and groundwater data would support the implementation of Measure 4.5-5, and the project-level CEQA review of the Local Groundwater Projects will include a more detailed analysis of baseline stormwater and groundwater quality that addresses the information provided by the commenter.

- L_DalyCty-17 The commenter expresses concurrence with the Draft PEIR significance determinations for impacts related to basin overdraft, potential effects on surface water, and seawater intrusion in the South Westside Groundwater Basin (Vol. 3, Chapter 5, pp. 5.6-23 to 5.6-29). As noted in the comment, the potential for seawater intrusion into the Westside Groundwater Basin would occur in the North Westside Groundwater Basin, north of Lake Merced, as described on p. 5.6-28 of the Draft PEIR.
- L_DalyCty-18 This comment notes that future growth will mainly be infill lots aimed at mixed-use developments, and provides an exhibit showing examples of Smart Growth in Daly City to which this comment refers. Comment acknowledged.
- L_DalyCty-19 This comment regards concerns raised during the scoping process about the development of demand projections, and expresses the commenter's opinion that the appropriate issue is the consistency of the methodology used rather than the availability of newer information. Comment noted. As a point of clarification, in the process of developing future water demand estimates each wholesale customer was asked to select the published population projection source to be used for its service area, as described in the Draft PEIR (Vol. 1, Chapter 3, p. 3-21 and Vol. 4, Chapter 7, p. 7-14). About two-thirds of the wholesale customers selected *Projections 2002*, the Association of Bay Area Governments' (ABAG) current projections series at the time, for their population projections. *Projections 2002* was used as the source of employment projections for all but two of the wholesale customers. For a more detailed discussion of the use of *Projections 2002* and updated forecasts presented in subsequent ABAG projections series, refer to **Responses SI_PacInst-76** and **SI_PacInst-77**.
- L_DalyCty-20 The opinion of the commenter, expressing support for Variant 3 – 10% Rationing and opposition to the No Program and No Purchase Request Increase Alternatives, is acknowledged.
- L_DalyCty-21 This comment, which expresses concern about the Aggressive Conservation/ Water Recycling and Local Groundwater Alternative and describes Daly City's water conservation and recycling projects and efforts related to conjunctive use, is acknowledged.
- L_DalyCty-22 Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative, as well as to **Response L_BAWSCA1-47**.
- L_DalyCty-23 This comment, which addresses consistency in the application of demand projection methodology and the existence of new information or different criteria, is acknowledged. Please refer to **Response L_DalyCty-19**, above.

- L_DalyCty-24 This comment concurring with and expanding on the information presented in the Draft PEIR is noted. Regarding the second paragraph in this comment, Daly City's conservation savings of 0.44 mgd is shown in the referenced table (Table 3.3, Vol. 1, Chapter 3, p. 3-18). As the table shows, conservation savings and the use of groundwater (also shown) are integral elements of the assumed supply mix, along with purchases from the SFPUC, to meet Daly City's projected demand.
- L_DalyCty-25 As discussed in **Response L_DalyCty-24**, conservation and the use of other water supply sources were factored into the purchase estimates.
- L_DalyCty-26 Draft PEIR Table 3.3 (Vol. 1, Chapter 3, p. 3-18), which is referenced in the section cited in this comment, includes a footnote explaining the purchase estimate range submitted by Daly City. This comment does not question the accuracy of the information presented, and the suggested revision would not alter the analysis or conclusions of the PEIR; therefore, no text change is needed.
- L_DalyCty-27 The information regarding the potential for the SFPUC to work with other local agencies to provide recycled water to San Francisco is acknowledged.
- L_DalyCty-28 The referenced description of Package C is the way Package C is defined in *City and County of San Francisco Retail Water Demands and Conservation Potential* (Hannaford and Hydroconsult, 2004, p. 39, second paragraph). The analogous Program C developed in the Draft PEIR for each of the wholesale customers is similarly described in the *SFPUC Wholesale Customer Water Conservation Potential Technical Report*: "Wholesale customers selected measures for Program C based on the full extent of what appeared cost-effective and implementable" (URS, 2004a, p. 4-3, last paragraph). Neither Program C nor Package C consists of any and all conservation measures considered in the respective studies, but rather resulted from a screening process that started with a larger number of potential measures. The process is summarized in the Draft PEIR (Vol. 1, Chapter 3 and Vol. 4, Chapter 7) and described in more detail in Appendix E.2 (Vol. 5, pp. E.2-12 to E.2-15).
- L_DalyCty-29 The commenter states that the use of the term "additional" is an important consideration that distinguishes conjunctive-use pumping under the Regional Groundwater Projects (a component of WSIP facility improvement project SF-2) and normal historical (i.e., municipal) groundwater pumping. This comment is acknowledged and is consistent with the interpretation used in the Draft PEIR. Groundwater pumping under the Regional Groundwater Projects is described in Chapter 3 (Vol. 1, pp. 3-36 to 3-38 and 3-56). The impacts of this proposed conjunctive-use pumping are evaluated in Section 5.6 (Impacts 5.6-1 through 5.6-6, Vol. 3, Chapter 5, pp. 5.6-21 to 5.6-31), while the cumulative impacts of drought-year groundwater pumping under the WSIP combined with municipal groundwater pumping from the South Westside Groundwater Basin are addressed in Impact 5.7.5-2 (Vol. 3, Chapter 5, pp. 5.7-90 and 5.7-91).

L_DalyCty-30 See **Response L_DalyCty-29**.

L_DalyCty-31 The commenter notes that increased pumping by the participating pumpers during a drought year will make more water available to users who do not have alternate water supplies. In response to this comment, the following text from the Draft PEIR (Vol. 1, Chapter 3, p. 3-42, first full paragraph, last sentence) is revised as follows:

In exchange, those customers would increase groundwater pumping during drought periods, thereby reducing the amount of their purchase requests during a drought and ~~creating a temporary reduction system demand~~ making more water available for serving regional water system demand.

L_DalyCty-32 The commenter expresses an expectation that any use of groundwater within San Francisco would remain consistent with Daly City's effort to preserve the Westside Groundwater Basin for municipal purposes—the best and highest use. Table 3.10 of the Draft PEIR, referred to by the commenter, addresses components of each WSIP facility project (Vol. 1, Chapter 3, p. 3-55). Water quality objectives for the Groundwater Projects (SF-2) are addressed at a program level in Section 5.6 of the Draft PEIR and are based on maintaining beneficial uses of the groundwater basin established by the Regional Water Quality Control Board in the Basin Plan (Vol. 3, Chapter 5, p. 5.6-22).

L_DalyCty-33 In response to this comment, the City of Daly City has been added to Table 3.11, WSIP Improvement Projects – Affected Jurisdictions, under SF-3, Recycled Water Projects (Vol. 1, Chapter 3, p. 3-60). The table is revised as follows:

<u>Affected County and City Jurisdictions</u>	<u>SF-3, Recycled Water Projects</u>
<u>Daly City</u>	<u>X</u>

L_DalyCty-34 The comment is correct about the square mileage of the North and South Westside Groundwater Basins, and these areas are provided in the discussion of the Westside Groundwater Basin aquifer system (Vol. 3, Chapter 5, pp. 5.6-4 and 5.6-5).

L_DalyCty-35 This comment, which indicates that the In-Lieu Recharge Demonstration Study is also referred to as the Aquifer Recharge Study, is acknowledged. The name of this study used in the Draft PEIR is consistent with the name used in the Luhdorff and Scalmanini report documenting the results of the study (Luhdorff and Scalmanini, 2005).

L_DalyCty-36 The commenter states that in 2005, the North San Mateo County Sanitation District (a subsidiary of the City of Daly City) delivered a total of 155.24 million gallons of recycled water to golf clubs. This supplemental information supports the program-level description of the replacement of irrigation pumping with recycled water (Vol. 3, Chapter 5, p. 5.6-8). The project-level CEQA review of

the Regional Groundwater Projects (SF-2) will include a more detailed analysis of the replacement of irrigation pumping with recycled water produced by North San Mateo County Sanitation District and will address the information provided by the commenter.

L_DalyCty-37 The commenter indicates that Daly City records of historical pumping rates show a range of 278 to 305 acre-feet per year (afy), as opposed to the 120 to 150 afy stated in the Draft PEIR. The City and County of San Francisco acknowledges the information provided by the commenter and will use this and other updated data to refine the ongoing modeling being conducted to identify the potential for adverse conditions in the South Westside Groundwater Basin. The commenter correctly quotes the estimated historical pumping rates by the California Golf Club presented in the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-8, footnote 8); this range is based on studies performed on behalf of the SFPUC (Luhdorff and Scalmanini, 2006). While historical groundwater pumping rates and uses were considered to determine the effects of groundwater pumping under WSIP's proposed conjunctive use program (part of the Regional Groundwater Projects, a component of SF-2), this updated information does not affect the impact analysis presented in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.6-23 to 5.6-31) because the proposed groundwater pumping would be conducted consistent with operating agreements between the SFPUC and participating pumpers. The operating agreements would specify that an operating committee be established to develop annual operating and maintenance plans, and monitoring and modeling would be conducted to assess the conjunctive use program's performance and to identify and avoid potential problems. Updated information, such as that provided by the commenter, would be used to inform decisions to modify the recharge or pumping strategy as necessary (Vol. 3, Chapter 5, p. 5.6-26). The project-level CEQA review of the Regional Groundwater Projects will include an updated and more detailed review and analysis of historical pumping in the South Westside Groundwater Basin.

L_DalyCty-38 The commenter suggests identifying the beneficial uses of Lake Merced to provide a better understanding of the intent of the Local Groundwater Projects (a component of SF-2) and also describes the rapid rise in lake levels beginning in the 1930s and the original operation of Lake Merced as a systemwide balancing reservoir. In addition, this comment describes the previous misperception of Lake Merced as a surface expression of groundwater and the current understanding of the interrelationship of Lake Merced and the groundwater system, which indicates that the lake levels are only indirectly connected to the primary production aquifer and can be separately and distinctly managed. This comment is acknowledged.

The Draft PEIR (Vol. 3, Chapter 5, pp. 5.6-13 to 5.6-15) provides background information on Lake Merced as part of the description of existing conditions, and includes a discussion of the historical fluctuation of the lake and the relationship between Lake Merced and the underlying groundwater system. The beneficial uses

of Lake Merced are identified in Table 4.5-1 of the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-10). In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-13, end of third full paragraph) is revised as follows:

However, Lake Merced has not been used as a potable water supply since the 1930s. Refer to Table 4.5-1 for a description of the existing beneficial uses of Lake Merced.

L_DalyCty-39 This comment, which expresses concern that the Draft PEIR discussion may create a misperception that groundwater levels in the Daly City area continue to decline, rather than having reached a stabilized level, is acknowledged. However, the Draft PEIR (Vol. 3, Chapter 5, pp. 5.6-16 and 5.6-17) includes text that should avoid this misperception; it states that: “Along the coastline to the south of Lake Merced, including Fort Funston and Thornton Beach, it appears that faulting and steeply dipping beds of the Merced Formation provide a physical barrier between the South Westside Groundwater Basin aquifer system and the Pacific Ocean; this barrier has prevented seawater intrusion, despite the fact that groundwater levels in Daly City were lowered to over 120 feet below msl prior to implementation of the In-Lieu Recharge Demonstration Study (described in Section 5.6.1.9).”

This statement does not address whether or not groundwater levels had stabilized beneath Daly City, but is intended to demonstrate the effectiveness of the barrier in preventing seawater intrusion, even though groundwater levels were 120 feet below sea level.

The commenter also states that the Draft PEIR should include additional information regarding the physical barrier that prevents seawater intrusion west of the Daly City pumping area, and that seawater intrusion is more likely to the north in San Francisco’s Sunset District, where the physical barrier is thinned out. The presence of the barrier to the west of the Daly City pumping area is discussed at a program level in the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-16) and is one basis for the determination that potential impacts related to seawater intrusion would be less than significant for the Regional Groundwater Projects (SF-2) in the South Westside Groundwater Basin (Impact 5.6-3, Vol. 3, Chapter 5, p. 5.6-29).

The absence of the barrier to the north of Lake Merced is described in the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-16) as follows: “Even though the shallow aquifer in the North Westside Groundwater Basin is in direct connection with the ocean near the coastline, limited development of this portion of the groundwater basin and a groundwater gradient towards the ocean have prevented seawater intrusion in this area, with the exception of temporary effects on the shallow aquifer that occurred during dewatering for construction of the Oceanside Water Pollution Control Plant in the mid-1990s.”

The lack of the barrier in this portion of the groundwater basin is one basis for the determination that potential impacts related to seawater intrusion would be potentially significant for the Local Groundwater Projects (SF-2) in the North Westside Groundwater Basin (Impact 5.6-3, Vol. 3, Chapter 5, pp. 5.6-28 and 5.6-29).

- L_DalyCty-40 This comment, which indicates that the In-Lieu Recharge Demonstration Study is also referred to as the Aquifer Recharge Study, is acknowledged. The name of this study used in the Draft PEIR is consistent with the name used in the Luhdorff and Scalmanini report documenting the results of the study (Luhdorff and Scalmanini, 2005), and reflects the fact that the groundwater basin would be recharged because the SFPUC would provide system water to the participating pumps in-lieu of the municipal pumping that would otherwise occur.

The commenter also provides additional and updated information regarding Daly City's participation in the study from October 2002 to May 2007. The Draft PEIR description of the In-Lieu Recharge Demonstration Study is based on the October 2005 Luhdorff and Scalmanini report (Vol. 3, Chapter 5, p. 5.6-17). The project-level CEQA analysis of the Regional Groundwater Projects (SF-2) will address this updated information provided by the commenter.

- L_DalyCty-41 The commenter suggests revisions to the Draft PEIR description of Daly City's well permitting requirements specified in Chapter 13.20 of the Daly City Municipal Code. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-21, last sentence of third full paragraph) is revised as follows:

Chapter 13.20 of the Daly City Municipal Code specifies well permitting requirements for Daly City, ~~but~~ Although this code does not include provisions related to overdraft of the Westside Groundwater Basin, Section 13.20.070 allows for denial of a permit when the request is judged not to be in the public interest.

- L_DalyCty-42 The commenter suggests clarification to the Draft PEIR description of the delivery of system water during drought conditions. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-25, last sentence of third full paragraph) is revised as follows:

During drought conditions, the SFPUC would be able to reduce the quantity of SFPUC system water delivered to the participating pumps, and the stored groundwater, or banked water, would be available for local use to supplement supplies from the regional water system.

The commenter suggests that to help distinguish conjunctive-use pumping under the Regional Groundwater Projects (SF-2) from historical pumping within the South Westside Groundwater Basin, a clarification should be added to the top of

p. 5.6-26 stating that the conjunctive-use program pumping would be restricted to the amount of banked groundwater. The Draft PEIR already includes this statement in the following description of groundwater withdrawals (Vol. 3, Chapter 5, p. 5.6-26): “*Because groundwater withdrawals would be restricted to the amount of water banked under the Regional Groundwater Projects* [emphasis added], groundwater levels as a result of implementation of the proposed conjunctive-use program would be expected to be consistently in a range higher than those that have resulted from long-term historical groundwater pumping.” A similar statement is included on p. 5.6-29 of the Draft PEIR.

Additionally, the potential cumulative impacts of drought-year groundwater pumping under the WSIP combined with municipal groundwater pumping from the South Westside Groundwater Basin are addressed in Impact 5.7.5-2 (Chapter 5, pp. 5.7-90 and 5.7-91). No further clarification is required to distinguish conjunctive-use pumping from historical pumping within the South Westside Groundwater Basin.

The commenter suggests revisions to footnote 15 on p. 5.6-26 of the Draft PEIR to clarify that conjunctive-use pumping would be conducted in combination with municipal pumping by the participating pumpers. See **Response L_DalyCty-29**. No change to footnote 15 is needed because this footnote addresses only pumping under the proposed Regional Groundwater Projects (SF-2).

L_DalyCty-43 This comment, which states that recycled water was made available from the North San Mateo County Sanitation District, a subsidiary to the City of Daly City, as a substitute irrigation supply, is acknowledged. The Draft PEIR (Vol. 3, Chapter 5, p. 5.7-86) includes a program-level description of the replacement of irrigation pumping with recycled water based on the best information available at the time of preparation of the Draft PEIR. This supplemental information provided by the commenter supports the program-level analysis related to groundwater impacts in the South Westside Groundwater Basin. The project-level CEQA review of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of the replacement of irrigation pumping with recycled water produced by the North San Mateo County Sanitation District and will address the information provided by the commenter

L_DalyCty-44 This comment, which provides clarification that the municipal groundwater pumping during a drought year would be equivalent to Daly City’s historical 3.75 mgd pumping established for the Aquifer Recharge Study from October 2002 to May 2007, is acknowledged. The Draft PEIR includes a program-level description of historical municipal pumping in the South Westside Groundwater Basin (Vol. 3, Chapter 5, p. 5.7-86) based on studies performed on behalf of the SFPUC (Luhdorff and Scalmanini, 2006). This supplemental, updated information provided by the commenter supports the program-level analysis of

groundwater impacts in the South Westside Groundwater Basin. The project-level CEQA review of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of historical pumping from the South Westside Groundwater Basin and will address the updated information provided by the commenter.

The commenter also requests that a reference to Table 4-4 of the Daly City Urban Water Management Plan (UWMP) be included in the Draft PEIR. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-87, first bullet) is revised as follows:

- In its 2005 UWMP, the City of Daly City estimates that future municipal groundwater pumping under the WSIP conjunctive-use program (Regional Groundwater Projects, SF-2) would range from 1.34 mgd (1,501 afy) during a nondrought year when surface water is supplied by the SFPUC to 3.76 mgd (4,212 afy) during a drought year when the city is also allowed to pump its banked groundwater (City of Daly City, 2005). These projected pumping volumes are presented in Table 4-4 of the 2005 UWMP.

L_DalyCty-45 The commenter suggests adding clarification to the second bullet point at the top of p. 5.7-91 of the Draft PEIR to refer to the “program” as the “conjunctive use program.” In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-91, second bullet) is revised as follows:

- Under the proposed conjunctive-use program, the participating pumpers collectively would not be allowed to pump more than the quantity of banked groundwater resulting from the in-lieu delivery of SFPUC system water.

L_DalyCty-46 This comment, which is similar to Comment L_DalyCty-24 and states the City’s concurrence with the Daly City data presented in Draft PEIR Table 7.2, is noted.

L_DalyCty-47 This comment concurring with and expanding on the information presented in Draft PEIR Table 7.3 is noted.

L_DalyCty-48 This comment correctly states that conservation savings (0.44 mgd) are not included in the demand estimate for Daly City shown in Table 7.10. Conservation savings are reflected in the City’s 2030 purchase estimate, which is not shown in this table. Please also refer to **Response L_DalyCty-24**.

L_DalyCty-49 Refer to previous responses in this letter and to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14).

L_DalyCty-50 See **Response L_DalyCty-10**.

L_DalyCty-51 This comment, which states Daly City’s concurrence with and expands on information presented in the Draft PEIR (Vol. 5, Appendix E.1, Table E.1.1,

p. E.1-2, and Table E.2.1, p. E.2-2) and provides similar information to that in Comment L_DalyCty-24, is noted. Information on Daly City's expected groundwater use, and its effects on Daly City's expected purchases, is included in Draft PEIR Table E.2.6 (Appendix E.2, p. E.2-18) as well as in Table 7.2 (Vol. 4, Chapter 7, p. 7-15).

- L_DalyCty-52 This comment, which supplements information on adjustments to the Demand Side Management Least-Cost Planning Decision Support System model for Daly City (described in Draft PEIR Vol. 5, Appendix E.2, p. E.2-7) and describes Daly City's review of local planning efforts in determining future demand estimates, is acknowledged.
- L_DalyCty-53 Daly City's concurrence with the information shown for conservation savings in Draft PEIR Table E.2.4 (Vol. 5, Appendix E.2), and with the explanation for the purchase estimate range in Table E.2.6, is noted. The information presented in Table E.2.5 is based on the *SFPUC Wholesale Customer Recycled Water Potential Technical Memorandum* (RMC, 2004). Demand projections, the use of other sources (including recycled water), and associated purchase estimates will evolve somewhat over time, and the City's update of information on the yield of current and planned recycled water projects is reflective of this fact. The comment correctly notes that the WSIP demand studies considered water supply sources that would offset demand for potable supplies and did not include demand that is exclusively for nonpotable supplies in the baseline and projected future demands. Similarly, the recycled water potential studies distinguished between total recycled water projects and those that would replace potable supplies; only recycled water that would replace potable supplies is shown in the Draft PEIR tables. The information presented in this comment regarding Daly City's other recycled water projects is acknowledged.
- L_DalyCty-54 This comment indicates that the starting point and endpoint values in Draft PEIR Tables E.3.4, E.3.5, and E.3.6 (Vol. 5, Appendix E.3, pp. E.3-6 to E.3-8) are correct, that Daly City records have slight differences in the numbers presented between the period 2005–2025 and 2005–2030, and that the differences are not significant. Comment noted. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_DalyCty-55 This comment concurs with numbers presented in Draft PEIR Table E.3.37 (Vol. 5, Appendix E.3, p. E.3-43) but cautions that the water demand estimate for 2030 does not include water conservation potential consistent with Program B. Comment acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.

Dublin San Ramon Services District, Bert Michalczyk, General Manager, 9/28/07

L_DSRSD-01 The information presented in Draft PEIR Section 3.4.6 (Vol. 1, Chapter 3, pp. 3-23 to 3-25), consists of the projects that the SFPUC had identified for funding through the WSIP bond measure as of the publication of the Draft PEIR in June 2007. As stated in that section, the SFPUC is continuing to develop and refine the WSIP projects. The information provided by the commenter regarding regional interconnecting projects is acknowledged for future consideration by the SFPUC. The SFPUC currently has a number of interties with other Bay Area water agencies, including the Santa Clara Valley Water District and East Bay Municipal Utility District, for use during emergencies or planned maintenance on critical facilities (Vol. 1, Chapter 2, p. 2-12) as part of its overall water supply reliability of existing operations. As described in the Draft PEIR (Vol. 4, Chapter 9, Tables 9.13 and 9.14, pp. 9-104 to 9-110), numerous alternative strategies and concepts were identified, including consideration of regional groundwater and recycling projects and additional interties, many of which were incorporated into the CEQA alternatives analysis in Chapter 9.

East Bay Municipal Utility District, William Kirkpatrick, Manager of Water Distribution Planning, 8/27/07

L_EBMUD-01 This comment, which expresses appreciation for the opportunity to comment on the Draft PEIR and requests that the East Bay Municipal Utility District remain on the project mailing list, is acknowledged.

East Bay Regional Park District, Chris Barton, Senior Planner, 10/1/07

L_EBRPD-01 The commenter is concerned that the WSIP could affect the park user's experience. The significance criteria applied in the Recreational Resources section (Draft PEIR, Vol. 2, Chapter 4, p. 4.12-17) relate to projects that develop recreational facilities and projects that would result in an increase in demand for recreational activities. The City and County San Francisco (CCSF) CEQA Checklist includes an additional significance criterion related to projects that could adversely affect existing recreational resources. Under this third criterion, the Draft PEIR impact analysis considered whether the project would result in: (1) direct removal of or damage to existing recreational resources; (2) indirect impacts such as air quality and noise effects that degrade the quality of the recreational experience; and (3) disruption of access to existing recreation facilities. These topics are typically covered under the Land Use, Aesthetics, Traffic, Air Quality, and Noise sections. The impact analysis in the Draft PEIR takes into account the types of activities described by the commenter that provide park users with recreational experiences at East Bay Regional Park District (EBRPD) facilities as well as recreational facilities throughout the WSIP study area.

Further, Section 15382 of the CEQA Guidelines emphasizes that a significant effect on the environment is a substantial adverse change in the physical condition of the project area. Impacts on the subjective experiences of nature appreciation, hiking, and photography could occur as a result of physical environmental impacts (such as traffic, air quality, noise, park access, biological resources, and visual impacts). Thus, the above-added criteria are intended to tie physical environmental impacts to effects on the recreational experience. The recreational impact analysis in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.12-18 to 4.12-28) considered physical impacts such as siting, construction, and operation of WSIP facilities in the evaluation of impacts on the quality of the recreational experience. One example is the evaluation of the Calaveras Dam Replacement project (SV-2), which considered potential temporary and long-term impacts on visual resources at borrow sites and spoils areas as seen from the Sunol Wilderness Area. The analysis determined this impact to be significant and unavoidable due to the loss of oak woodland and changes in views of affected hillsides from across the reservoir. Thus, this physical impact is identified as significant because it could diminish the recreational experience of hikers and photographers, even though this adverse visual impact would not constitute a physical impact on recreational facilities.

Air quality and noise impacts were noted parenthetically as examples of the types of physical impacts that could adversely affect the recreational experience. Citing

air quality and noise as examples did not preclude or dismiss other types of physical impacts that could disrupt or deteriorate the quality of the park users' experience, such as traffic, land use access, biological resource, and visual resource impacts.

Please refer also to **Response L_EBRPD-02** for further discussion of these issues.

L_EBRPD-02 As discussed in **Response L_EBRPD-01**, under Section 15382 of the CEQA Guidelines, impacts on recreational resources would occur if there were physical effects on recreational facilities, such as physical deterioration or adverse impacts related to the construction or expansion of recreational facilities. The recreational impact analysis (Vol. 2, Chapter 4, pp. 4.12-18 to 4.12-28) considers physical environmental impacts on the recreational experience.

In response to this comment, the following text is added to the Approach to Analysis discussion in Section 4.12, Recreational Resources (Vol. 2, Chapter 4, p. 4.12-18, second full paragraph):

To determine potential direct effects of WSIP projects construction activities and/or land acquisition, project areas were compared with the locations of identified recreational resources. Potential indirect effects on recreational resources were identified through the same means, as well as by reviewing the impact findings from Section 4.3, Land Use and Visual Quality; Section 4.5, Hydrology and Water Quality; Section 4.9, Air Quality; and Section 4.10, Noise and Vibration. Indirect impacts that would typically result from other physical impacts and could adversely affect the recreational experience include the following: removal of vegetation that could alter views (Section 4.3, Land Use and Visual Quality); construction-related noise that could affect hiking or nature appreciation (Section 4.10, Noise); or impeded access to hiking trails (Section 4.8, Traffic, Transportation, and Circulation).

Also refer to **Responses L_EBRPD-03, L_EBRPD-06, L_EBRPD-09, and L_EBRPD-10** for additional discussion of visual, traffic, air quality, and noise impacts on recreational resources.

L_EBRPD-03 The commenter expresses concern regarding the potential impacts of temporarily closing Calaveras Road during construction of the Calaveras Dam Replacement project (SV-2). The Draft PEIR (Vol. 2, Chapter 4, p. 4.12-23) presents a programmatic discussion of the recreational impacts associated with temporary closure of Calaveras Road during the construction period based on a preliminary project description. Because this disruption to recreational access would be temporary and an alternate route into the wilderness area would be available, this impact was determined to be less than significant. This impact determination assumes that the SFPUC would implement the Standard Construction Measures,

including Measure #6 requiring that the contractors prepare a traffic control plan. Programmatic construction-related traffic impacts resulting from implementation of the WSIP as well as other projects in the region are evaluated in Section 4.8, Traffic, Transportation, and Circulation; Section 4.16, Collective Impacts Related to WSIP Facilities; and Section 4.17, Cumulative Effects (Vol. 2, pp. 4.8-10 to 4.8-22; pp. 4.16-33 and 4.16-34; and p. 4.17-61). The PEIR analysis determined that the WSIP projects in the Sunol Valley, either individually or collectively, would have potentially significant impacts on traffic during construction. The Draft PEIR includes Mitigation Measures 4.8-1 and 4.16-6c, requiring coordinated and combined Sunol Valley traffic control plans (Vol. 4, Chapter 6, pp. 6-30 to 6-33), which would further serve to reduce the impacts of the temporary road closure on recreational users.

However, the project-level EIR for the Calaveras Dam Replacement project (SV-2) will analyze access issues and impacts on recreational resources in more detail based on the most up-to-date construction plans and schedule, and will identify additional and/or more specific traffic mitigation measures as appropriate. Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

L_EBRPD-04 The Draft PEIR (Vol. 2, Chapter 4, p. 4.12-23) concludes that at a programmatic level of analysis, implementation of SFPUC Standard Construction Measures #1, #3, #5, and #6 (neighborhood notice, air quality, traffic, and noise) would reduce impacts on recreational resources. In addition, Mitigation Measure 4.8-1a (Vol. 4, Chapter 6, pp. 6-30 and 6-31) and Mitigation Measure 4.16-6c (p. 6-33) provide a programmatic approach to mitigating potential traffic impacts and specify 22 measures that could be included in traffic control plans that will be required to mitigate the impacts of construction vehicle traffic. However, in response to this comment, the EBRPD has been added to Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of certain WSIP projects in the Sunol Valley.

The project-level EIR for the Calaveras Dam Replacement project (SV-2) will analyze the project in more detail based on the most up-to-date construction plans and schedule, and will provide more detailed traffic mitigation measures (including consideration of the commenter's suggested measures to mitigate impacts associated with the temporary closure of Calaveras Road between Geary Road and Felter Road). Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

L_EBRPD-05 The construction schedule information used in the Draft PEIR impact assessment is presented in Table C.4 (Vol. 5, Appendix C, p. C-21), which indicates that construction of the Calaveras Dam Replacement project (SV-2) would occur over a two- to three-year period. Since details regarding the duration of the temporary closure of Calaveras Road between Geary Road and Felter Road were not available at the time of Draft PEIR preparation, the assessment assumed that Calaveras Road would be closed for the duration of the construction period of two to three years as a worst-case scenario. The text in Section 4.3, Land Use and Visual Quality, and Section 4.8, Traffic, Transportation, and Circulation (Vol. 2, Chapter 4, pp. 4.3-15 and 4.8-12) correctly refers to the two- to three-year construction duration. Although this is consistently evaluated in the Draft PEIR, the text describing the construction duration in the Traffic section (Vol. 2, Chapter 4, p. 4.8-22, third full paragraph) has been revised to indicate the “two- to three-year construction duration.” Text changes to this paragraph are indicated under **Response L_EBRPD-06** below.

Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level. The project-level EIR for the Calaveras Dam Replacement project (SV-2) will analyze the project in more detail based on the most up-to-date construction plans and schedule, and will identify additional and/or more specific mitigation measures for significant impacts. Additional details related to the duration of the temporary closure of Calaveras Road between Geary Road and Felter Road and associated impacts will be included in the project-level EIR.

L_EBRPD-06 The programmatic traffic analysis (Vol. 2, Chapter 4, p. 4.8-22) indicates that construction of the Calaveras Dam Replacement project (SV-2) would require closure of Calaveras Road between Geary Road and Felter Road to through-traffic during the two- to three-year construction period. Based on information on the Calaveras Dam Replacement project available at the time the Draft PEIR was prepared, it was not possible to determine the extent to which direct access to EBRPD trails could be restricted during closure of Calaveras Road. The Ohlone Wilderness Trail, located north of Geary Road, could be directly affected, and the Bay Area Ridge Trail connection from the west could be indirectly affected. The Bay Area Ridge Trail connects to the Ohlone Wilderness Trail from the Mission Peak Regional Preserve. At the programmatic level, the Draft PEIR (Vol. 2, Chapter 4, p. 4.8-22) states that implementation of SFPUC Standard Construction Measure #5 (traffic control plan) and additional traffic control measures identified in Mitigation Measure 4.8-1a (Vol. 4, Chapter 6, p. 6-30) would mitigate this potential impact to a less-than-significant level. This programmatic mitigation measure specifies detailed elements of the traffic control plan and requires coordination with local jurisdictions for affected roadways and intersections.

The project-level EIR for the Calaveras Dam Replacement project (SV-2) will provide the site-specific analysis of the potential impacts on EBRPD trails based on more detailed and up-to-date project information.

Based on clarifications provided in this comment and the previous comment (**L_EBRPD-05**), the Draft PEIR (Vol. 2, Chapter 4, p. 4.8-22, third full paragraph) is revised as follows:

Construction of Calaveras Dam (SV-2) would require temporary closure of Calaveras Road between Geary Road and Felter Road to through-traffic during the two- to three-year construction period. Through-traffic using Calaveras Road would be required to find an alternate route for the duration of the construction period and would likely use I-680. Access to the East Bay Regional Park District's (EBRPD) Sunol Regional Wilderness would still be provided via Calaveras Road and Geary Road from the north, and emergency vehicles would continue to have access to temporarily closed roads. Direct access to ~~some~~ the EBRPD Ohlone Wilderness Regional Trail may be restricted, including access to the Bay Area Ridge Trail connection from the west. There are no private residences or commercial uses on this segment of Calaveras Road. This project would be evaluated as part of separate, project-level CEQA review. Implementation of SFPUC Construction Measure #5 (traffic control plan) and additional traffic control measures identified in Measure 4.8-1a would be adequate to ensure acceptable levels of traffic, pedestrian, and bicycle flow and to reduce any *potentially significant* circulation and access impacts to a less-than-significant level.

L_EBRPD-07 As stated in Mitigation Measure 4.8-1a (Vol. 4, Chapter 6, p. 6-31), the traffic control measures require that roadway rights-of-way be repaired or returned to their original condition or better upon the completion of construction. This measure typically includes inspection of roadways prior to and after completion of the project, and if project-related roadway damage were detected, the SFPUC would be required to enter into an agreement with local jurisdictions for implementing a post-construction repair/rehabilitation program. This measure would also typically address the condition of roadways during project construction. Mitigation Measures 4.8-1a and 4.16-6c (Vol. 4, Chapter 6, pp. 6-30 and 6-33) require coordination with local jurisdictions, which will include Alameda County, in developing these measures.

L_EBRPD-08 The commenter raises concerns regarding the effectiveness of traffic-related Mitigation Measure 4.16-6c (Vol. 4, Chapter 6, p. 6-33) to mitigate potentially significant impacts associated with overlapping schedules for projects in the Sunol Valley Region. Given the programmatic nature of the impact assessment and mitigation measures, the use of the word “could” rather than “shall” is appropriate for this mitigation measure, because this programmatic measure specifies various measures that *could* be included in the Sunol Valley Traffic Control Plan, and this plan *shall* be required to mitigate the collective or

combined impacts of construction vehicle traffic. Project-level CEQA review for WSIP facility projects in the Sunol Valley Region will identify mitigation measures that respond to the specific requirements of each project's construction and identified significant impacts. The project-level CEQA documents will include mitigation measures that utilize the words "should" or "shall," as suggested by the commenter. Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

L_EBRPD-09 Draft PEIR Sections 4.9, Air Quality, and 4.16, Collective Impacts Related to WSIP Facilities (Vol. 2, Chapter 4, pp. 4.9-20 and 4.16-29) present a programmatic impact assessment of the air quality impacts. Table 4.9-4 (Vol. 2, Chapter 4, p. 4.9-24) presents average daily total construction-related emissions that would be generated in each region during construction of all WSIP projects. The Draft PEIR (Vol. 2, Chapter 4, p. 4.9-23) acknowledges that most of the estimated emissions are attributable to the three largest WSIP projects: San Joaquin Pipeline System (SJ-3), Calaveras Dam Replacement (SV-2), and Bay Division Pipeline Reliability Upgrade (BD-1). Therefore, air quality in the Sunol Valley Region would be primarily affected by the Calaveras Dam Replacement project.

The Draft PEIR (Vol. 2, Chapter 4, p. 4.9-25) classifies construction emissions associated with the WSIP projects in the Sunol Valley Region to be potentially significant, requiring implementation of the dust and exhaust control measures recommended by the Bay Area Air Quality Management District (BAAQMD) for all of these projects, even if the project by itself would not exceed BAAQMD operational significance thresholds. Dust control measures typically reduce PM₁₀ emissions by 50 percent. As indicated in Table 4.9-5 (Vol. 2, Chapter 4, p. 4.9-24), the combined average PM₁₀ emissions in the Sunol Valley Region (52 pounds per day) would not exceed the BAAQMD operational significance threshold of 80 pounds per day, and implementation of dust control measures could reduce project emissions to 25 pounds per day—well below the threshold. Pollutant emissions associated with equipment exhaust would exceed BAAQMD thresholds and would significantly contribute to the degradation of regional air quality. The Draft PEIR (Vol. 2, Chapter 4, p. 4.16-29) classifies these regional contributions as potentially significant and unavoidable, given the San Francisco Bay Area Air Basin's nonattainment status for ozone and particulate matter.

When evaluating the effects of short-term construction emissions, the Draft PEIR focuses on sensitive receptors that cannot relocate during project construction and that, therefore, cannot avoid exposure to pollutant emissions. While it is acknowledged that recreationists are also sensitive receptors, they are mobile (not stationary) receptors and can choose to use other regional parks (or other trails

within the park) on a short-term basis to avoid emissions, if air quality is a concern. It should also be noted that recreationists would be exposed to project-related construction emissions for short periods of time. Nevertheless, impacts on recreational resources will be specifically evaluated as part of project-level CEQA review for all WSIP projects in the Sunol Valley Region. Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

- L_EBRPD-10 The commenter's statement pertaining to the significant impact on recreational resources is addressed in **Response L_EBRPD-01**. The commenter correctly summarizes the Draft PEIR statement (Vol. 2, Chapter 4, p. 4.3-2) that views of WSIP facilities may be available from public trails in the Sunol Regional Wilderness. The Sunol Regional Wilderness is not specifically called out as a visual resource on the page referenced by the commenter (p. 4.3-8) because that discussion is an overview of the approach to the visual quality impact analysis in its entirety, and does not identify individual visual resources.

"Visual Resources" is the subheading for the last paragraph on p. 4.3-2 (Draft PEIR, Vol. 2). Each of the visual features discussed in the paragraph under this subheading is recognized in the Draft PEIR as a visual resource, including available views of the Calaveras Dam Replacement project (SV-2) from the Sunol Regional Wilderness. The visual assessment conducted for the Draft PEIR determined that Calaveras Dam is not visible from the Ohlone Regional Wilderness; however, any potential for visibility from the Ohlone Regional Wilderness or any other EBRPD facilities will be assessed in greater detail as part of project-level CEQA review for the Calaveras Dam Replacement project.

Potential impacts on views from the Sunol Regional Wilderness due to the Calaveras Dam Replacement project (SV-2) are identified in Draft PEIR Table 4.3-4 (Vol. 2, Chapter 4, p. 4.3-21) and described under Impact 4.3-4 (p. 4.3-38). Excavation and grading activities associated with dam construction would remove vegetation and create visual discontinuity that would affect views from surrounding areas, including the Sunol Regional Wilderness. Mitigation Measures 4.3-4a through 4.3-4d (Vol. 4, Chapter 6, pp. 6-7 and 6-8) would minimize these visual impacts; however, even with mitigation, visual impacts resulting from tree removal and grading in the vicinity of Calaveras Dam were determined to be significant and unavoidable. The project-level EIR for the dam project will further analyze the visual impacts on Sunol Regional Wilderness and other EBRPD facilities, if applicable, and identify site-specific mitigation measures to help reduce these impacts.

- L_EBRPD-11 The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-5) states that the purpose of the *Alameda Watershed Management Plan* (Alameda WMP) is to provide a policy

framework for the SFPUC to make decisions about the activities on watershed lands, and to provide watershed management implementation guidelines. While Alameda WMP policies must be implemented for all SFPUC projects located within Alameda WMP boundaries, Alameda WMP goals and policies are not intended to provide project-specific requirements for preserving and protecting visual resources. In addition, the Alameda WMP does not address protection or preservation of visual resources that are not located on CCSF-owned property.

The Alameda WMP recognizes that the CCSF-owned watershed lands are endowed with visual features; however, the Alameda WMP also states its primary goal is to “Maintain and protect water quality for public health and safety.” Because the SFPUC water distribution, storage, and maintenance facilities are already located and built within CCSF-owned watershed lands (such as with the Calaveras Dam Replacement project, SV-2), the SFPUC does not have the flexibility to site or designate locations for major facilities and construction staging areas that entirely avoid onsite and offsite visual impacts. Instead, the Alameda WMP policies require viewshed studies and implementation of design guidelines to avoid and minimize visual impacts to the extent feasible. Two design guidelines from the Alameda WMP that are included in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.3-37 and 4.3-38) refer to protecting existing visual resources within the watershed lands by contouring slopes and landforms for compatibility with the surrounding environment, and by minimizing grading and the visibility of cut banks. In addition, SFPUC Standard Construction Measure #10 (construction site maintenance/restoration) will require sites to be returned to the general condition that existed before construction, including regrading of the site and revegetation of disturbed areas. Implementation of both of these guidelines and Measure #10 would minimize the visual impacts of WSIP facilities within SFPUC Alameda watershed lands.

In addition to identified Alameda WMP design guidelines (Vol. 2, Chapter 4, pp. 4.3-37 and 4.3-38), the Draft PEIR requires implementation of Mitigation Measure 4.3-2, Facility Siting Studies (Vol. 4, Chapter 6, p. 6-7) for the Additional 40-mgd Treated Water Supply (SV-3) and San Antonio Backup Pipeline (SV-6) projects, which includes consideration of alternative site locations. Siting and viewshed studies will be completed as necessary as part of project-level CEQA review for all WSIP projects (including ancillary project features such as haul roads or borrow sites) in visually sensitive areas, including the Sunol Valley.

Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.

L_EBRPD-12 With respect to the need for viewshed studies for the Calaveras Dam Replacement project (SV-2), the commenter references the impact discussion in Chapter 5 (Vol. 3, p. 5.4.7-4). This chapter (which begins on p. 5.1-1) evaluates potential environmental impacts of the proposed water supply and system operations, which are distinct from the impacts of constructing WSIP facility improvement projects (such as the Calaveras Dam Replacement), which are described and analyzed in Chapter 4 of the Draft PEIR. Therefore, the conclusion of the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.7-4) that Policy WA-9 viewshed studies would not be required is appropriate, as it applies to changes in views as a result of proposed changes in water supply and system operations. The Draft PEIR (Vol. 3, Chapter 5, pp. 5.4.7-5 and 5.4.7-6) states that potential recreational and visual impacts attributable to changes in WSIP water supply or regional system operations would more likely involve changes in water flows in Alameda Creek, which could in turn affect the visual experience of EBRPD visitors.

As noted in the Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9), the SFPUC seeks to work cooperatively with local jurisdictions to avoid land use conflicts. The project-level EIR for the Calaveras Dam Replacement project (SV-2) will determine the need for a viewshed study for this project, as specified in Policy WA-9 of the Alameda WMP.

L_EBRPD-13 The commenter expresses concern that the WSIP could result in reduced flows in Alameda Creek, with a resulting decrease in the recreational experience for EBRPD users and a reduction in the fish and wildlife habitat in several parks that feature Alameda Creek as a recreational feature. The commenter's concerns with reduced flows in Alameda Creek, the need to manage flows to maximize benefits for amphibians and fish, and the recreational experience for EBRPD users are addressed in the Draft PEIR as follows: stream flow—Impact 5.4.1-2 (Vol. 3, Chapter 5, pp. 5.4.1-25 to 5.4.1-35); fisheries—Impact 5.4.5-3 (Vol. 3, Chapter 5, pp. 5.4.5-18 to 5.4.5-20); terrestrial biological resources—Impact 5.4.6-2 (Vol. 3, Chapter 5, pp. 5.4.6-18 and 5.4.6-19); and recreational and visual resources—Impact 5.4.7-1 (Vol. 3, Chapter 5, pp. 5.4.7-5). Mitigation Measure 5.4.5-3a (Vol. 4, Chapter 6, p. 6-52) calls for biological studies as well as an operational plan to manage minimum flows for resident trout; this measure has been expanded to address other aquatic-dependent species, including amphibians. Subsequent to publication of the Draft PEIR, the SFPUC modified the project description of the Calaveras Dam Replacement project (SV-2), as described in Vol. 7, Chapter 13, Section 13.2 of this Comments and Responses document, which has resulted in a reduction in severity of Impact 5.4.7-1 from potentially significant to less than significant. Please also refer to **Response S_CDFG2-15** and **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for additional discussion of the issues raised by this comment, including a discussion of steelhead fisheries in Alameda Creek.

- L_EBRPD-14 The commenter refers to a provision in the land use plan for the EBRPD's Sunol and Ohlone Wilderness Regional Preserves "to coordinate the timing of water for the Calaveras Dam with the SFPUC to maximize the benefits to these [amphibians and anadromous fish] species." The SFPUC is solely responsible for all operations related to Calaveras Dam, including the timing of releases from the dam. As discussed in the Draft PEIR (Vol. 3, Chapter 5, p. 5.2-20), the SFPUC is currently participating in the Alameda Creek Fisheries Restoration Workgroup, of which the EBRPD is also a member, to manage the Alameda Creek watershed and to plan for restoration of steelhead in Alameda Creek. The SFPUC's participation in the Workgroup will continue independent of the WSIP. Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for discussion of steelhead (anadromous fish species) issues. Also refer to **Response L_EBRPD-19** regarding the status of the land use plan for the Sunol and Ohlone Wilderness Regional Preserves and to **Response S_CDFG2-15** regarding mitigation measures to address other stream-dependent species (amphibians).
- L_EBRPD-15 This comment, which suggests that the SFPUC consider giving the EBRPD the opportunity to review and comment on the operation plan for establishing minimum flows in Alameda Creek for resident trout, is acknowledged. As indicated by the commenter, Mitigation Measure 5.4.5-3a (Vol. 4, Chapter 6, pp. 6-52 and 6-53) incorporates coordination with the Alameda Creek Fisheries Restoration Workgroup, of which the EBRPD is a member. In addition, the EBRPD's interest in coordinating their resource management efforts with those of the SFPUC has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the Calaveras Dam Replacement project (SV-2). Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for additional information about the SFPUC's coordination efforts with other agencies. The commenter is also referred to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14) for a description of changes in the Calaveras Dam Replacement project to include protective measures for fisheries.
- L_EBRPD-16 The commenter states concerns over the use of land already managed for watershed protection that might be used as mitigation for new projects (Draft PEIR, Vol. 4, Chapter 6, pp. 6-11 and 6-12). However, watershed land already owned by the CCSF is not necessarily precluded from development. For example, extensive areas of CCSF-owned land in the Sunol Valley are in use for viticulture, golf courses, commercial nurseries, and gravel mining, and therefore are not conserved as natural habitat. Placing a conservation easement over natural habitat on SFPUC land could provide an added degree of protection, if such land could be used for other purposes without compromising its function in watershed protection.

In addition, some CCSF-owned land may be deemed extraneous for watershed protection purposes and could be sold. The Sheep Ranch is one such example; this area, which comprises about 400 acres, is under CCSF ownership but is situated in the Arroyo de la Laguna watershed, not the Alameda Creek watershed in the Sunol Valley. A conservation easement over the Sheep Ranch could ensure that this land would not be sold and subsequently developed.

Some of the land owned by the CCSF in the Sunol Valley has been highly disturbed, and restoration or enhancement could considerably increase habitat values. Some examples are abandoned commercial nurseries, stock ponds with eroded outlets, and former oak woodlands that were cut down for timber and firewood many decades ago. Watershed and water quality management objectives do not necessarily require that such lands be restored to full ecological function and productivity. Thus, ecological restoration would not necessarily take place unless it was part of a mitigation program for capital projects. If such lands were placed under a conservation easement and restored under WSIP mitigation and Habitat Reserve Program management, such improvements would be both mandated and funded.

- L_EBRPD-17 The Draft PEIR (Vol. 2, Chapter 4, pp. 4.6-55 and 4.6-56) indicates that Mitigation Measure 4.6-1b, implementation of the Habitat Reserve Program or a similar habitat compensation program, would provide a mechanism for offsite identification, protection, restoration and management of compensation land.

The commenter's concern regarding the long-term effectiveness of conservation easements over private lands is acknowledged. In fact, any lands set aside for long-term mitigation and conservation can be compromised by unforeseen management problems. However, conservation easements, besides being routinely accepted as CEQA mitigation, often have the advantage of remaining in the private sector, thus providing economic incentives for the landowner to maintain the property. In addition, use of conservation easements could enable the SFPUC to protect more land than could be protected under a fee purchase program, since easements are typically less expensive than fee purchases.

- L_EBRPD-18 The commenter requests application of a 5 dB CNEL increase as a significance criterion for impacts on park users. As defined in the Draft PEIR, CNEL is a 24-hour noise level that includes a 10-dB penalty for nighttime noise (Vol. 2, Chapter 4, p. 4.10-1). This threshold is typically used to evaluate the impact of noise sources associated with project operations, such as operation of facility equipment or permanent increases in traffic. Construction-related noise is more sporadic and can vary from hour to hour and day to day. In addition, most construction activities occur during the day, so it is inappropriate to evaluate changes in the ambient noise environment over a 24-hour period. For projects where only daytime construction would occur, the use of CNEL would

underestimate the noise impact. Therefore, the Draft PEIR defines as significant any noise increase that interferes with activities during the day and/or night (speech and sleep interference), whichever is applicable (Vol. 2, Chapter 4, pp. 4.10-12 and 4.10-13). These thresholds are based on Leq rather than CNEL and are more rigorous for construction noise since they account for hourly variations in noise increases.

While passive recreational areas can be sensitive to noise, the significance of construction-related noise impacts are determined, in part, by the nature of the recreational use (trail versus picnic area) in areas where recreationists using the facilities cannot avoid construction noise. Although there are trails in the Sunol Regional Wilderness, potential noise increases were not identified as significant since hikers could choose to use other parts of the park located away from facility construction areas. Hikers using trails near construction areas would be exposed to short-term noise increases, but only when hiking on the trail section located near the construction area. The hilly topography in the Sunol Valley would help limit the extent of area affected by construction noise, since hills would block the construction noise. Nevertheless, the site-specific impacts on recreational resources will be evaluated as part of project-level CEQA review for all WSIP projects in the Sunol Valley Region.

- L_EBRPD-19 The EBRPD has adopted over 40 land use plans for its regional parks and preserves. Land use plans evaluate park resources, document and recommend programs for managing and conserving park resources, discuss key planning issues and relevant policies, and offer proposals for future recreational and service facilities (EBRPD, 2007e). Not all EBRPD parklands have adopted land use plans, although it is the District's long-term goal to create such a plan for every park. According to the EBRPD, the land use plan for the Sunol and Ohlone Regional Wilderness Preserves has not been adopted, but a draft plan was completed in 2003 (Still, 2008).

In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-2, last paragraph) is revised as follows:

East Bay Regional Parks. The EBRPD has jurisdiction over numerous regional parks located in Alameda and Contra Costa Counties. Several major EBRPD facilities encompassing thousands of acres of parks and open space are clustered in the East County/Sunol Valley area, including Del Valle Regional Park, Ohlone Regional Wilderness, Sunol Regional Wilderness, Vargas Plateau Regional Preserve, and Mission Peak Regional Park. The long-term goal of the EBRPD is to adopt land use plans to guide the management and use of all of its facilities. The EBRPD has adopted a land use plan for Del Valle Regional Park; other land use plans are in draft form at various stages of planning.

- L_EBRPD-20 In the event that construction of the WSIP facilities requires the SFPUC to access or cross EBRPD trails or parklands, trail or encroachment permits would be required from the EBRPD if the SFPUC does not have a property interest that provides access without a permit. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for detailed discussion of the issues raised by this comment. The EBRPD's interest in determining which WSIP facility projects would encroach on District property has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in all project-level CEQA review of WSIP projects in the Sunol Valley Region.
- L_EBRPD-21 At the time the Draft PEIR was prepared, there were alternative tunnel alignments under consideration for the New Irvington Tunnel project (SV-1), as indicated in Table C.3 (Vol. 5, Appendix C, p. C-17). The Draft PEIR impact assessment encompassed the range of possible impacts that could result from proposed and alternative tunnel alignments. Potential impacts on EBRPD facilities will be evaluated in greater detail as part of project-level CEQA review for the New Irvington Tunnel project based on the most up-to-date and detailed project plans regarding the tunnel location. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.
- L_EBRPD-22 The commenter's concerns with flooding impacts as a result of the Alameda Creek Fishery Enhancement project (SV-1) are addressed in the Draft PEIR (Vol. 2, Chapter 4, p. 4.5-38); the PEIR analysis determined that potential flooding impacts under this project would be potentially significant because the construction of dams in Alameda Creek could impede flood flows or exacerbate flooding issues. Implementation of the site-specific flooding analysis specified in Mitigation Measure 4.5-4b (Vol. 4, Chapter 6, p. 6-10) would be required to reduce this impact to a less-than-significant level. Such analysis will be required as part of project-level CEQA review for this project. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level.
- L_EBRPD-23 The EBRPD Public Safety Division provides law enforcement and fire protection services for 65 park facilities in Alameda and Contra Costa Counties. In response to this comment, the EBRPD has been added to the list of agencies that provide fire protection and law enforcement services in the Sunol Valley Region. Table 4.11-2 of the Draft PEIR (Vol. 1, Chapter 4, p. 4.11-4) is revised as follows:

**TABLE 4.11-2
LAW ENFORCEMENT AND FIRE PROTECTION SERVICE PROVIDERS
WITHIN THE WSIP STUDY AREA**

Jurisdiction	Law Enforcement Agencies	Fire Protection Service Agencies
Alameda County		
Unincorporated areas including, San Lorenzo and Castro Valley	Alameda County Sheriff's Department <u>East Bay Regional Park District Police Department</u>	Alameda County Fire Department <u>East Bay Regional Park District Fire Department</u>

As indicated in **Response L_EBRPD-04**, the EBRPD has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of certain WSIP projects in the Sunol Valley. At that time, the EBRPD will have the opportunity to coordinate fire suppression planning and response (including review of traffic control plans). Please also refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for additional information about the SFPUC's planned coordination efforts with other agencies.

- L_EBRPD-24** The locations of the Calaveras Dam Replacement (SV-2) borrow and spoil areas are based on the preliminary project information available at the time the Draft PEIR was prepared. The Draft PEIR discloses programmatic temporary and long-term impacts on visual and biological resources that could occur at the borrow sites and spoils areas. The Draft PEIR (Vol. 2, pp. 4.3-38 and 4.6-55) identifies potentially significant visual and biological impacts due to the extensive grading proposed in borrow areas on slopes east of the reservoir and the resulting removal of riparian communities (such as coast live oak riparian forest, etc.). Mitigation measures are identified to reduce these impacts, but visual impacts would not be reduced to a less-than-significant level and would be unavoidable. The addition of impacts associated with the borrow area at the south end would not alter these significance determinations. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for discussion of the appropriate level of detail of an impact analysis at the program level versus the project level. The project-level EIR for the Calaveras Dam Replacement project will describe and map the geographic limits of the borrow and spoils areas, and will assess site specific visual and biological impacts associated with this project.
- L_EBRPD-25** In response to this comment, the Draft PEIR reference to the Habitat Preserve Program (Vol. 4, Chapter 6, p. 6-55, third sentence of the second full paragraph) is corrected as follows:

One alternative for implementing such habitat compensation is the Habitat Reserve Program (HRP) currently being developed by the SFPUC. The purpose of the HRP is to provide a comprehensive, coordinated approach to mitigation and related regulatory compliance for WSIP projects and operations. This related SFPUC project is described further in Chapter 3, Section ~~3.44~~ 3.12.3.

- L_EBRPD-26 The Quarry Lakes Regional Recreation Area and the Coyote Hill Regional Park, and their locations with respect to Alameda Creek and the Alameda Creek Trail, are described in the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.7-3). These facilities were not specifically called out in the setting overview referenced by the commenter on Draft PEIR p. 5.4.7-1. Even with the addition of new information on these existing parks, the impact discussion of recreational facilities and/or activities and visual effects on scenic resources remain the same as described in the Draft PEIR for these recreational facilities (Vol. 3, Chapter 5, pp. 5.4.7-5 and 5.4.7-6, respectively). Potential recreational and visual effects were identified only for the Sunol Regional Wilderness. No impacts were identified in the Draft PEIR for the other EBRPD parklands described on pp. 5.4.7-2 and 5.4.7-3.

In response to this comment, the Vargas Plateau Regional Preserve has been added to the inventory of EBRPD parks described in Section 5.4.7.1 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.4.7-2 and 5.4.7-3), and potential recreational and visual impacts were also added. No significant visual or recreational impacts would occur at the Vargas Plateau Regional Preserve as a result of program-related changes in water supply and regional system operations. Views of Alameda Creek from the Vargas Plateau Regional Preserve would be minimally affected by program-related changes in flows, because any changes in flows would be substantially moderated by inflow from Arroyo de la Laguna and Arroyo Mocho, which are not controlled by the SFPUC. In addition, the WSIP would result in increased low-flow releases in the summer, which would add to the visual amenities afforded by the creek during those times. The WSIP would not affect the visual or recreational amenities of Alameda Creek in the Coyote Hills Regional Park because of the intervening flows and the tidal nature of that reach of the creek.

In response to this comment, the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.7-1, third full paragraph) is revised as follows:

Alameda Creek Recreation and Visual Quality

Alameda Creek runs through several local parks, ~~and~~ municipalities (including ~~Sunol Regional Wilderness~~, Alameda County), and the cities of Fremont and Union City. Alameda Creek also runs through the Sunol Regional Wilderness and is adjacent to the Vargas Plateau Regional Preserve, Quarry Lakes Regional Recreation Area, and Coyote Hills

Regional Park, all of which are operated by the EBRPD. The recreational uses of the creek are described below.

The following paragraph is added to the Draft PEIR just before the paragraph on the Quarry Lakes Regional Recreation Area (Vol. 3, Chapter 5, p. 5.4.7-3, first full paragraph):

Vargas Plateau Regional Preserve

The Vargas Plateau Regional Preserve, managed by the EBRPD, is located adjacent to the SFPUC Alameda watershed along a common boundary line on the east side of the preserve. Its northern boundary touches Alameda Creek for a distance of about 2,500 feet. A portion of the decommissioned Sunol Aqueduct crosses the park within a utility easement. Currently, the preserve is not suitable for active public use due to the lack of public road access, the need to protect natural or man-made resources, and other factors related to public safety and access. The EBRPD is currently in the process of adopting the *Vargas Plateau Regional Park Land Use Plan*, which would create a regional park that provides trails, outdoor recreation, campgrounds, and nature appreciation areas (EBRPD, 2007e).

The following reference is added to the Draft PEIR (Vol. 3, Chapter 5, p. 5.4.7-6):

East Bay Regional Park District (EBRPD), *Draft Vargas Plateau Regional Park Land Use Plan*, October 2007e, available online at <http://www.ebparks.org/planning/lup>, accessed January 25, 2008.

City of Foster City, Ramon Towne, Director of Public Works, 10/1/07

- L_FosterCty-01 This comment, which states Estero Municipal Improvement District's goal to "Pursue Reliable and Uninterruptible Alternative Sources of Water Supply" and encourages that seismic retrofits to the regional water system be implemented expeditiously, is acknowledged.
- L_FosterCty-02 Table 3.3, Table 7.2, Table 7.3, Table E.2.1, and Table E.2.6 in the Draft PEIR show that projected 2030 demand for Estero Municipal Improvement District is 6.8 mgd, consistent with this comment. Tables 3.4 and E.1.1 referenced in this comment show only the 2030 purchase estimates, not projected demand. The source of the range shown for the 2030 purchase estimate is the *SFPUC 2030 Purchase Estimates Technical Memorandum* (Table 3, p. 1-5 of that report; URS, 2004a), which is based on information submitted by the wholesale customers. The source for the estimated range of 0.0 to 0.6 mgd in conservation savings (which accounts for the difference between the projected demand and the purchase estimate) was the form entitled "Wholesale Customer Best Estimate of Water Purchases from the SFPUC" (dated November 17, 2004), which Estero Municipal Improvement District submitted to the SFPUC. The submitted form states:

The Estero Municipal Improvement District (EMID) projects that it will purchase 100% of its estimated total water demand from the SFPUC in 2030. Based on the information collected and analyses conducted in developing overall Demand Projections this total demand equates to 6.8 mgd (annual average). Based on the same information collected and analyses conducted, EMID projects that this total demand may be reduced by as much as 0.6 MGD if the equivalent of all "Category A" and "Category B" conservation measures as analyzed for EMID were adopted and achieve their maximum potential savings. It is understood that this estimate will be used by the SFPUC for purposes of planning and environmental review and is subject to change based on changed conditions, such as the future cost of water, new pricing structures, and new developments in the area of conservation Best Management Practices.

Based on this comment, the SFPUC assumes that Estero Municipal Improvement District will not realize any conservation savings in 2030 and plans to purchase 6.8 mgd from the regional water system (SFPUC, 2008a); this would correspond to the high end of the purchase estimate range and the low end of the conservation estimate range shown in the Draft PEIR tables. The SFPUC selected the high range purchase estimate totaling 300 mgd as the target goal for the average annual water delivery, as stated in the Draft PEIR (Vol. 4, Chapter 7, p. 7-16). The demand projections and/or associated

purchase estimates are expected to evolve somewhat over time (including the eventual emergence of a single figure in the cases where a range had been assumed), and the clarification of Estero Municipal Improvement District's estimate of 2030 purchases and conservation savings is an example of this; no change to the referenced tables is needed.

- L_FosterCty-03 This comment, which concurs with and expands on information about Estero Municipal Improvement District's service area presented in the Draft PEIR, is noted. As discussed in the Draft PEIR (Vol. 4, Chapter 7, p. 7-14), the source of population projections used to develop water demand projections was selected by the wholesale customers. As discussed in the more detailed description of demand projection development (see Appendix E.2, pp. E.2-6 et seq.), a "blend" of ABAG cities was created in order to reconcile ABAG projections with those for the wholesale customers' service areas. The percentage of wholesale customer service area within jurisdictional boundaries is shown in Chapter 7, Table 7.1 (p. 7-12).
- L_FosterCty-04 This comment, which expresses support for the Modified WSIP Alternative and for the adoption of the 10 percent rationing goal during drought periods, is acknowledged. The support of the commenter for WSIP Variant 3 – 10% Rationing is acknowledged. See **Response L_Burlgme-02** for clarification of the difference between the proposed program and Variant 3.
- L_FosterCty-05 This information related to Estero Municipal Improvement District's development of an Emergency Sanitation Annex Plan and the importance of the complete rehabilitation of the Hetch Hetchy system is noted.

City of Fremont, Transportation and Operations Department, Rene Dalton, 10/9/07

L_Fremont-01 Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for detailed discussion of the issues raised by this comment. The City of Fremont has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of the following projects: Bay Division Pipeline (BDPL) Reliability Upgrade (BD-1), New Irvington Tunnel (SV-4), and Seismic Upgrade of BDPL Nos. 3 and 4 at Hayward Fault (BD-3).

While the City has requested the use of jack-and-bore construction for the pipeline crossings of arterial streets in Fremont, it should be noted that the Draft PEIR (Vol. 2, Chapter 4, p. 4.8-13) indicates the cut-and-cover construction method would be used to cross Mission Boulevard, Paseo Padre Parkway, and Fremont Boulevard, which was based on preliminary information available at the time the Draft PEIR was prepared. The project-level EIR for the BDPL Reliability Upgrade project (BD-1) will analyze the project in more detail, including the up-to-date design details for construction across roadways, and will identify additional mitigation measures for significant impacts associated with cut-and-cover construction across multiple-lane arterials, including coordination with the City of Fremont.

L_Fremont-02 The last bullet item under Mitigation Measure 4.8-1a (Vol. 4, Chapter 6, p. 6-31) refers to the state's *Manual of Traffic Controls for Construction and Maintenance Work Areas*. In late 2006, the *California Manual on Uniform Traffic Control Devices* replaced the 1996 version of the *Manual of Traffic Control for Construction and Maintenance Work Areas*. In response to this comment, the text of the Draft PEIR has been revised to update this reference and to include Caltrans' *2006 Standard Plans*. The Draft PEIR (Vol. 4, Chapter 6, p. 6-31, last bullet item under Measure 4.8-1a) is revised as follows:

To the extent applicable, the traffic control plan will conform to the ~~state's *Manual of Traffic Controls for Construction and Maintenance Work Areas*~~ *California Manual on Uniform Traffic Control Devices for Streets and Highways: Part 6 Temporary Traffic Control* and Caltrans' *2006 Standard Plans*.

L_Fremont-03 The commenter states that applications for encroachment permits and traffic control plan reviews must be submitted to the City of Fremont two months in advance of construction, and provides information on the application process. The SFPUC will obtain encroachment permits when access is needed to public

rights-of-way where the SFPUC has no property interest that provides access without a permit.

Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) for more discussion of the issues raised by this comment. The City of Fremont has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation (including the need for encroachment permits and development and review of traffic control plans) during the planning and design phases of the following projects: the BDPL Reliability Upgrade (BD-1), New Irvington Tunnel (SV-4), and Seismic Upgrade of BDPL Nos. 3 and 4 at Hayward Fault (BD-3).

- L_Fremont-04 The commenter requests coordination with City of Fremont staff regarding the need to close bicycle trails and maintenance access roads during construction near Paseo Padre Parkway. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for more discussion of the issues raised by this comment. The City of Fremont has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of the following projects: BDPL Reliability Upgrade (BD-1), New Irvington Tunnel (SV-4), and Seismic Upgrade of BDPL Nos. 3 and 4 at Hayward Fault (BD-3).
- L_Fremont-05 The commenter states that the City of Fremont requires submittal of site-specific plans for all work within city limits that could affect Fremont's transportation network. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for more discussion of the issues raised by this comment. The City of Fremont has been added to Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) as an agency that has requested consultation during the planning and design phases of any WSIP project that could affect the Fremont transportation network.

City of Hayward Department of Public Works, Robert Bauman, Director of Public Works, 9/17/07

- L_Hayward-01 The commenter correctly describes the purpose of the CEQA EIR process. The comments describing the urgent need for the WSIP facility improvement projects for water quality, seismic, and delivery reliability are acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for more discussion.
- L_Hayward-02 This comment advocating a two-tiered approach that separates the proposed seismic improvements from the proposed changes in water supply (i.e. additional Tuolumne River diversions) is acknowledged. Please see the discussion in **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.5).
- L_Hayward-03 This comment, which provides considerable background on future planned growth in Hayward and the basis for its projected 2030 water demand, as well as information regarding the City's commitment to smart growth and water conservation, is acknowledged.

Town of Hillsborough, Cyrus Kianpour, City Engineer, 9/27/07

- L_Hillsb-01 This comment expressing support for the WSIP goals and objectives and the Draft PEIR is acknowledged.
- L_Hillsb-02 This comment addresses the need and urgency to repair the regional system to avoid failure in a significant seismic event. Section 3.3 of the Draft PEIR (Vol. 1, Chapter 3, pp. 3-5 to 3-8) describes the need for and objectives of the WSIP. In addition, the PEIR describes the regional faulting and seismic hazards along the SFPUC regional water system (Vol. 2, Chapter 4, pp. 4.4-4 to 4.4-13) and includes a map of major faults in the vicinity of the system (Figure 4.4-1, Vol. 2, Chapter 4, pp. 4.4-7 and 4.4-8). The No Program Alternative (Vol. 4, Chapter 9, pp. 9-23 to 9-40) describes the consequences and environmental effects of not improving SFPUC system facilities, which include increasing the risk of prolonged water outages (see in particular p. 9-32). The purpose of the PEIR is to evaluate the environmental effects of implementing the WSIP as well as several alternatives to the WSIP identified in the PEIR. The requested economic evaluation is outside the scope and purview of this PEIR (see CEQA Guidelines Section 15064). In its comments on the Draft PEIR, the Bay Area Water Supply and Conservation Agency (BAWSCA) provided information regarding potential the economic consequences associated with SFPUC facility failures due to an extended loss of water (refer to Comment L_BAWSCA1-05). The information in L_BAWSCA1-05 is based on a 2002 report by the Bay Area Economic Forum. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3) for more discussion.
- L_Hillsb-03 This comment expressing support for the Modified WSIP Alternative is acknowledged.
- L_Hillsb-04 This comment expressing the Town of Hillsborough's support for the Modified WSIP Alternative is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative, and **Response L-BAWSCA1-47**.
- L_Hillsb-05 The first sentence of this comment, which recommends that the Draft PEIR discuss the possibility of the SFPUC and its wholesale customers entering into a new contract that would maintain established entitlements, is acknowledged. The Draft PEIR (Vol. 1, Chapter 2, pp. 2-43 and 2-44) describes the customer agreements between the SFPUC and its wholesale customers; the analysis in the Draft PEIR is based on the existing terms of the agreement. The second sentence in this comment, which supports BAWSCA taking the lead on regionally funded conservation through increased water rates, is also acknowledged.

- L_Hillsb-06 This comment emphasizes the need to implement the proposed WSIP facility projects to improve the regional water system's performance and reliability, and expresses concern that the proposed changes in water supply sources could delay implementation of these facility improvements. Comment acknowledged.
- L_Hillsb-07 This comment expressing support for the 10 percent rationing goal during prolonged drought periods is acknowledged. See **Response L_Burlgme-02** for clarification of the difference between the proposed program and Variant 3 – 10% Rationing.
- L_Hillsb-08 The commenter indicates that the WSIP would result in the construction of facilities within Hillsborough's boundaries. However, Table 3.11 (Vol. 1, Chapter 3, p. 3-60) indicates that no WSIP facility projects evaluated in the Draft PEIR would be located within the town boundaries. This table indicates that the Crystal Springs/San Andreas Transmission Upgrade project (PN-2) would be located in San Mateo County, and that several cities (including Hillsborough) are close to that project site. The project-level CEQA analysis for this project will identify any offsite impacts that would affect the town.
- L_Hillsb-09 This comment describing the Town of Hillsborough's conservation program efforts is noted.

Los Altos Hills County Fire District, Dorothy Price, President, 9/21/07

- L_LAHCFD-01 This comment regarding the critical need for water reliability for the purposes of firefighting is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.4) for more discussion.
- L_LAHCFD-02 This comment, which supports conservation measures and additional restrictions on water use to the extent feasible, and describes the Fire District's water conservation measures, is noted. For information on alternatives evaluated in the Draft PEIR that do not include additional diversions from the Tuolumne River, refer to the descriptions of the Year-round Desalination at Oceanside Alternative (Vol. 4, Chapter 9, Section 9.2.6) and the Aggressive Conservation/Water Recycling and Local Groundwater Alternative (Without Tuolumne River Supplement) (Vol. 4, Chapter 9, Section 9.2.4, p. 9-47). Refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for additional response regarding conservation programs and recycling projects proposed by the SFPUC and its wholesale customers.
- L_LAHCFD-03 This comment urging rapid completion of the environmental review process and implementation of the WSIP is acknowledged.

Town of Los Altos Hills, Craig Jones, Mayor, 9/14/07

- L_LosAltosH-01 This comment regarding the critical need for water reliability for the purposes of firefighting is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.4) for more discussion.
- L_LosAltosH-02 This comment reiterates projected future water demand in the SFPUC service area through 2030 as presented in the Draft PEIR. To clarify the information related to water supplies presented in this comment, water supply sources during nondrought and drought periods under the proposed program would consist of runoff from local watersheds (with Calaveras and Lower Crystal Springs Reservoirs restored), increased average annual diversions from the Tuolumne River, and recycled water/groundwater/additional conservation in San Francisco. During drought sequences, this supply would be augmented first through implementation of a conjunctive-use program in the Westside Groundwater Basin, and then by additional Tuolumne River diversions through a water transfer with Turlock Irrigation District and Modesto Irrigation District. Information related to future conservation measures and recycled water projects proposed by the SFPUC wholesale customers is provided in **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3).
- L_LosAltosH-03 This comment, which asserts that the Town of Los Altos Hills has implemented Smart Growth principles by requiring a minimum lot size of one acre, is acknowledged. More typically, the concept of “smart growth” refers to more intensive development at densities that encourage the use of public transit and reduce the overall footprint of the built environment. The Los Altos Hills approach does result in the use of less water per acre relative to denser housing, but does so by limiting the number of households and population that can be accommodated within the city limits.
- L_LosAltosH-04 This comment describing the town’s conservation efforts is noted.
- L_LosAltosH-05 This comment urging rapid certification of the Draft PEIR and expeditious implementation of the WSIP is acknowledged.

City of Menlo Park, Kent Steffens, Director of Public Works, 10/1/07

- L_Menlo1-01 This comment regarding the vulnerability of the regional system to seismic hazards and the need to proceed expeditiously with the WSIP is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 4, Chapter 14, Section 14.1.3) for more discussion.
- L_Menlo1-02 Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2, and 14.4.3) for detailed discussion of the issues raised by this comment. The City's request for coordination of reasonable construction mitigation measures has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the Bay Division Pipeline Reliability Upgrade project (BD-1).
- L_Menlo1-03 Noise limits specified in Section 8.06.030 and time limits specified in Section 8.06.040 of the Menlo Park Noise Ordinance are summarized in Draft PEIR Table 4.10-2 (Vol. 2, Chapter 4, p. 4.10-7), and these limits are consistent with the noise ordinance sections attached to the commenter's letter. Draft PEIR Impact 4.10-1 (Vol. 2, Chapter 4, p. 4.10-19) acknowledges that temporary construction-related noise impacts associated with the Bay Division Pipeline Reliability Upgrade project (BD-1) would be potentially significant at some locations due to the proximity of sensitive noise receptors to the pipeline alignment. The Draft PEIR's potentially significant and unavoidable (PSU) significance determination for this impact acknowledges that the language "to the extent feasible" contained in SFPUC Construction Measure #6 (Vol. 1, Chapter 3, p. 3-80) and Draft PEIR Mitigation Measure 4.10-1a (Vol. 4, Chapter 6, p. 6-39) may not reduce impacts to a less-than-significant level, since these measures do not guarantee compliance with local noise ordinances. Measure 4.10-1a indicates that for some WSIP projects, nighttime construction cannot be avoided (e.g., tunnel construction must occur 24 hours per day), and in these situations, construction noise would be required to comply with applicable noise ordinance nighttime limits or not exceed the 50-dBA sleep interference criterion to the extent feasible. The City's concerns with construction noise and compliance with the City's Noise Ordinance will be addressed in detail as part of project-level CEQA review for the Bay Division Pipeline Reliability Upgrade project.
- L_Menlo1-04 The City's comment identifying the need for settlement monitoring where the proposed Bay Tunnel crosses under existing levees in Menlo Park is addressed under Draft PEIR Impact 4.4-4 (Vol. 2, Chapter 4, p. 4.4-31) for the Bay Division Pipeline Reliability Upgrade project (BD-1). The impact discussion identifies this impact as potentially significant but mitigated to a less-than-

significant level with implementation of a subsidence monitoring program (Measure 4.4-4) to detect potential ground movement well before major subsidence occurs. Corrective action, such as increased tunnel support, would be implemented if measured displacement reached a designated minimum trigger amount. This impact would be evaluated in more detail as part of project-level CEQA review for this project.

L_Menlo1-05 Trucks operating onsite within the pipeline right-of-way are considered part of the onsite construction activities described under Draft PEIR Impact 4.10-1 (Vol. 2, Chapter 4, p. 4.10-19) and would be subject to ordinance time limits as specified in SFPUC Construction Measure #6. However, the impacts associated with trucks operating offsite along construction haul routes (mostly public streets for this project) are described under Draft PEIR Impact 4.10-2 (Vol. 2, Chapter 4, p. 4.10-25), and these trucks would be subject to restrictions such as avoiding local residential streets, using designated truck routes, and avoiding nighttime hours (10 p.m. to 7 a.m.) depending on the proximity of residential uses to haul routes (Vol. 4, Chapter 6, Mitigation Measures 4.10-2a and 4.10-2b, p. 6-41). The City's concerns with truck noise along haul routes will be addressed in detail as part of project-level CEQA review for the Bay Division Pipeline Reliability Upgrade project.

L_Menlo1-06 The commenter raises concerns regarding the effectiveness of the traffic mitigation measures (Vol. 4, Chapter 6, p. 6-30, Measures 4.8-1a and 4.8-1b) to mitigate potentially significant traffic impacts when the Bay Division Pipeline Reliability Upgrade project (BD-1) is being constructed through Menlo Park, and the need to develop the traffic control plan in consultation with the City of Menlo Park prior to submitting this project to bid. As indicated in Draft PEIR Mitigation Measure 4.8-1a (Vol. 4, Chapter 6, p. 6-30), the SFPUC and its contractors will prepare the traffic control plan in coordination with Caltrans and local jurisdictions. The project-level EIR for the Bay Division Pipeline Reliability Upgrade project will analyze traffic impacts in more detail based on the most up-to-date design details, and will identify additional mitigation measures for significant impacts.

Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2, Intent of Programmatic Impact Analysis, and Section 14.4.3) for detailed discussion of the issues raised by this comment. The City's request for coordination of construction traffic routing and appropriate mitigation measures has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the Bay Division Pipeline Reliability Upgrade project (BD-1).

- L_Menlo1-07 Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for detailed discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. The project-level EIR for the Bay Division Pipeline Reliability Upgrade project (BD-1) will analyze vibration impacts in more detail and, if warranted, identify additional mitigation measures for significant impacts, such as preparation of a mitigation monitoring program that includes vibration monitoring.
- L_Menlo1-08 This comment correctly states that Menlo Park (i.e., the Menlo Park Water District) receives 100 percent of its water supply from the SFPUC. Ninety-six percent of Menlo Park's existing demand is met through SFPUC purchases (as shown in Draft PEIR Table 7.3, Vol. 4, Chapter 7, p. 7-18); however, because Menlo Park purchases the balance of its supply from East Palo Alto (according to the BAWSCA Annual Survey [BAWSCA, 2006]), all of its supply is ultimately provided by the SFPUC. In response to this comment, and to clarify and avoid double counting of existing supply, Table 3.1 (Vol. 1, Chapter 3, p. 3-7) has been revised as follows:

TABLE 3.1
SFPUC REGIONAL WATER SYSTEM CUSTOMERS

Wholesale Regional Customers ^a (BAWSCA Members)		
Peninsula	South Bay	Other Major Customers
	City of Menlo Park ^{*b}	

* Indicates customers that currently receive additional water supplies from sources other than the SFPUC.

^a Not shown on the table because they are not a BAWSCA member, the Cordilleras Mutual Water Association is also a wholesale customer receiving water from the SFPUC. It is a small water association serving 18 single-family homes located in San Mateo County.

^b Menlo Park receives all of its water supply from the SFPUC; however, a portion of the supply is obtained indirectly from the SFPUC through purchases from East Palo Alto (BAWSCA, 2006).

SOURCES: CDM, 2005; URS, 2004a.

The following has been added to the Chapter 3 references (p. 3-88):

Bay Area Water Supply and Conservation Agency (BAWSCA),
Bay Area Water Supply and Conservation Agency Annual Survey
FY2004-05, April 2006.

Although the comment does not raise this issue with respect to Table 3.4 (Vol. 1, Chapter 3, p. 3-19), for consistency with the revised Table 3.1, Table 3.4 has also been revised, as follows:

TABLE 3.4
SUMMARY OF SFPUC 2030 PURCHASE ESTIMATES

SFPUC Customer	Fiscal Year 2001/2002 Purchases from the SFPUC (mgd)	2030 Purchase Estimates (mgd)	Change in Water Purchases from the SFPUC (mgd)
Wholesale Customers			
City of Menlo Park ^{a,c,d}	3.57	4.54	0.97

^a Wholesale customer that currently receives water supplies from sources other than the SFPUC, including local groundwater, local surface water, recycled water, and other sources of supply.

^c Wholesale customer that currently receive water supplies from other sources but projects receiving only SFPUC water by 2030

^d Menlo Park purchased 96 percent of its 2001/2002 supply directly from the SFPUC; the balance of its 2001/2002 purchases also came from the SFPUC regional system, but was purchased from East Palo Alto. Menlo Park projects that it will purchase all of its 2030 supply directly from the SFPUC.

SOURCES: URS, 2004c; City of Redwood City, 2005; Westborough Water District, 2007.

Please also refer to the description of Menlo Park in Chapter 7 (Vol. 4, pp. 7-47 and 7-48), which identifies Menlo Park's other sources of supply.

Menlo Park Planning Commission, Kirsten Keith, Employee, 9/18/07

[See Public Hearing Transcript, Fremont, pp. 24–25]

L_Menlo2-01 This recommendation to read the book *Cadillac Desert* is acknowledged, but as it does not address the adequacy or accuracy of the Draft PEIR, no response is provided.

City of Menlo Park, Kelly Fergusson, Mayor, 9/19/07

[See Public Hearing Transcript, Palo Alto, pp. 43–44]

L_Menlo3-01 This comment states that the Mayor of Menlo Park and the City of Menlo Park's Public Works Director were present at the September 19, 2007 public hearing on the Draft PEIR held in the city of Palo Alto. No response is necessary.

Modesto Irrigation District, Walt Ward, President of the Board of Directors, 9/6/07

[See Public Hearing Transcript, Modesto, pp. 25–26]

- L_MID-01 This comment requests an extension of the public review period for the WSIP Draft PEIR by 30 days or longer. The public review period on the Draft PEIR was initially scheduled for 90 days, from June 29, 2007 through October 1, 2007, but was extended by an additional 15 days, to October 15, 2007. Further, comments received after the October 15, 2007 deadline were accepted and are responded to in this Comments and Responses document. In accordance with CEQA Guidelines Section 15105, the public review period for draft EIRs that require review by state agencies must not be less than 45 days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse. Thus, the public review period provided for the Draft PEIR meets and exceeds the public review requirements under CEQA.
- L_MID-02 Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.3) for detailed discussion of this issue.

Modesto Irrigation District / Turlock Irrigation District, Walter Ward / Robert Nees, Assistant General Manager / Assistant General Manager, 10/1/07

L_MID-TID1-01 In response to the request of the commenter, on October 4, 2007, the San Francisco Planning Department sent the Turlock Irrigation District (TID) and Modesto Irrigation District (MID) a CD containing hydrologic model output as well as related files to help TID and MID to understand the data. In addition, a meeting was held on November 28, 2007 to discuss the Hetch Hetchy/Local Simulation Model (HH/LSM) and its use in support of the Draft PEIR, and included representatives from TID, MID, the SFPUC, and the PEIR consultant team (representing the San Francisco Planning Department). The SFPUC representative described how the HH/LSM was used to analyze the WSIP and estimate its effects on Tuolumne River flows, and identified assumptions made in the analysis. A slide presentation was made and hard copy of the presentation was provided to meeting attendees (see Attachment L_MID-TID1-1). The meeting was conducted informally, and the SFPUC answered questions raised by TID and MID attendees.

At the November 28, 2007 meeting, the SFPUC noted that the assumptions and modeling approach used for the TID and MID in the HH/LSM are consistent with the assumptions and approach used in the modeling of the San Joaquin River and modeling for MID's recent water treatment plant project. TID and MID are using CalSim II, the statewide model developed by the Department of Water Resources and the U.S. Bureau of Reclamation, to model the San Joaquin River.

At the end of the meeting, the TID and MID representatives indicated that the SFPUC representative had answered all of their questions with respect to the HH/LSM, and that an executable copy of the model would be sent to TID and MID. The model was transmitted to the Districts on December 21, 2007.

With regard to the request to extend the comment period on the Draft PEIR, please refer to **Response L_MID-01**. In addition, because the SFPUC planned to refine the HH/LSM runs used in the Draft PEIR in 2008 in support of the Final PEIR, the Districts were invited to submit comments on the modeling in advance of preparation of this Response to Comments document. The comments would be considered if submitted to the SFPUC in a timely manner.

For further information on the HH/LSM, please refer to **Section 14.5, Master Response on Water Resources Modeling** (Vol. 7, Chapter 14).

- L_MID-TID1-02 The Draft PEIR (Vol. 1, Chapter 2, pp. 2-35 to 2-37) provides a summary description of the City and County of San Francisco's (CCSF) rights to Tuolumne River water. The SFPUC believes that the diversion of water from the Tuolumne River as proposed in the WSIP is consistent with the CCSF's water rights.
- L_MID-TID1-03 The commenter's summary of the two fundamental principles pertaining to the existing system is consistent with the description in the Draft PEIR (Vol. 1, Chapter 3, p. 3-8). These principles are used as the basis for the WSIP goals and objectives. Chapter 9 of the Draft PEIR (Vol. 4) identifies and analyzes alternatives to the proposed program that would meet most of the basic program goals and objectives while at the same time avoiding or substantially lessening significant environmental effects of the WSIP. The PEIR analyzes one alternative that would involve treatment and pumping of Tuolumne River water—the Lower Tuolumne River Diversion Alternative (Vol. 4, Chapter 9, pp. 9-59 to 9-66). In addition, the Draft PEIR provides further discussion of the reasons for rejecting filtration of Sierra source water as an alternative strategy (Vol., 4, Chapter 9, pp. 9-119 and 9-120).
- However, as noted in Section 11.2 (Vol. 6, Chapter 11, p. 11-2), following certification of the Final PEIR, decision-makers have the discretion to approve the WSIP or any portion/modification/alternative of the WSIP analyzed in the PEIR.
- L_MID-TID1-04 The flows expressed as million gallons per day (mgd) do not express an instantaneous rate of flow. When used in the text of the Draft PEIR, the flow expressed in mgd is typically qualified as an average annual, monthly, or daily flow. (For an example, see the first full paragraph of Vol. 1, Chapter 2, p. 2-37 of the Draft PEIR.) Annual flows are expressed in mgd in the Draft PEIR, rather than in acre-feet per year (afy), because municipal water supply agencies typically use mgd (and not afy) as their primary units of flow.
- Projected purchase requests (water demand) for the SFPUC in 2030 is 300 mgd (336,066 afy), an increase of 35 mgd (39,207 afy) compared to the 2005 condition.
- With respect to the units of flow used in the Draft PEIR, please refer to **Section 14.5, Master Response on Water Resources Modeling** (Vol. 7, Chapter 14, Section 14.5.8). With respect to the request for a copy of the water supply model, refer to **Response L_MID-TID1-01**.
- L_MID-TID1-05 Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14) for more detail on the proposed water transfer from TID/MID to the SFPUC. Also refer to **Response L_TUD1-09**.

The SFPUC has determined that the proposed water transfers from TID and MID would be feasible technically, based on HH/LSM model runs that use 82 years of historical hydrology as well as assumptions that are consistent with those used in the modeling of the San Joaquin River for the Department of Water Resources and in the modeling for MID's recent water treatment plant project (see **Response L_MID-TID1-01**). This 82-year hydrologic record includes several extended drought sequences, and the modeling conducted for the Draft PEIR analysis using the HH/LSM indicated that the WSIP water supply level of service could be achieved during drought periods with the combination of water transfer, a conjunctive-use program in the Westside Basin, and a maximum systemwide rationing of 20 percent.

The analysis in the Draft PEIR is based on the worst-case assumption (in terms of environmental consequences) that the proposed water transfer from TID and MID would originate from stored water in Don Pedro Reservoir. Consequently, the river flow estimates and the reservoir storage estimates for the with-WSIP scenario shown in the Draft PEIR include the effects of the proposed transfer (Vol. 3, Chapter 5, pp. 5.3.1-1 to 5.3.1-40). Most of the environmental effects of the WSIP on the Tuolumne River would stem from WSIP-induced changes in reservoir storage and river flow. The effects of WSIP-induced reservoir storage and river flow changes on other environmental elements, including water quality, groundwater, fisheries, terrestrial biological resources, recreation/visual resources, and energy, are described in Vol. 3, Chapter 5, Sections 5.3.2 through 5.3.9 of the Draft PEIR. These PEIR sections provide a project-level analysis of the effects of the proposed water transfer on the Tuolumne River and its natural resources, as required by CEQA. However, additional CEQA documentation could be required once any facilities needed to execute the transfer have been designed.

- L_MID-TID1-06 In its planning, the SFPUC determined that a dry-year water transfer from TID/MID would be needed if the SFPUC is to deliver water to customers during the design drought without requiring rationing of greater than 20 percent systemwide. An approximately 26,000-acre-foot transfer from TID and MID, averaged over the 8.5-year design drought, was analyzed using the HH/LSM, and the environmental impacts of such a transfer are characterized in the Draft PEIR. After publication of the Draft PEIR, updated and refined modeling using the HH/LSM indicated that a dry-year transfer of approximately 29,000 acre-feet would be needed. The increase in the size of the dry-year transfer would have a negligible effect with respect to the environmental impacts of the WSIP described in the Draft PEIR, because the full 29,000-acre-foot transfer would be needed so rarely. The SFPUC is not considering transfers substantially greater than 29,000 acre-feet, so the Draft PEIR does not analyze larger transfers. Please also refer to **Section 14.3**,

Master Response on Proposed Dry-Year Water Transfer (Vol. 7, Chapter 14, Section 14.3.2) for additional information.

L_MID-TID1-07 Neither the Tuolumne River nor the San Joaquin River is currently listed for water temperature in the State Water Resources Control Board's Clean Water Act Section 303(d) list.

The WSIP would have no effect on water temperature in the Tuolumne River below La Grange Dam in most months, because flow in this reach of river equals the minimum required flow in most months. Flow in the river would be the same with the WSIP as under the existing condition in 717 months of the 984-month (82-year) hydrologic record. As stated in the Draft PEIR, on infrequent occasions (12 months in the 984-month hydrologic record), WSIP-induced flow reductions would cause mean daily temperature increases of 1 or 2 degrees Celsius (see Draft PEIR Vol. 3, Chapter 5, p. 5.3.3-19). The statement in the comment letter that an increase of 1 to 2 degrees would occur in 15 percent of the months modeled—157 months in the 984-month record—is incorrect.

The Draft PEIR also notes that the WSIP could cause an exceedance of the water quality objective (i.e., the objective prohibiting an increase of more than 5 degrees Fahrenheit, or 2.8 degrees Celsius) in three or four months of the 984-month hydrologic record (Vol. 3, Chapter 5, p. 5.3.3-19). Because exceedances would be so infrequent that they would not impair the river's ability to support its designated beneficial uses, it was concluded that the WSIP would have a less-than-significant impact on water temperature.

The primary purpose of the water temperature objective is to protect aquatic life, and particularly cold-water fish. As indicated in the Draft PEIR, the reductions in flow combined with the increases in water temperature attributable to the WSIP would have a potentially significant adverse impact on fishery resources in the lower Tuolumne River (Vol. 3, Chapter 5, pp. 5.3.6-29 to 5.3.6-32). A proposed mitigation measure, Measure 5.3.6-4a (Vol. 4, Chapter 6, p. 6-48), would essentially eliminate the effects of the WSIP on flow and water temperature in the lower Tuolumne River and the San Joaquin River.

L_MID-TID1-08 Please refer to **Sections 14.6 and 14.7, Master Responses on the Upper and Lower Tuolumne River Issues** (Vol. 7, Chapter 14), respectively, regarding additional instream flow requirements.

L_MID-TID1-09 As stated in the Draft PEIR, the CCSF must adhere to the Raker Act (Vol. 1, Chapter 2, pp. 2-33 and 2-34). The WSIP is consistent with Raker Act requirements, including Section 9(h), with respect to the export of additional

water from the Tuolumne River watershed, since the additional diversions under the WSIP would be for municipal and domestic purposes. Also refer to **Response L_TUD1-05**.

The WSIP does not seek to meet the entire increase in purchase requests (water demand) projected to occur between 2005 and 2030 by diverting more water from the Tuolumne River. The projected purchase request in 2030 is 300 mgd (336,066 afy), an increase of 35 mgd (39,207 afy) compared to the 2005 condition. Local demand would be reduced by about 4 mgd (4,481 afy) through water conservation measures over and above those already planned. Approximately 6 mgd (6,721 afy) of the additional demand would be met from local sources to be developed under the WSIP—2 mgd from groundwater wells in San Francisco (WSIP facility improvement project SF-2), and 4 mgd from reclamation and recycling of San Francisco's wastewater (WSIP facility improvement project SF-3).

The SFPUC is not planning to add new wholesale customers and is considering several options that would limit the use of Tuolumne River water to meet the wholesale customers' needs. An alternative, the No Purchase Request Increase Alternative, which would limit deliveries to the wholesale customers' current purchase requests, is evaluated in Chapter 9 of the Draft PEIR (Vol. 4). The Modified WSIP Alternative, which is also discussed in Chapter 9, would include an additional 5 to 10 mgd of water conservation, recycling, and groundwater use in the wholesale customers' service areas.

L_MID-TID1-10 The WSIP would result in an overall increase in average annual hydropower generation, but a decrease in average annual hydropower generation at TID/MID facilities, as noted in the Draft PEIR (Vol. 3, Chapter 5, p. 5.3.9-3). If TID/MID replaced the hydropower lost with power produced at a fossil-fuel plant, then the replacement would cause the emission of additional air pollutants and greenhouse gases. However, any emissions would be more than offset by the emission reductions resulting from the SFPUC's increase in hydropower generation, which would replace power produced through the combustion of fossil fuels. Please refer to the Draft PEIR (Vol. 2, Chapter 4, Section 4.9) for a description of the WSIP's effects related to greenhouse gas emissions.

L_MID-TID1-11 Please refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for a discussion of climate change that augments the discussion presented in Section 5.7.6 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-92 to 5.7-96). Section 14.11 provides more detailed and up-to-date information on climate change as it relates to the SFPUC regional water supply and the proposed WSIP.

L_MID-TID1-12 The comment expressing an opinion on the appropriateness of additional diversions from the Tuolumne River is acknowledged.

The opinion of the commenter that greater consideration should be given to the Lower Tuolumne River Diversion Alternative and the two desalination alternatives is acknowledged. The San Francisco Planning Department disagrees that the Lower Tuolumne River Diversion, Year-round Desalination at Oceanside, and Regional Desalination for Drought Alternatives would have fewer environmental impacts than the WSIP or Modified WSIP Alternative. As described in the Draft PEIR (Vol. 4, Chapter 9, p. 9-93 and 9-94), although these alternatives would have lesser effects on the Tuolumne River than the WSIP and the Modified WSIP Alternative, they would result in substantially greater construction and operations impacts associated with a treatment plant, intake structures, transmission and distribution pipelines, and possibly a storage facility. In addition to the likelihood of substantially greater impacts on land use, traffic, air quality, noise, biological resources, and energy, these alternatives would also result in indirect effects associated with greater energy use. Obtaining the additional energy would have its own environmental impacts, which would likely include the emission of air pollutants and greenhouse gases.

As noted above in **Response L_MID-TID1-03** and in Section 11.2 (Vol. 6, Chapter 11, p. 11-2), following certification of the Final PEIR, decision-makers have the discretion to approve the WSIP or any portion/modification/alternative of the WSIP analyzed in the PEIR.

L_MID-TID1-13 If the proposed and preferred Mitigation Measure 5.3.6-4a (Vol. 4, Chapter 6, p. 6-48) proves to be feasible and is implemented, then the WSIP would have minimal effects on the Tuolumne River below La Grange Dam. If Measure 5.3.6-4a proves to be infeasible, then the SFPUC would implement Mitigation Measure 5.3.6-4b (Vol. 4, Chapter 6, pp. 6-48 and 6-49). Please refer to **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14) for detailed discussion of these measures.

The Draft PEIR does not provide a mitigation measure for TID/MID's loss of hydropower identified under Impact 5.3.9-1 (Vol. 3, Chapter 5, pp. 5.3.9-2 and 5.3.9-3) because this impact is economic rather than environmental and consequently does not need to be addressed in a CEQA document. Depending on how TID/MID replaced the lost power, greenhouse gases could be emitted. However, as noted **Response L_MID-TID-10**, any increased emissions would be more than offset, because the WSIP would produce a net increase in hydropower. Refer to the Draft PEIR for information on greenhouse gas emissions under the WSIP (Vol. 2, Chapter 4, Section 4.9).

- L_MID-TID1-14 This comment requesting special attention is acknowledged.
- L_MID-TID1-15 This comment, which expresses TID's opinion regarding prior discussion of the water transfers, is acknowledged. Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.2) for additional information.
- L_MID-TID1-16 This comment, which expresses TID's concurrence with the removal of the fourth pipeline from the WSIP, is acknowledged. The WSIP facility improvement projects (Vol. 1, Chapter 3, Table 3.10, p. 3-49) include the San Joaquin Pipeline System project (SJ-3), which would consist of partial segments of a fourth San Joaquin Pipeline and additional crossover facilities.
- L_MID-TID1-17 This comment regarding the agreements between the CCSF and the Districts (TID and MID) is acknowledged. The Draft PEIR (Vol. 1, Chapter 2, pp. 2-42 and 2-43) includes a summary description of the Fourth Agreement among the CCSF, TID, and MID regarding the New Don Pedro Project.
- L_MID-TID1-18 The SFPUC chose a design drought more severe than any drought in the hydrologic record because of San Francisco's unusual vulnerability to droughts and its experiences during earlier droughts. Most agricultural water agencies and many municipal water agencies have both surface water and groundwater supply sources. During droughts, these agencies can increase pumping from their groundwater sources to make up for any shortfall in surface water supplies. When planning for the future, these agencies typically establish their design drought based on the historical record. If the historical record proves to be unreliable and droughts more severe than those in the historical record occur, the agencies can always turn to their groundwater supplies or, in the case of the agricultural agencies, fallow some land. In this way, they can avoid severe economic losses. Unlike these agencies, San Francisco depends almost exclusively on surface water supplies, and its water rights are restricted in a manner that means little or no water is available to the SFPUC from its primary source, the Tuolumne River, in very dry years. As a result, the risk of a severe water shortage, with attendant economic losses, is much greater for San Francisco than for most other urban or agricultural communities. Because of these circumstances, the SFPUC determined that it would take a more conservative posture than many water agencies in choosing a design drought.
- The disadvantages for the SFPUC of choosing a design drought based on the historical record were illustrated during the 1987–1992 drought. Toward the end of this extended drought, San Francisco's water supplies were almost exhausted, and the SFPUC was initiating programs to achieve a 45 percent reduction in system wide water deliveries (described in Vol. 1, Chapter 2,

p. 2-26). Absent an unseasonably large spring storm (the “March miracle”), severe rationing would have been imposed and economic losses incurred.

For the reasons noted above, the SFPUC concluded that it would be imprudent to base its design drought entirely on historical hydrology. Consequently, it does not see the need for a parallel analysis of the WSIP using a design drought based on historical hydrology. If such an analysis were performed, it would likely reduce the size of the transfer needed to meet the SFPUC’s water needs during droughts. Although the design drought is an extreme event without precedent in the historical record, dry-year transfers, when needed, would typically be smaller than the estimated maximum.

- L_MID-TID1-19 Please refer to **Response L_MID-TID1-01**.
- L_MID-TID1-20 The SFPUC has conducted sufficient background studies, which have identified the feasibility of developing approximately 10 mgd of additional water from conservation, recycling, and groundwater development in San Francisco. If the SFPUC were unable to meet the demand of retail customers through conservation, recycling, and groundwater use, more water would have to be diverted from the Tuolumne River to meet the WSIP goals and objectives. This possibility was examined as Variant 1 in Vol. 4, Chapter 8, pp. 8-7 to 8-10 of the Draft PEIR. The environmental consequences of Variant 1 are described in Vol. 4, Chapter 8, pp. 8-70 to 8-72 of the Draft PEIR.
- L_MID-TID1-21 The WSIP does not include plans to fully treat the SFPUC’s entire water supply. The federal Safe Drinking Water Act generally requires filtration of drinking water supplies; however, the U.S. Environmental Protection Agency and California Department of Health Services have approved the use of unfiltered water from the Hetch Hetchy watershed because Hetch Hetchy water is of such high quality. These agencies and the SFPUC concluded that watershed protection and disinfection are sufficient to produce a safe water supply. The SFPUC does not expect to be required to filter Hetch Hetchy water by 2030, and so full treatment was not included in the WSIP. The improvements contained in the WSIP are compatible with the addition of filtration, if filtration ever becomes necessary in the future.
- L_MID-TID1-22 Refer to **Response L_MID-TID1-02**.
- L_MID-TID1-23 Refer to **Response L_MID-TID-05** and **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14) for more detail on the proposed water transfer from TID/MID to the SFPUC.
- L_MID-TID1-24 Refer to **Response L_MID-TID-14**.

L_MID-TID1-25 Some of the information requested in this comment is available and pertinent to the PEIR. As noted in the Draft PEIR, the 2005 regional system firm yield is estimated to be 219 mgd (Vol. 1, Chapter 3, Table 3.5, p 3-26). This is lower than the normal regional system firm yield of 226 mgd because of current restrictions on storage in Calaveras Reservoir. The expected 2030 regional system firm yield with the WSIP is estimated to be 256 mgd. However, the requested information on the Tuolumne River and local system firm yield is not relevant (or available), since the WSIP was designed with consideration of the regional system as a whole. The average annual delivery via the San Joaquin Pipeline under 2005 conditions is about 247,700 acre-feet. The corresponding value under 2030 conditions with the WSIP would be about 274,500 acre-feet. Other project-specific data on the San Joaquin Pipeline system is relevant to the programmatic impact analysis in the PEIR and would be considered as necessary during project-level environmental review of the San Joaquin Pipeline System project (SJ-3).

With respect to units of flow, please refer to **Response L_MID-TID1-04**. With respect to the assumptions used in WSIP water supply planning and modeling, refer to **Response L_MID-TID1-01**, which addressed the commenter's request for flow assumptions.

L_MID-TID1-26 Please refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14) for a discussion of climate change that augments the discussion presented in Section 5.7.6 of the Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-92 to 5.7-96). Section 14.11 provides more detailed and up-to-date information on climate change as it relates to the SFPUC regional water supply and the proposed WSIP.

L_MID-TID1-27 Comment noted with respect to TID's opinion that any additional diversions from the Tuolumne River should be made from the lower reaches of the river.

The Draft PEIR analyzes an alternative under which the SFPUC would divert water from the Tuolumne River just upstream of the river's confluence with the San Joaquin River. It is referred to as the Lower Tuolumne River Diversion Alternative and is described in Vol. 4, Chapter 9, pp. 9-59 to 9-66 together with its potential environmental consequences.

The Draft PEIR did not evaluate a lower Tuolumne River alternative involving diversion at about River Mile 25, close to the existing diversion for TID's future Regional Water Supply Project. Such an alternative would be more costly than the Lower Tuolumne River Diversion Alternative examined in the Draft PEIR and, as noted in the comment letter, would have fewer environmental benefits.

L_MID-TID1-28 Please refer to the Draft PEIR (Vol. 1, Chapter 3, pp. 3-86 to 3-88) for a description of the required actions and approvals applicable to the overall WSIP. This discussion identifies TID and MID as responsible for review and approval of water transfer agreements with the SFPUC and/or for amendments to the SFPUC's water bank account in Don Pedro Reservoir. Please also refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.3) for additional information.

L_MID-TID1-29 The Draft PEIR provides a description of the purpose of the program environmental impact report (Vol. 1, Chapter 1, pp. 1-1 to 1-4), as well as a description of WSIP project refinements and other WSIP components that had been developed since the SFPUC's issuance of the preliminary WSIP program description in January 2006 (Vol. 1, Chapter 3, pp. 3-23 to 3-25). The San Francisco Planning Department is responsible for preparation of the PEIR and the environmental review of individual WSIP projects. The Planning Department maintains a mailing list for the WSIP PEIR and also uses this list for the project-level CEQA documents for individual WSIP projects to inform all potentially affected agencies, organizations, and individuals.

The commenter's impression (gained at the scoping meeting) that the PEIR would be the overarching document for all projects funded through the WSIP bond measure is incorrect (see Draft PEIR Vol. 1, Chapter 3, pp. 3-23 and 3-24). Some water system improvements funded through the WSIP bond measure are treated as independent projects, are not addressed in the PEIR, and would be subject to separate CEQA compliance processes.

The Lower Tuolumne Diversion Alternative is evaluated in Chapter 9 of the Draft PEIR (Vol. 4, pp. 9-59 to 9-66). The SFPUC recognizes that if it chose to proceed with this alternative, or any course of action described in the PEIR, it would have to coordinate with TID and MID, and that regional and specific projects would need to be closely coordinated. TID's Regional Surface Water Supply Project is described in the Draft PEIR cumulative impact analysis (Vol. 3, Chapter 5, Section 5.7).

**Modesto Irrigation District / Turlock Irrigation District,
Walter Ward / Robert Nees, Assistant General Manager /
Assistant General Manager, 10/29/07**

L_MID-TID2-01 See **Response L_MID-TID1-01.**

L_MID-TID2-02 See **Response L_MIDTID1-01.**

City of Millbrae, Ronald Popp, Director of Public Works, 9/28/07

- L_Millbr-01 This comment, which describes the City of Millbrae's evaluation of groundwater and recycled water projects, its pursuit of conservation practices, and its reliance on the SFPUC for water supplies, is noted.
- L_Millbr-02 This comment regarding the urgency and critical nature of the WSIP and the need to proceed expeditiously with the WSIP is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for more discussion.
- L_Millbr-03 This comment expressing the City of Millbrae's support for the Modified WSIP Alternative is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative.
- L_Millbr-04 Please refer to **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.6.5) and **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.6) for clarification regarding current and estimated future municipal and agricultural diversions from the Tuolumne River.
- L_Millbr-05 The Draft PEIR analyzes the environmental impacts of the proposed program, which includes a level of service objective to limit rationing during an extended drought to a maximum of 20 percent systemwide. Chapter 8 of the Draft PEIR analyzes a WSIP variant in which rationing during an extended drought would be limited to a maximum of 10 percent systemwide (Vol. 4, Chapter 8, pp. 8-33 to 8-35). The PEIR does not include a variant with 30 percent systemwide rationing, although the No Program Alternative and Aggressive Conservation/Water Recycling and Local Groundwater Alternative would result in rationing greater than 20 percent systemwide during drought periods. With respect to CEQA requirements related to economic evaluations, please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 7, Section 14.1.6).

City of Milpitas, Thomas Williams, City Manager, 9/27/07

- L_Milpts-01 This comment regarding the urgency to rehabilitate the SFPUC water delivery system to help the system withstand a major earthquake is acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.4) for more details related to this issue.
- L_Milpts-02 This comment emphasizing the City of Milpitas' reliance on SFPUC water supplies and urging rapid implementation of the WSIP is acknowledged.
- L_Milpts-03 This comment, which contains information on the current percentage of Milpitas' supply provided by the SFPUC and additional information on Milpitas' other sources of supply, is noted. The percentages of supply provided by the SFPUC, as shown in Draft PEIR Table 7.3 (Vol. 4, Chapter 7, p. 7-18), are from the 2001 base year used in the wholesale customer demand study, and the percentage shown in Table 3.3 (Vol. 1, Chapter 3, p. 3-18) and Table 7.2 (Vol. 4, Chapter 7, p. 7-15) and the customer summary referenced in this comment is the projected percentage for 2030. For wholesale customers with multiple sources of supply, such as Milpitas, the percentage of water supplied by the SFPUC would be expected to vary from year to year, as this comment illustrates. This change does not alter the analysis or conclusions presented in the Draft PEIR. By virtue of the City's making this comment, this information is included as part of the Final PEIR.
- L_Milpts-04 This comment on Milpitas' maintenance of separate potable distribution systems is noted. By virtue of the City's making this comment, this information is included in the Final PEIR.
- L_Milpts-05 As shown in Table 7.3 (Vol. 4, Chapter 7, p. 7-18), the City of Milpitas' 2001 to 2030 projected demand increase is 48 percent, while its change in purchases from the SFPUC is only 20 percent; this substantial difference between demand and purchases noted in the Draft PEIR is consistent with information provided in this comment (i.e., that a larger portion of the City's future demand increase is expected in areas served by the Santa Clara Valley Water District). The customer-specific summary (Chapter 7, p. 7-49) notes that Milpitas' 2030 purchase estimate of 8.2 million gallons per day (mgd) is below its current water supply assurance of 9.23 mgd. By virtue of the City's making this comment, this information is included in the Final PEIR.
- L_Milpts-06 This comment describing Milpitas' recycled water use is noted. Draft PEIR Table 3.3 (Vol. 1, Chapter 3, p. 3-18) and Table 7.2 (Vol. 4, Chapter 7, p. 7-15) show the City's 2030 projected use of 1.77 mgd of recycled water which, as this comment notes, represents approximately 10 percent of its total 2030 water supply.

- L_Milpts-07 The introduction to Section 7.3.6, Customer-Specific Summaries, of the Draft PEIR (Vol. 4, Chapter 7, p. 7-34) indicates that the discussions in this section refer to Table 7.2.
- L_Milpts-08 This comment providing additional information regarding the City's water conservation programs is acknowledged.
- L_Milpts-09 Draft PEIR Tables C.4 and C.5 (Vol. 5, Appendix C, pp. C-21 and C-24) indicate that the SFPUC proposes to utilize Calaveras Road for the Calaveras Dam Replacement (SV-2) construction access route for workers, equipment, and haul/delivery trucks. The City's concerns with potential construction-related traffic impacts on Milpitas streets will be addressed in detail as part of project-level CEQA review for the Calaveras Dam Replacement project.
- L_Milpts-10 Draft PEIR Table C.3 (Vol. 5, Appendix C, p. C-16) indicates there are no alternative locations under consideration in Milpitas. In response to this comment, the City of Milpitas has been added to Table 3.11, WSIP Improvement Projects – Affected Jurisdictions, under SV-2, Calaveras Dam Replacement project (Vol. 1, Chapter 3, p. 3-60). The table is revised as follows:

<u>Affected County and City Jurisdictions</u>	<u>SV-2, Calaveras Dam Replacement</u>
<u>Milpitas</u>	<u>A</u>

- L_Milpts-11 The commenter requests that the Midtown and Transit Area Specific Plans for Milpitas be added to Draft PEIR Table 4.17-3 (Vol. 2, Chapter 4, p. 4.17-14) in Section 4.17, Cumulative Effects. Since the Draft PEIR cumulative analysis did not include specific plans, these plans have not been included. In general, many factors determine how and when growth will occur in a specific plan area, and it is therefore too speculative to assume that all or some portion of the expected growth in a specific plan area would coincide with the construction of WSIP facility projects. As stated in note "b" of Table 4.17-3 (Vol. 2, Chapter 4, p. 4.17-20), the schedules of projects included in the cumulative projects list were based on the most current information available during preparation of the Draft PEIR, as of July 2006.

The Draft PEIR (Vol. 2, Chapter 4, p. 4.17-2) states that the project information listed in Tables 4.17-1 through 4.17-5 (Vol. 2, Chapter 4, pp. 4.17-3 to 4.17-35) was compiled based on consultations with local jurisdictions within the San Joaquin, Sunol Valley, Bay Division, Peninsula, and San Francisco Regions (the local planning, community development, and public works/engineering departments of these agencies) as well as review of EIRs and information posted on agency websites. Specific development projects are listed in Tables 4.17-1 through 4.17-5, and they include projects located within specific plan areas. Several development projects in the Midtown Specific Plan area could be included in

Table 4.17-3: the North Main Street utilities and streetscape improvements, Milpitas Public Library, Devries Place senior housing, and the Santa Clara Valley Health Center Milpitas and Parking Structure. These projects are already under construction along the Main Street corridor. Since none of them are adjacent to any proposed WSIP facility projects, the cumulative impacts resulting from these projects in combination with the WSIP projects and other projects listed in the Draft PEIR would be limited to cumulative construction-related traffic impacts on I-880 and Highway 237 as well as associated regional air quality and noise impacts. The Draft PEIR identifies cumulative traffic, air quality, and noise impacts as potentially significant and unavoidable. The significance of these impacts would remain unchanged when these projects are added.

L_Milpts-12 The bullet characterizing growth in Milpitas and East Palo Alto as more recent is in reference to the preceding bullet, which indicates that the highest rates of growth within most cities in the wholesale customer service area occurred in the decades following World War II (i.e., the 1950s through the 1970s). By contrast, according to the Milpitas General Plan (p. 1-1), “with the exception of the Great Mall...and some scattered subdivisions and buildings along Main Street, virtually the entire City has been built over the last 30 years” (City of Milpitas, 2002a). Additional information on growth trends in select jurisdictions in the service area, including Milpitas, is presented in Draft PEIR Appendix E.4. The additional information on growth over the past decade provided in this comment supplements, and is not inconsistent with, the information presented in the Draft PEIR on the longer-term development trends in the area.

L_Milpts-13 This comment states that the Draft PEIR characterization of growth for the city (Vol. 4, Chapter 7, pp. 7-49 and 7-50) is incorrect and cites examples of smart growth planning. The City’s commitment to smart growth described in this comment is acknowledged. The PEIR text referenced in this comment accurately describes adjustments that were made to the Demand Side Management Least-Cost Planning Decision Support System (DSS) model, which reflected assumptions about future growth in the city at the time. Model assumptions and adjustments were made in close consultation with city staff, and the City submitted a form concurring with the projected demands. While the City of Milpitas faults the characterization of future growth within the city and suggests that adjustments be made to the demand model, Comment L_Milpts-05 shows that the City’s purchase request is consistent with that presented in the Draft PEIR. Therefore, no change to the PEIR text or to the description of account categories in the demand model is warranted.

L_Milpts-14 The “Water Customer – Selected Population Projection for 2030” column in Draft PEIR Table 7.8 (Vol. 4, Chapter 7, p. 7-28) refers to population projections used in the DSS demand model, based on the projection source selected by each wholesale customer. The information presented in this column (including a 2030 population of 88,841 for Milpitas) is based on the *SFPUC Wholesale Customer Demand*

Technical Memorandum (URS, 2004b, Table 4-1, p. 4-5 of the memorandum), which also indicates that the Association of Bay Area Governments' (ABAG) *Projections 2002* subregional series was Milpitas' choice of projections source. This is consistent with the "Wholesale Customer Population Projection Selection Form" submitted by Milpitas (dated February 6, 2004), which indicated the City selected ABAG as the projections source, and that this selection was a revision of an earlier projections source selection.

With respect to the general plan projection, contrary to the information in the Draft PEIR (and consistent with information presented in this comment), the Midtown Milpitas Specific Plan is included in the current general plan projection of 77,100.¹ Therefore, in response to this comment, the Draft PEIR has been revised as shown below. However, the suggested revision (of taking the additional population expected to result from the proposed Transit Area Specific Plan project and adding it to the general plan projection) has not been made, because the comparison of general plan and water demand study projections presented in Table 7.8 and discussed in the individual customer summaries is between the demand study projections and those in *adopted* general plans; the Transit Area Specific Plan has not yet been adopted.

The entry for Milpitas in Table 7.8 (Vol. 4, Chapter 7, p. 7-28) has been revised as shown on the following page.

The customer-specific summary (Vol. 4, Chapter 7, p. 7-50, first full paragraph) for Milpitas is revised as follows:

The customer-selected population projection used for Milpitas in the demand study is generally consistent with approximately 15 percent greater than the growth identified in the city's general plan and is generally consistent with (about 3 percent less than) the growth projected by ABAG. ~~The 2030 Milpitas population presented in the demand study is approximately 6 percent less than that cited in the city's general plan, as amended by the Midtown Milpitas Specific Plan, and projected by ABAG. The City of Milpitas is currently preparing a Transit Area Specific Plan that is expected, upon adoption, to result in a buildout population of 95,014, somewhat greater than the population projection used in the demand study (Williams, 2007).~~

¹ This is at variance with the *Midtown Milpitas Specific Plan Draft Environmental Impact Report* (DEIR) analysis (Chapter 5 of that report, p. 5-1), which states that ABAG projected a 2020 population of 77,100 for Milpitas based on the land use regulations and land availability in effect prior to the adoption of the specific plan. (*Projections 2000*, published in 1999, shows this projection of 77,100 in 2020 and is assumed to be the projection series cited in the specific plan DEIR.)

TABLE 7.8
COMPARISON OF WATER DEMAND POPULATION ESTIMATES AND GENERAL PLAN POPULATION ESTIMATES

Customer	UWMP Population in 2030	Projections 2005 Population in 2030	Water Customer- Selected Population Projection for 2030	General Plan Population Projection for General Plan Projection Year ^a	General Plan Projection Year ^a	Difference: Water Customer Population and General Plan Population	% Difference (Water Customer Population and General Plan Population)
Customer-selected projection less than or equal to general plan projection							
City of East Palo Alto	32,712	43,600	32,712	34,600	2020	-1,888	-5.5%
City of Milpitas ^b	91,400	91,400	88,841	94,400	2020	5,559	-5.9%
City of Sunnyvale ^c	159,100	159,100	151,610	154,600	2020	-2,990	-1.9%
Customer-selected projection 1–10% greater than general plan projection							
Alameda County Water District	405,900	404,700	379,931	359,113		20,818	5.8%
Fremont	257,100	257,200		229,213	2020		
Newark	53,500	53,400		49,800	2020		
Union City	95,300	94,100		80,100	2020		
CWS–South San Francisco District and Westborough Water District ^{d,e}	83,450	73,660	73,884	68,685	2020	5,199	7.6%
City of Daly City	115,651	127,200	115,651	113,000	2020	2,651	2.3%
City of Hayward	162,800	171,500	162,757	160,300	2025	2,457	1.5%
Town of Hillsborough		11,800	12,708	11,800	2025	908	7.7%
Mid-Peninsula Water District ^f	28,930	28,800	27,997	27,800	2010	197	0.7%
City of Millbrae	24,200	24,500	25,174	24,860	2015	314	1.3%
City of Mountain View	81,700	89,600	81,670	75,200	2010	6,470	8.6%
City of Palo Alto	69,199	92,200	69,199	62,880	2010	6,319	10.0%
City of Redwood City	93,329	122,300	93,535	87,100	2020	6,435	7.4%
City of San Bruno	See note g	50,700	48,229	46,400	2020	1829	3.9%
City and County of San Francisco ^h	849,942	903,300	849,942	811,100	2020	38,842	4.8%
City of Santa Clara	140,698	142,100	140,698	129,900	2010	10,798	8.3%
Customer-selected projection more than 10% greater than general plan projection							
City of Burlingame ^h	31,900	31,900	34,967	31,500	2010	3,467	11.0%
City of Milpitas ^b	91,400	91,400	88,841	94,400	2020	5,559	-5.9%
Coastside County Water District ⁱ	24,973	27,100	24,973	21,065	2020	3,908	18.6%
Estero Municipal Improvement District (MID) ^{j,k}	40,866	32,500	40,096	30,803	2010	9,293	30.2%

NOTE: Most wholesale customer service areas are not contiguous with city limits (or with the city and its planning area), and therefore the population projections from the jurisdictions' general plans and ABAG should be considered as general comparisons only. The following are not included, because the water service area and jurisdictional boundaries are not comparable or the general plan of the corresponding jurisdiction does not provide a comparable population projection: Brisbane, CWS–Bear Gulch, CWS–Mid-Peninsula, Menlo Park, North Coast County Water District, Purissima Hills Water District, San Jose North, Skyline County Water District, and Stanford University.

^a The general plan population projection and projection year are the most distant population projection and the year of the most distant population projection available in the general plan or general plan element.

^b The general plan population is based on the 2002 Milpitas General Plan, population shown in the general plan (77,100) plus the additional population accommodated by the Milpitas Midtown Specific Plan, as advised by Milpitas Planning Department staff (Carrington, 2006), to account for 5,000 additional units with an assumed density of 3.46 persons per unit (i.e., an added population of 17,300). The City has amended to general plan to incorporate the specific plan.

^c The service area of Sunnyvale's water district is contiguous with the city limits; however, another water utility (CWS) serves several small areas within the city.

^d CWS = California Water Service Company.

^e CWS–South San Francisco serves South San Francisco, Colma, a small portion of Daly City, and the unincorporated area of Broadmoor. The water customer estimate for the Westborough Water District is from the district's Urban Water Management Plan. The general plan figure is the combined total projected population in the South San Francisco and Colma general plans (67,400 and 1,285 respectively); the general plan projection year shown (2020) is for South San Francisco, the projection year for Colma is 2005. The Projections 2005 figure is for South San Francisco and Colma (71,800 and 1,860, respectively).

^f The Mid-Peninsula Water District serves Belmont, portions of San Carlos, and unincorporated areas of San Mateo County. The general plan figure is for the city of Belmont, from the 2002 housing element.

^g The San Bruno UWMP (City of San Bruno, 2007) shows two population projections for 2030: 50,700, based on ABAG's Projections 2005, and 48,229, based on the City's Adjusted Draft General Plan.

^h UWMP and Projections 2005 figures are for household population, since the customer-selected figure is for household population.

ⁱ Burlingame's water system also serves portions of unincorporated Burlingame and a few properties in the city of San Mateo and town of Hillsborough.

^j The general plan figure is for the city of Half Moon Bay only, from the 1993 Half Moon Bay Local Coastal Program Land Use Plan (Table 9.3, Chapter 9, page 189). In addition to incorporated Half Moon Bay, the Coastside County Water District serves unincorporated areas of Half Moon Bay and the unincorporated communities of El Granada, Miramar, and Princeton by the Sea.

^k Estero MID serves Foster City and a portion of the city of San Mateo. The general plan figure is for Foster City.

SOURCES: ABAG, 2004; ACWD, 2005; CWS–South San Francisco, 2006; Carrington, 2006; City and County of San Francisco, 2004; City of Belmont, 2002a; City of Burlingame, 2002a; City of Burlingame, 2005; City of Daly City, 2004a; City of Daly City, 2005; City of East Palo Alto, 1999a; City of East Palo Alto, 2006; City of Foster City, 2001a; City of Fremont, 2003a; City of Half Moon Bay, 1993; City of Hayward, 2002a; City of Hayward, 2005; City of Millbrae, 1998a; City of Millbrae, 2005; City of Milpitas, 2002a; City of Milpitas, 2005; City of Mountain View, 2002a; City of Mountain View, 2005; City of Newark, 2002a; City of Palo Alto, 1998a; City of Palo Alto, 2005b; City of Redwood City, 2005b; City of Redwood City, 2007a; City of San Bruno, 2003a; City of San Bruno, 2007; City of Santa Clara, 2002a; City of Santa Clara, 2005; City of South San Francisco, 2002a; City of Sunnyvale, 2002a; City of Sunnyvale, 2005; City of Union City, 2002a; Coastside County Water District, 2005; Estero MID, 2005; Hannaford and Hydroconsult, 2004; Mid-Peninsula Water District, 2006; SFPUC, 2005; Town of Colma, 1999a; Town of Hillsborough, 2002a; URS, 2004a, Westborough Water District, 2005.

The first bullet on p. 7-27, Section 7.3.3, General Plan Projections, is revised as follows:

The population projections used for ~~three~~ two of the wholesale customers (East Palo Alto, ~~Milpitas~~, and Sunnyvale) in the water demand studies are less than (from 2 to 6 percent less) the projections assumed in the general plans of the jurisdictions served by them.

The first two bullets on p. 7-29 are revised as follows:

The population projections assumed by ~~three~~ four of the water customers (Burlingame, Coastside County Water District, ~~and~~ Estero Municipal Improvement District, and Milpitas) appear to be more than 10 percent greater than the projections assumed in the respective general plans. The difference in these projections results from the longer 2030 planning horizon used for water planning and differences in the geographic area covered by the two sets of projections. Based on the difference in projections, however, the growth assumed in the demand models of these wholesale customers does not appear to be fully addressed in the general plans of the cities served by these customers.

Two of the ~~three~~ four customers assuming greater population growth than is reflected in the respective general plan also show somewhat greater growth than is forecasted in *Projections 2005*. Both of these customers (Burlingame and Estero MID) serve unincorporated areas outside the city's jurisdictional boundaries and ABAG subregional areas. In addition, Estero MID serves a non-segregable part of the city of San Mateo that is not included with the *Projections 2005* forecast for Foster City used in this comparison. The other customer (Coastside County Water District) assumes less growth than is forecasted in *Projections 2005* for 2030.

In response to this comment and comment L_RdwdCty-08, the last complete bullet on p. 7-7, Section 7.1.2, Summary of Conclusions, is revised as follows:

The population growth assumed in the demand projections for most (~~47~~ 15 of ~~20~~ 2019) of the water customers for which comparable general plan projections are available is similar to the growth anticipated in the general plans of the cities served by them.

In Vol. 1, Summary, p. S-62, the last full paragraph, second from the last sentence, is revised as follows:

In some jurisdictions (Foster City, Half Moon Bay, Milpitas, and Burlingame), the WSIP could support more population growth than is forecasted in adopted general plans.

In Vol. 5, Appendix E.3, the entries for Milpitas in Tables E.3.34 and E.3.36 (pp. E.3-38 and E.3-40) are revised as shown on the following pages.

TABLE E.3.34
COMPARISON OF GENERAL PLAN POPULATION PROJECTIONS TO ABAG PROJECTIONS 2005,
UWMPS, AND WATER CUSTOMER DEMAND PROJECTIONS FOR GENERAL PLAN PROJECTION YEAR

	Population in General Plan Population Year ^a Shown in:			
	General Plan ^b	UWMP	SFPUC Water Customer Projection ^c	Projections 2005
Cities with GP Population Projections for 2005				
Colma	1,285	see note d	see note d	1,350
Cities with GP Population Projections for 2010				
Belmont	27,800	see note f	see note f	26,000
Burlingame	31,500	30,200	31,648	30,200
Foster City	30,803	37,424 ^e	36,284 ^e	29,800
Menlo Park	35,285	10,344 ^g	12,619 ^g	35,600
Mountain View	75,200	75,200	74,422	76,000
Palo Alto	62,880	64,168	62,823	78,300
San Mateo	100,700	see note h	see note h	102,500
Santa Clara	129,900	116,527	115,630	117,400
Cities with GP Population Projections for 2015				
Millbrae	24,860	23,055	23,253	22,800
Cities with GP Population Projections for 2020				
Atherton	8,400	see note i	see note i	7,900
Daly City	113,000	114,291 ^j	112,363 ^j	120,200
East Palo Alto	34,600	29,612	29,844	39,600
Fremont	229,213	236,700	see note k	236,900
Half Moon Bay (incl. unincorporated area)	21,065	23,262	22,679	26,400
Milpitas	77,100 94,400 ^l	82,400	79,846	82,400
Newark	49,800	50,000	see note k	49,000
Redwood City	87,100	89,492 ^m	89,519 ^m	114,200
San Bruno	46,400	n.a.	45,642	47,700
San Francisco	811,100	840,000	818,954 ⁿ	859,200
South San Francisco+Westborough Water District ^d	67,400	78,200	70,156	68,700
Sunnyvale	154,600	146,900	144,629	146,900
Union City	80,100	86,000	see note k	82,600
Cities with GP Population Projections for 2025				
Hayward	160,300	160,300	158,909	165,900
Hillsborough	11,800	n.a.	12,520	11,600
Cities with GP Population Projections for Years Prior to 2005 or No Applicable GP: Projections for 2030				
Brisbane + Guadalupe Valley MID		n.a.	6,164	5,240
Los Altos Hills		n.a.	see note o	10,700
Los Trancos County Water District ^p		see note q	1,094	n.a.
Pacifica		42,100	47,829	42,200
Portola Valley		see note q	see note q	7,800
San Carlos		see note h	see note h	35,200
Stanford University		n.a.	27,924	n.a.
Woodside		see note q	see note q	7,300

n.a. = Not available.

^a Population shown is for the year of the most distant population projection available in the general plan, housing element, or other relevant local document (see note b). For example, populations in all columns for cities in the group titled "Cities with GP Population Projections for 2005" are populations projected for or estimated in 2005.

^b Population estimates are from each city's general plan (GP) or the general plan's EIR.

^c Estimates for years between 2001 and 2030 are derived by Mundie & Associates, based on linear interpolations of water customer projections, except for the 2020 San Francisco projection, which is included in the Retail Demand Study (Hannaford and Hydroconsult, 2004).

^d CWS – South San Francisco District (Colma, parts of Daly City and South San Francisco, plus unincorporated areas) UWMP projection for 2020 is 64,050, and Westborough Water District (which serves part of South San Francisco) UWMP projection for 2020 is 14,150; the CWS-South San Francisco water customer projection for 2020 is 56,006 and the Westborough Water District water customer projection is the same as its UWMP projection (14,150).

TABLE E.3.36
COMPARISON OF GENERAL PLAN POPULATION PROJECTIONS TO
ABAG PROJECTIONS 2005, UWMPs, AND WATER CUSTOMER DEMAND PROJECTIONS FOR 2030

	General Plan Population Projection	UWMP Population in 2030	SFPUC Water Customer Population Projection for 2030	Projections 2005 Population in 2030
Cities with GP Population Projections for 2005				
Colma	1,285	see note a	see note a	1,860
Cities with GP Population Projections for 2010				
Belmont	27,800	see note c	see note c	28,800
Burlingame	31,500	31,900	34,967 ^d	31,900
Foster City	30,803	40,866	40,096 ^b	32,500
Menlo Park	35,285	11,218 ^{e,i}	13,655 ^{e,i}	41,100
Mountain View	75,200	81,700 ^g	81,670 ^g	89,600
Palo Alto	62,880	69,199	69,199	92,200
San Mateo	100,700	see note h	see note b,h	119,800
Santa Clara	129,900	140,698	140,698	142,100
Cities with GP Population Projections for 2015				
Millbrae	24,860	24,200	25,174	24,500
Cities with GP Population Projections for 2020				
Atherton	8,400	see note f	see note f	8,200
Daly City	113,000 ⁱ	115,651 ^{j,k}	115,651 ^{j,k}	127,200
East Palo Alto	34,600	32,712	32,712	43,600
Fremont	229,213	257,100	see note l	257,200
Half Moon Bay (incl. uninc. area)	21,065	24,973 ^m	24,973 ^m	27,100
Milpitas	77,100 ⁿ	91,400	88,841	91,400
Newark	49,800	53,500	see note l	53,400
Redwood City	87,100	93,329 ^o	93,535 ^o	122,300
San Bruno	46,400	see note p	48,229 ^q	50,700
San Francisco	811,100	871,000	849,942	924,600
South San Francisco+Westborough Water District	67,400	83,450 ^r	73,884 ^r	71,800
Sunnyvale	154,600	159,100	151,610	159,100
Union City	80,100	95,300	see note l	94,100
Cities with GP Population Projections for 2025				
Hayward	160,300	162,800	162,757	171,500
Hillsborough	11,800		12,708 ^s	11,800
Cities with GP Population Projections for Years Prior to 2005 or No Applicable GP Population Projection				
Brisbane + Guadalupe Valley MID		n.a.	6,164	5,240
Los Altos Hills		n.a.	see note t	10,700
Los Trancos Valley Water Dist. ^u		n.a.	1,094 ^v	
Pacifica		42,100	47,829	42,200
Portola Valley		n.a.	see notes f,w	7,800
San Carlos		see note h	see note h	35,200
Stanford University			27,924	n.a.
Woodside			see note f	7,300

- ^a CWS – South San Francisco District (Colma, parts of Daly City and South San Francisco, plus unincorporated areas) UWMP projection for 2030 is 60,150; water customer projection for 2030 is 59,584.
- ^b Estero MID (Foster City and part of San Mateo) projection for 2030 is 40,096.
- ^c Mid-Peninsula Water District (Belmont, part of San Carlos, and portions of unincorporated San Mateo County) UWMP projection for 2030 is 28,930; water customer projection is 27,997.
- ^d Figure shown is for the City of Burlingame Water Agency, which also serves some unincorporated area.
- ^e Figure shown is for the portion of Menlo Park (less than half of the city's population) served by the City of Menlo Park Water Agency.
- ^f CWS – Bear Gulch District (Atherton, parts of Menlo Park, Portola Valley, and Woodside, plus unincorporated areas) projection for 2030 is 73,719; UWMP population projection is 59,220 in 2030.
- ^g Figure shown is for the City of Mountain View Water Agency, which serves most of Mountain View.
- ^h CWS – Mid-Peninsula District (parts of the cities of San Mateo and San Carlos plus unincorporated areas) water customer population projection for 2030 is 139,834; UWMP population projection for 2030 is 134,010.
- ⁱ The Housing Element of the Daly City General Plan projects this population within the city limits and a population of 120,000 within the (planning) area that corresponds to the ABAG subregional study area.
- ^j Figure shown is for the portion of Daly City served by the City of Daly City Water Agency.
- ^k Parts of Daly City and South San Francisco are served by CWS – South San Francisco District.
- ^l Alameda County Water District (cities of Fremont, Newark, and Union City) projection for 2030 is 379,931.
- ^m Figure shown is for the Coastside County Water District, which also serves unincorporated Half Moon Bay.
- ⁿ Based on Milpitas General Plan adjusted to include 5,000 housing units added by the Midtown Milpitas Specific Plan (Carrington, 2006).
- ^o Figure shown is for City of Redwood City Water Agency, which also serves part of the City of San Carlos, part of the Town of Woodside, and portions of unincorporated San Mateo County.
- ^p San Bruno UWMP (City of San Bruno, 2007) shows two population projections for 2030: 50,700, based on ABAG's *Projections 2005*, and 48,229, based on the City's Adjusted Draft General Plan.
- ^q Figure shown is for the City of San Bruno Water Agency, which also serves some unincorporated areas.
- ^r Figures shown are for the CWS – South San Francisco District plus Westborough Water District. For the Westborough Water District, the water customer projection is the same as the UWMP projection.
- ^s Figure shown is for the Town of Hillsborough Water Agency, which also serves some unincorporated area.
- ^t Purissima Hills Water District, (part of Los Altos Hills and some unincorporated area) projection is 6,763.
- ^u Los Trancos County Water District was acquired by CWS in 2006, and is now part of the CWS – Bear Gulch District. Because it was a separate entity when these projections were prepared, it is presented separately in this analysis.
- ^v Includes a portion of Portola Valley.
- ^w Portola Valley is served by CWS – Bear Gulch District; a portion of the city was previously served by the Los Trancos County Water District, which is now part of CWS – Bear Gulch.

SOURCE: See sources for Table E.3.34.

In Vol. 5, Appendix E.3, the footnote and source information for Milpitas in Table E.3.34 (p. E.3-39) is revised as follows:

¹ Based on Milpitas General Plan ~~adjusted to include 5,000 housing units added by the Midtown Milpitas Specific Plan.~~

SOURCES: ABAG, 2004; ACWD, 2005; CWS-Mid-Peninsula, 2005 ;CWS-South San Francisco, 2006; ~~Carrington, 2006~~; City and County of San Francisco, 2004; City of Belmont, 2002; City of Burlingame, 2002a; City of Burlingame, 2005; City of Daly City, 2004; City of Daly City, 2005; City of East Palo Alto, 1999; City of East Palo Alto, 2006; City of Foster City, 2001; City of Fremont, 2003; City of Half Moon Bay, 1993; City of Hayward, 2002; City of Hayward, 2005; City of Menlo Park, 1994; City of Menlo Park, 2006; City of Millbrae, 1998; City of Millbrae, 2005; City of Milpitas, 2002b; City of Milpitas, 2005; City of Mountain View, 2002; City of Mountain View, 2005; City of Newark, 2002; City of Palo Alto, 1998; City of Palo Alto, 2005; City of Redwood City, 2005; City of Redwood City, 2007; City of San Bruno, 2003; City of San Bruno, 2007; City of San Mateo, 2001; City of Santa Clara, 2002; City of Santa Clara, 2005; City of South San Francisco, 2002; City of Sunnyvale, 2002; City of Sunnyvale, 2005; City of Union City, 2002; Coastside County Water District, 2005; Estero MID, 2005; Hannaford and Hydroconsult, 2004; Mid-Peninsula Water District, 2006; SFPUC, 2005; Town of Atherton, 2002; Town of Colma, 1999; Town of Hillsborough, 2002; URS, 2004, Westborough Water District, 2005.

Vol. 5, Appendix E.4 (p. E.4-8, second paragraph) is revised as shown:

...With the Midtown Milpitas Specific Plan, the city's general plan population at buildout is projected to be 77,100 ~~94,400~~ (City of Milpitas, 2002a; City of Milpitas, 2002c; ~~Carrington, 2006~~).

In addition, the entry for Milpitas in Table E.4.1 (p. E.4-3) is revised as shown on p. 5.3-141.

- L_Milpts-15 This comment stating that the Elmwood development receives water from sources other than the SFPUC is noted. Draft PEIR Appendix E.6 presents a review of select EIRs on major projects within wholesale customer service areas. The purpose of the review was to see whether mitigation measures identified in a given jurisdiction's general plan EIR were being applied (if appropriate) at the project level within the jurisdiction. The summary regarding Elmwood does not address the source of water for this development, which, as indicated, is not germane to this program-level review. Therefore, the text revision suggested in this comment is not necessary.
- L_Milpts-16 This comment, which expands on and is not inconsistent with the summary of information on the Midtown Milpitas Specific Plan presented in Draft PEIR Appendix E.4.2, is noted. This information does not alter the analysis or conclusions of the Draft PEIR. By virtue of the City's making this comment, this additional information is included in the Final PEIR, and no change to the Draft PEIR text is required.

**TABLE E.4.1
CURRENT POPULATION ESTIMATES AND FORECASTS OF SELECT JURISDICTIONS**

City	Actual Population	Current Population Estimates			Forecasts				
	U.S. Census 2000 Population	U.S. Census Estimated 2005 Population	ABAG Projections 2005 Estimated 2005 Population	Department of Finance Estimated 2006 Population	General Plan Buildout (Year) and Population	ABAG Projections 2005 Population Projection for Buildout Year	Customer- Selected Population Projection for 2030	ABAG Projections 2005 Population Projection for 2030	Percent of Supply (after Conservation) from SFPUC
Alameda County									
ACWD ^a	312,753	311,600	326,900	325,396	(2020) 359,113	368,500	379,931	404,700	25%
Fremont	203,413	200,468	211,100	210,158	(2020) 229,213	236,900		257,200	
Newark ^b	42,471	41,956	44,400	43,486	(2020) 49,800	49,000		53,400	
Union City	66,869	69,176	71,400	71,752	(2020) 80,100	82,600		94,100	
Hayward	140,030	140,293	146,300	146,398	(2025) 160,300	165,900	162,757	171,500	100%
Santa Clara County									
Milpitas ^c	62,698	63,383	65,400	65,276	(2020) 77,100 94,400	82,400	88,841	91,400	48%
Santa Clara ^d	102,361	105,402	108,700	110,771	(2010) 129,900	117,400	140,698	142,100	15%
Sunnyvale	131,760	128,902	131,700	133,544	(2025) 154,600	146,900	151,610	159,100	46%
San Mateo County									
East Palo Alto	29,506	32,242	32,700	32,083	(2020) 34,600	39,600	32,712	43,600	100%
Redwood City ^e	75,402	73,114	77,300	76,087	(2020) 87,100	87,100	93,535	122,300	92%
San Mateo ^f	92,482	91,081	94,900	94,315	(2010) 100,700	98,000	See note f	119,800	100%
South San Francisco ^g	60,552	60,735	61,000	61,824	(2020) 67,400	68,500	73,884	71,800	See note g
City and County of San Francisco	776,733	739,426	798,000	798,680	(2020) 811,100	859,200	849,942	924,600	97%

^a ACWD = Alameda County Water District; U.S. Census, ABAG, Department of Finance (DOF), and general plan figures are the combined estimates for Fremont, Newark and Union City.

^b The Newark general plan projection shown is from the 2002 housing element. The general plan (adopted in 1992) projected a buildout population of 51,942 by the year 2007.

^c The general plan population is based on the population shown in the general plan (77,100) plus the additional population accommodated by the Milpitas Midtown Specific Plan, as advised by Milpitas Planning Department staff (Carrington, 2006), to account for 5,000 additional units with an assumed density of 3.46 persons per unit (i.e., an added population of 17,300). The City has amended to general plan to incorporate the specific plan.

^d The general plan figure for Santa Clara is the average of the range projected in the general plan at buildout of 124,800 to 135,000.

^e The SFPUC provides 100 percent of Redwood City's potable water. The remaining 8 percent of demand indicated here is met by recycled water.

^f The city of San Mateo is served by the CWS-Mid-Peninsula District and Estero MID, both of which serve other jurisdictions as well; therefore, the 2030 population assumed by the wholesale customers is not comparable to projections for the city. The SFPUC supplies all of the CWS-Mid Peninsula District's and Estero MID's water.

^g The customer-selected projection is the combined 2030 estimates for the CWS-South San Francisco District (which also serves Colma and a small portion of unincorporated San Mateo County), based on the 2004 demand study, and the Westborough Water District, based on the district's 2005 UWMP. The SFPUC would supply approximately 85 percent of the CWS-South San Francisco District's water supply in 2030 and 100 percent of Westborough Water District's. The other figures are for South San Francisco only.

SOURCES: ABAG, 2004; California Department of Finance, 2006; Carrington, 2006; City of East Palo Alto, 1999a; City of Fremont, 2003a; City of Hayward, 2002a; City of Milpitas, 2002a; City of Newark, 2002; City of Redwood City, 2007c; City of San Mateo, 2001; City of Santa Clara, 2002; City of Sunnyvale, 2002; City of Union City, 2002a; U.S. Census Bureau, 2000; U.S. Census Bureau, 2006; URS, 2004, Westborough Water District, 2005.

City of Mountain View, Cathy Lazarus, Public Works Director, 9/28/07

- L_MtnVw-01 This comment regarding the urgent need to implement the WSIP improvements to protect public health, safety, and the economic well-being of Bay Area residents is acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 to 14.1.4) for more discussion.
- L_MtnVw-02 This comment, which requests acknowledgement for water agencies' efforts to manage water demand and provides additional information on the City of Mountain View's water conservation programs, is acknowledged. The Draft PEIR (Chapter 3, Table 3.3, p. 3-18 and Chapter 7, Table 7.2, p. 7-15) indicates the projected savings from conservation in 2030 for each wholesale customer. The additional information provided in Attachment 1 of the comment letter is included in the administrative record for the Draft PEIR.
- L_MtnVw-03 This comment, which clarifies that water service within Mountain View's jurisdictional boundaries is provided by a City-owned and -operated water utility, is noted.

City of Newark, John Becker, City Manager, 10/1/07

L_Newark-01 The commenter indicates that the City of Newark will be directly affected by the Bay Division Pipeline Reliability Upgrade project (BD-1) and identifies the need for mitigation to address public inconvenience, public safety (traffic controls and emergency access), and construction-related disruption. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for detailed discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. The project-level EIR for Bay Division Pipeline Reliability Upgrade project will present more detailed information and provide additional analysis of impacts in Newark, including more detailed mitigation measures.

L_Newark-02 This comment is acknowledged. Please refer to **Response L_Newark-01**.

City of Palo Alto, Yoriko Kishimoto, Mayor, 9/25/07

- L_PaloAlto-01 This comment expresses support for the WSIP and the adequacy of the Draft PEIR in satisfying CEQA requirements. It summarizes the more detailed comments presented in Comments L_PaloAlto-04 through L_PaloAlto-06; refer to **Responses L_PaloAlto-04** through **L_PaloAlto-06** for the specific responses.
- L_PaloAlto-02 This comment requests clarification on the development of the water demand projections. The Draft PEIR (Vol. 1, Chapter 3, pp. 3-16 to 3-22) describes the methodology used to develop the 2030 water demand projections; more detailed information is provided in Draft PEIR Appendix E.2 (Vol. 5). As described on p. 3-21, each wholesale customer selected the source of the demographic projections to be used in the development of the water demand projections for its service area. According to the *SFPUC Wholesale Customer Water Demand Projections Technical Memorandum* (Table 4-1 of that report, p. 4-5; URS, 2004a), the Association of Bay Area Governments' (ABAG) *Projections 2002* was used to develop water demand for Palo Alto, not the comprehensive plan (as implied in this comment). The "Wholesale Customer Population Selection Form" submitted by the City of Palo Alto to the SFPUC also indicates that *Projections 2002* was the City's choice of projections for use in the demand model. The inconsistency between ABAG's 2030 projections and the population forecast used is discussed in the customer summary presented in Draft PEIR Chapter 7 (Vol. 4, pp. 7-51 and 7-52). The comment that the Draft PEIR demand estimates for Palo Alto are realistic is acknowledged.
- L_PaloAlto-03 The commenter's request for coordination of the construction schedule for the BDPL Nos. 3 and 4 Crossovers project (BD-2) with Palo Alto's Gunn High School is addressed by SFPUC Construction Measure #1, Neighborhood Notice (Draft PEIR, Vol. 4, Chapter 6, p. 6-4), which states, "Where schools would be affected, the SFPUC will coordinate with school facility managers to schedule construction for time periods with the least impact on school activities to ensure student safety and to minimize disruption to educational and recreational uses of the school property."
- L_PaloAlto-04 The comment stressing support for the timely completion the seismic improvement projects contained in the WSIP is acknowledged. The information related to Palo Alto City Council Resolution #7986 is also noted. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for more discussion.

- L_PaloAlto-05 This comment expressing Palo Alto's support for the Modified WSIP Alternative is acknowledged. Please see **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for additional discussion and analysis of this alternative. In addition, this comment noting the critical need for completing the seismic upgrades and repairs of the regional system is also acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 and 14.1.3) for further discussion.
- L_PaloAlto-06 This comment expressing Palo Alto's support for the transfers of conserved water as a component of the Modified WSIP Alternative is acknowledged. The commenter also expresses support for the following: wholesale customers paying for the best conservation measures; aggressive pursuit of conservation opportunities in the Modesto and Turlock Irrigation District service areas; and creating a net increase in flows in the lower Tuolumne River to improve environmental conditions. These comments are acknowledged. See **Response L-BAWSCA1-47**.
- L_PaloAlto-07 This information related to the City of Palo Alto's support for the efficient use of natural resources, including water supplies, is noted. Please see **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14), for more discussion on assumptions regarding conservation and recycling used in the development of the WSIP. Please also refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.2) for additional discussion regarding the proposed dry-year transfer under the WSIP.
- L_PaloAlto-08 This comment, which describes Palo Alto's commitment to stewardship of the natural environment and smart growth practices, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_PaloAlto-09 This comment, which describes Palo Alto's energy and water conservation programs, water consumption patterns, and water rates, is acknowledged. This information is conceptually included in the PEIR by virtue of its inclusion in this comment letter.
- L_PaloAlto-10 The opinion of the commenter supporting WSIP Variant 3 – 10% Rationing is acknowledged. See **Response L_Burlgme-02** for clarification of the difference between the proposed program and Variant 3.
- L_PaloAlto-11 As described in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-116 and 9-122 to 9-123), the SFPUC investigated several alternatives for an exchange or transfer with the Santa Clara Valley Water District (SCVWD) as part of the WSIP background studies exploring regional water supply opportunities. The SFPUC and SCVWD explored options using the existing intertie or a new intertie, as

well as exchanges through delivery to the eight customers in common to both the SCVWD and SFPUC. In general, an exchange would involve the SFPUC advancing water in wet years to the SCVWD in exchange for supplies from the SCVWD in dry years. However, the SCVWD does not have the capacity or need for additional water supplies during wet years. At times when the SFPUC has additional supplies available for delivery to the SCVWD, the SCVWD cannot use the water directly or store it. Additionally, the SCVWD does not have excess water to transfer to the SFPUC in normal or dry years. Therefore, this concept was eliminated from further consideration because it would not provide a dependable future water source for the SFPUC regional system.

- L_PaloAlto-12 The commenter requests that the PEIR include an elevation/schematic of the control building and/or vault associated with the BDPL Nos. 3 and 4 Crossovers project (BD-2). Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for detailed discussion of the issues raised by this comment. This master response provides information on the appropriate level of detail of an impact analysis at the program level versus the project level. At the programmatic level, design details for individual WSIP projects are not presented or evaluated in the Draft PEIR. The City will have the opportunity to review and comment on the design details of this project during project-level CEQA review.

The commenter states that the mitigation measures should not allow WSIP projects to violate city ordinances (including but not limited to noise and nuisance ordinances), and that the City should be consulted at an early stage in this project. The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9) states that the SFPUC is exempt from complying with the building and zoning ordinances of other cities. However, project consistency with the provisions of other local ordinances (including noise and tree ordinances) will be determined during the preparation of project-level CEQA documentation. The Palo Alto tree, vegetation, and noise ordinances are identified in Tables 4.6-1 and 4.10-2 (Vol. 2, Chapter 4, pp. 4.6-34 and 4.10-7). As stated in the Draft PEIR (Vol. 2, Chapter 4, p. 4.10-6), time and noise limits prescribed in local noise ordinances were used in the PEIR as criteria to determine the significance of project impacts under CEQA. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.3) regarding the City's request for early consultation. This request for early consultation has been noted in Draft PEIR Table C.6 (Vol. 5, Appendix C, p. C-26).

- L_PaloAlto-13 The commenter requests substitution of SFPUC Construction Measure #1 with specific language requiring coordination with Gunn High School, but such coordination is already required, as described in **Response L_PaloAlto-03**.

The commenter also mentions that additional right-of-way/easement could be needed for the BDPL Nos. 3 and 4 Crossovers project (BD-2), and also questions the visibility of the control building/vault from Foothill Boulevard. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for information on the appropriate level of detail of an impact analysis at the program level versus the project level. As a program-level document, the Draft PEIR does not present or evaluate the design details for the individual WSIP projects. The City will have the opportunity to review and comment on the design details of this project during project-level CEQA review.

- L_PaloAlto-14 The commenter requests that information on the city's parks and open space be updated. The number of parks and total urban park acreage presented in the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-10) are based on information cited in the *City of Palo Alto Comprehensive Plan* (1998) and subsequent revisions to the plan made in July 2007. In response to this comment, the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-10, fourth full paragraph) has been revised as follows:

City of Palo Alto

According to the City of Palo Alto, the city has a total of 4,358 acres of parkland and open space areas, including 32 urban parks encompassing approximately 200 acres and several large open-space and nature preserves. Foothill Park is approximately 1,400 acres and the Arastradero Preserve is approximately 610 acres (City of Palo Alto, 2007). Palo Alto operates 29 parks encompassing approximately 190 acres. Palo Alto Baylands Nature Preserve, a popular hiking and bird watching area on San Francisco Bay, encompasses 1,940 acres and contains 15 miles of multi-use trails, a segment of the Bay Trail, an athletic center, picnic facilities, an art park, and the Baylands Nature Interpretive Center. The City of Palo Alto owns the wetlands south of Cooley Landing (in East Palo Alto) in the vicinity of the BDPL Reliability Upgrade (BD-1) pipeline alignment (City of Palo Alto, 1998). A BDPL Nos. 3 and 4 Crossovers (BD-2) crossover facility would be adjacent to the sports fields at Gunn High School.

The following reference has been added to the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-29):

City of Palo Alto, Yoriko Kishimoto, Mayor, letter communication, September 25, 2007.

- L_PaloAlto-15 The commenter's recommendation to correct the last paragraph under the Cultural Resources section (Vol. 4, Chapter 6, p. 6-6) is not necessary. The Environmental Review Officer represents the Planning Department.
- L_PaloAlto-16 This comment repeats points made in Comment L_Palo Alto-02 about the projections source used in the demand model and differences between ABAG

projections and those used in the demand model. Please refer to **Response L_PaloAlto-02**. The Draft PEIR (Vol. 4, Chapter 7, p. 7-52) indicates that the population and employment projections used for Palo Alto in the demand study are about 10 percent and 16 percent higher, respectively, than those shown for 2010 in the comprehensive plan (referred to as the general plan), consistent with this comment's request. The comment that the City considers the forecast shown in the PEIR to be reasonable is acknowledged.

Purissima Hills Water District, Daniel Seidel, President, 9/28/07

- L_PHWD1-01 This comment regarding the critical need for a reliable water supply and fire safety in Los Altos Hills is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.4) for more discussion.
- L_PHWD1-02 The commenter correctly indicates that Foothill Community College is within the Purissima Hills Water District, although the data presented in the comment (number of students and ratio of students to residents) were not specific factors in the SFPUC's demand model. As described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3-20 and 3-21), base-year water usage was established using actual account data, and the growth rates reflected in the selected source of population and employment projections were used to project future water demand. According to the *SFPUC Wholesale Customer Water Demand Projections Technical Report*, Foothill College is the District's largest water customer (URS, 2004a, Appendix A, p. A-5). The comment comparing the District's per-acre water consumption with more densely developed communities is acknowledged. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2) for further discussion of per-capita demand.
- L_PHWD1-03 This comment regarding the urgency for the seismic improvements contained in the WSIP is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.3) for more discussion.
- L_PHWD1-04 Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for an expanded discussion of the overall need for the WSIP and of the potential consequences of not implementing the proposed program.
- L_PHWD1-05 This comment expressing an opinion related to growth inducement is acknowledged. The growth-inducement potential associated with the WSIP is analyzed in Chapter 7 of the Draft PEIR (Vol. 4).
- L_PHWD1-06 This comment, which states that water conservation measures are included in projected demand estimates and that, as these measures are implemented, further improvements in water conservation will be more difficult to achieve, is acknowledged. As a point of clarification, the column showing "2030 Demand (with Plumbing Code Savings)" in Table 3.3 (Vol. 1, Chapter 3, p. 3-18), Table 7.2 (Vol. 4, Chapter 7, p. 7-15), and Table 7.3 (Vol. 4, Chapter 7,

p. 7-18) does not include conservation measures but only savings that would result from plumbing codes and natural fixture replacement. Projected savings from conservation measures are shown in a separate column in Tables 3.3 and 7.2, and are reflected in the estimates of 2030 purchases from the SFPUC regional system shown in all three tables.

L_PHWD1-07 The opinion of the commenter regarding the reliability and impacts of desalination is acknowledged. This is consistent with information presented in the Draft PEIR regarding Variant 2 – Regional Desalination for Drought (Vol. 4, Chapter 8, pp. 8-24 to 8-32).

L_PHWD1-08 This comment urging rapid certification of the WSIP PEIR and expeditious implementation of the WSIP is acknowledged.

L_PHWD1-09 In response to this comment, the typographical error in the Draft PEIR (Vol. 4, Chapter 7, p. 7-52, fourth paragraph, third sentence) is revised as follows:

In 2001, the Purissima Hills Water District served 6,032—or 64 percent—of the approximately ~~94,555~~ 9,455 residences estimated for the town and its sphere of influence in 2000.

L_PHWD1-10 This comment questions the Draft PEIR’s inclusion of employment estimates for Los Altos Hills, stating “There are no commercial enterprises in Los Altos Hills” and estimating institutional employment in Los Altos Hills “in the 450–470 range.”

The employment estimates presented in the Draft PEIR (Vol. 5, Appendix E.3, Tables E.3.12, E.3.24, and E.3.35, pp. E.3-16, E.3-17, and E.3-40) are from the Association of Bay Area Governments’ (ABAG) *Projections 2002*, *Projections 2003*, and *Projections 2005* and include public employees (for example, city and school district jobs). These projections furnish the following detail for the estimates of existing employment in 2000 for Los Altos Hills:

	Projections 2002 and Projections 2003	Projections 2005
Agriculture & Mining	30	80
Manufacturing & Wholesale	60	190 ^a
Retail	50	60
Service	2,290	1,560
Financial & Professional		440
Health, Educational, & Recreational		1,120
Other	290	490
Total	2,720	2,380

^a Manufacturing, wholesale, and transportation

SOURCES: ABAG, *Projections 2002*, *Projections 2003*, and *Projections 2005*.

According to ABAG staff, the *Projections* employment estimates are based on information from the Census Transportation Planning Package, adjusted to include self-employed workers as well as those who might have been on vacation or otherwise absent from work during the census week (Wong, 2008). This information is assembled by census place (not census tract): for example, Los Altos Hills (Los Altos would be a separate and distinct census place). ABAG staff also note that Foothill College is located in Los Altos Hills (as indicated in Comment L_PHWD-02). The Foothill–De Anza Community College District employs 1,185 workers (604 full-time and 577 part-time) in Los Altos Hills at the college and the district’s central offices (Parisi, 2008).

- L_PHWD1-11 Information on the town’s website (<http://www.losaltoshills.ca.gov/government/generalplanupdate.html>) indicates that the revision of the Land Use Element has not yet been initiated. The Open Space and Recreation Element adopted in April 2007 and currently posted on the town’s website was reviewed to ensure there were no differences between it and the version cited in the Draft PEIR relevant to the PEIR’s growth-inducement analysis or conclusions. The following text from the Draft PEIR (Vol. 4, Chapter 7, p. 7-62 and p. 7-90) is revised as follows:

Land Use Element (n.d.) and Open Space, and Recreation Elements ~~(n.d.)~~ (2007).

The following reference on page 7-90 of the Draft PEIR is revised as follows to reflect the above text revision:

Town of Los Altos Hills Land Use, Open Space, and Recreation Elements, <http://www.losaltoshills.ca.gov/government/town-documents.html> (website accessed March 15, 2006), 2007.

Purissima Hills Water District, Daniel Seidel, President, 9/19/07

[See Public Hearing Transcript, Palo Alto, pp. 23–27]

- L_PHWD2-01 This comment raises a similar issue to that raised in Comment PHWD1-02 (concerning the influence of the community college on water demand). Please refer to **Response L_PHWD1-02**.
- L_PHWD2-02 This comment expresses concern related to the vulnerability of the regional water system to seismic hazards and urges rapid completion of the CEQA process so that seismic improvements can be made. Comment noted. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Sections 14.1.2 to 14.1.4) for more discussion of the numerous reasons the program is need.

Redwood City, Peter Ingram (sent by Chu Chang), Community Development Services Director, 9/27/07

- L_RdwdCty-01 This comment, which provides background information related to Redwood City's water service area and expresses support for the WSIP, is acknowledged.
- L_RdwdCty-02 This comment regarding the overall urgency of program implementation is acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for more discussion.
- L_RdwdCty-03 This comment expressing support for the programmatic approach to the environmental review of the WSIP is acknowledged.
- L_RdwdCty-04 The commenter's description of the City of Redwood City's current involvement with SFPUC engineering staff on the design drawings for the Bay Division Pipeline (BDPL) Reliability Upgrade project (BD-1) is acknowledged. The City indicates that its involvement with the SFPUC on this project will continue through the project-level CEQA process, which is the appropriate process for addressing concerns specific to that project.
- L_RdwdCty-05 This comment, which states concurrence with the demand methodology and the water demand estimates for Redwood City presented in the Draft PEIR, is acknowledged.
- L_RdwdCty-06 The commenter provides minor corrections for the acreages of some city parks described in the Draft PEIR. The acreages for Fleishman Park, Hawes Park, and Red Morton Parks presented in the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-11) were the acreages listed on Redwood City's website for the Recreation and Community Department. The acreage provided by the commenter for Hawes Park (1.59 acres) is the same acreage presented in the Draft PEIR.

In response to this comment, the Draft PEIR text (Vol. 2, Chapter 4, p. 4.12-11, first full paragraph) is revised as follows:

City of Redwood City

Redwood City owns and operates 30 parks, including small neighborhood parks, larger multi-use parks, a dog park, a skate park, and two outdoor pools (City of Redwood City, 2007c). The BDPL Reliability Upgrade project (BD-1) is in the vicinity of Fleishman Park, Hawes Park, and Red Morton Park. The ~~0.640-63~~ ^{0.640-63}-acre Fleishman Park has play equipment, a play area, picnic area, barbeque pits, and restrooms (City of Redwood City, 2007a). Hawes Park contains ball fields and restroom facilities on ~~covering~~ 1.59 acres (City of Redwood City, 2007a^b). Red

Morton Park encompasses ~~30.89~~ ^{31.74} acres and has pools, ball fields, play areas and equipment, picnic areas, barbeque pits, tennis courts, basketball courts, and restroom facilities (City of Redwood City, 2007~~a~~^d). An alternative site for the BDPL 3 and 4 Crossovers project (BD-2) could also be located in Redwood City (City of Redwood City, 1991).

The corresponding references are revised as follows (Vol. 2, Chapter 4, p. 4.12-29):

City of Redwood City, Peter Ingram, Community Services Director, letter communication, September 27, 2007a.

~~City of Redwood City, Parks, Recreation and Community Services, Fleishman Park, available online at www.redwoodcity.org/parks/parksandpools/parks/parks_fleishman.html, accessed May 17, 2007a.~~

~~City of Redwood City, Parks, Recreation and Community Services, Hawes Park, available online at www.redwoodcity.org/parks/parksandpools/parks/parks_hawes.html, accessed May 17, 2007b.~~

City of Redwood City, Parks, Recreation and Community Services, Parks and Pools, available online at www.redwoodcity.org/parks/parksandpools/index.html, accessed May 17, 2007~~b~~^e.

~~City of Redwood City, Parks, Recreation and Community Services, Red Morton Park, available online at www.redwoodcity.org/parks/parksandpools/parks/parks_red.html, accessed May 17, 2007d.”~~

L_RdwdCty-07 The commenter requests to know the cutoff date used for project selection in Section 4.17.2, Projects Considered in Cumulative Analysis. As stated in note “b” of Table 4.17-3 (Vol. 2, Chapter 4, p. 4.17-20), the schedules of projects included in the cumulative projects list were based on the most current information available during preparation of the Draft PEIR as of July 2006.

L_RdwdCty-08 The explanation for using the urban water management plan (UWMP) as the source for the population projection in the demand model is noted. A comparison of jurisdictions’ general plans is presented in the growth-inducement analysis because, unlike UWMPs, general plans (and general plan elements) reflect the land uses and level of growth planned for a jurisdiction by the land use planning agency; general plans also receive environmental review under CEQA prior to adoption, and are formally adopted or approved by the local decision-making body (i.e., city council or county board of supervisors).

Contrary to the information presented in the Draft PEIR, the recent Downtown Precise Plan was not adopted as an amendment to Redwood City's general plan, and therefore the 1990 general plan stands as the currently adopted plan. The 1990 general plan states that: "... Redwood City can be expected to experience a brisk housing market and a steady population increase through the next decade, reaching 70,000 by the year 2000" but that this estimate may need to be raised or lowered, depending on various contingencies (Redwood City Strategic General Plan, Population Characteristics, Chapter 4, p. 4-1). This population projection provides a sense, within the adopted general plan, of the City's expectations regarding future growth, which is what the "General Plan Projection" column of Draft PEIR Table 7.8 (Vol. 4, Chapter 7, p. 7-28) and the reference to general plan projections in the customer summaries is meant to convey. However, as stated in the Draft PEIR (p. 7-27, footnote 19; p. 7-28, table note; and p. 7-29, footnote 21), general plans with projection years earlier than 2005 were not considered comparable to the 2030 population and employment projections used in the water demand studies and consequently were not included in Tables 7.8 or 7.9 (and tables comparing WSIP projections with general plan projections in Appendix E.3). Since the buildout year for Redwood City's 1990 Strategic General Plan is 2000, as noted in this comment, the general plan projection should not be included in the table.

Therefore, in response to this comment, the Draft PEIR is revised as follows:

In Chapter 7, p. 7-27, the first paragraph, second sentence, of Section 7.3.3, and footnotes 19 and 20, are revised as follows:

The general plans of ~~2221~~ cities that are served in whole or part by SFPUC and its wholesale customers have population projections that are generally comparable to the water customer-selected population projections.^{19, 20}

¹⁹The ~~2221~~ cities, served by ~~2019~~ water customers, represent approximately two-thirds of 32 cities served by the SFPUC regional system.

²⁰ The ~~2221~~ cities are served by ~~1918~~ wholesale customers and the SFPUC (for the retail service area), referred to collectively here as ~~2019~~ water customers.

In Chapter 7, p. 7-27, the second from the last bullet is revised as follows:

The population projections assumed for ~~1413~~ of the water customers (ACWD, CWS-South San Francisco in combination with Westborough Water District, Daly City, Hayward, Hillsborough, Mid-Peninsula Water District, Millbrae, Mountain View, Palo Alto, ~~Redwood City~~, San Bruno, San Francisco, and Santa Clara) are

higher but within 1 to 10 percent of the projections presented in the respective general plans.

In response to this comment and comment L_Milpts-14, the last complete bullet on p. 7-7, Section 7.1.2, Summary of Conclusions, is revised as follows:

The population growth assumed in the demand projections for most (4715 of 2019) of the water customers for which comparable general plan projections are available is similar to the growth anticipated in the general plans of the cities served by them.

The entry for Redwood City in Table 7.8 (p. 7-28) is revised as shown on the following page.

The customer-specific summary (Chapter 7, Section 7.3.6, p. 7-53, third full paragraph) for Redwood City is revised as follows:

The customer-selected population projection used for Redwood City in the demand study is ~~generally consistent with the buildout population identified in the city's general plan (which has a 2020 planning horizon), and~~ 24 percent lower than ABAG's 2030 population projection of 122,300 for the city and its sphere of influence. The 2030 Redwood City population used in the demand study is approximately 7 percent more than the 2020 projection shown in the city's Downtown Precise Plan ~~(a recent amendment of the general plan)~~, which cites ABAG's *Projections 2005* forecast for 2020 for the city within its jurisdictional boundary. The city's water service area includes only a portion of the city's sphere of influence (Bonte, 2006), which probably accounts for the difference between the ABAG projection for the city and its sphere of influence and that assumed in the demand study. ABAG's 2030 projection of 94,300 for Redwood City within the city limits only is within 1 percent of the demand study projection. Because the population projection included in the city's 1990 general plan is for 2000 (earlier than 2005), it is not considered comparable to the 2030 WSIP population projection for this analysis. According to the city, the 2003 UWMP was selected for use in the demand study because the UWMP contained the most current population and employment projections at the time.

In response to this comment and Comment L_Milpts-14, the last complete bullet on p. 7-7 in Chapter 7, Section 7.1.2, Summary of Conclusions, is revised as shown in **Response L_Milpts-14**.

In Vol. 5, Appendix E.3, the entries for Redwood City have been deleted from Tables E.3.34 and E.3.36 (pp. E.3-38 and E.3-40), as shown on pp. 15.3-158 to 15.3-159.

TABLE 7.8
COMPARISON OF WATER DEMAND POPULATION ESTIMATES AND GENERAL PLAN POPULATION ESTIMATES

Customer	UWMP Population in 2030	Projections 2005 Population in 2030	Water Customer- Selected Population Projection for 2030	General Plan Population Projection for General Plan Projection Year ^a	General Plan Projection Year ^a	Difference: Water Customer Population and General Plan Population	% Difference (Water Customer Population and General Plan Population)
Customer-selected projection less than or equal to general plan projection							
City of East Palo Alto	32,712	43,600	32,712	34,600	2020	-1,888	-5.5%
City of Milpitas ^b	91,400	91,400	88,841	94,400	2020	5,559	-5.9%
City of Sunnyvale ^c	159,100	159,100	151,610	154,600	2020	-2,990	-1.9%
Customer-selected projection 1–10% greater than general plan projection							
Alameda County Water District	405,900	404,700	379,931	359,113		20,818	5.8%
Fremont	257,100	257,200		229,213	2020		
Newark	53,500	53,400		49,800	2020		
Union City	95,300	94,100		80,100	2020		
CWS–South San Francisco District and Westborough Water District ^{d,e}	83,450	73,660	73,884	68,685	2020	5,199	7.6%
City of Daly City	115,651	127,200	115,651	113,000	2020	2,651	2.3%
City of Hayward	162,800	171,500	162,757	160,300	2025	2,457	1.5%
Town of Hillsborough		11,800	12,708	11,800	2025	908	7.7%
Mid-Peninsula Water District ^f	28,930	28,800	27,997	27,800	2010	197	0.7%
City of Millbrae	24,200	24,500	25,174	24,860	2015	314	1.3%
City of Mountain View	81,700	89,600	81,670	75,200	2010	6,470	8.6%
City of Palo Alto	69,199	92,200	69,199	62,880	2010	6,319	10.0%
City of Redwood City	93,329	122,300	93,535	87,100	2020	6,435	7.4%
City of San Bruno	See note g	50,700	48,229	46,400	2020	1829	3.9%
City and County of San Francisco ^h	849,942	903,300	849,942	811,100	2020	38,842	4.8%
City of Santa Clara	140,698	142,100	140,698	129,900	2010	10,798	8.3%
Customer-selected projection more than 10% greater than general plan projection							
City of Burlingame ^h	31,900	31,900	34,967	31,500	2010	3,467	11.0%
Coastside County Water District ⁱ	24,973	27,100	24,973	21,065	2020	3,908	18.6%
Estero Municipal Improvement District (MID) ^{j,k}	40,866	32,500	40,096	30,803	2010	9,293	30.2%

NOTE: Most wholesale customer service areas are not contiguous with city limits (or with the city and its planning area), and therefore the population projections from the jurisdictions' general plans and ABAG should be considered as general comparisons only. The following are not included, because the water service area and jurisdictional boundaries are not comparable or the general plan of the corresponding jurisdiction does not provide a comparable population projection: Brisbane, CWS–Bear Gulch, CWS–Mid-Peninsula, Menlo Park, North Coast County Water District, Purissima Hills Water District, Redwood City, San Jose North, Skyline County Water District, and Stanford University.

^a The general plan population projection and projection year are the most distant population projection and the year of the most distant population projection available in the general plan or general plan element.

^b The general plan population is based on the population shown in the general plan (77,100) plus the additional population accommodated by the Milpitas Midtown Specific Plan, as advised by Milpitas Planning Department staff (Carrington, 2006), to account for 5,000 additional units with an assumed density of 3.46 persons per unit (i.e., an added population of 17,300). The City has amended to general plan to incorporate the specific plan.

^c The service area of Sunnyvale's water district is contiguous with the city limits; however, another water utility (CWS) serves several small areas within the city.

^d CWS = California Water Service Company.

^e CWS–South San Francisco serves South San Francisco, Colma, a small portion of Daly City, and the unincorporated area of Broadmoor. The water customer estimate for the Westborough Water District is from the district's Urban Water Management Plan. The general plan figure is the combined total projected population in the South San Francisco and Colma general plans (67,400 and 1,285 respectively); the general plan projection year shown (2020) is for South San Francisco, the projection year for Colma is 2005. The *Projections 2005* figure is for South San Francisco and Colma (71,800 and 1,860, respectively).

^f The Mid-Peninsula Water District serves Belmont, portions of San Carlos, and unincorporated areas of San Mateo County. The general plan figure is for the city of Belmont, from the 2002 housing element.

^g The San Bruno UWMP (City of San Bruno, 2007) shows two population projections for 2030: 50,700, based on ABAG's *Projections 2005*, and 48,229, based on the City's Adjusted Draft General Plan.

^h UWMP and *Projections 2005* figures are for household population, since the customer-selected figure is for household population.

ⁱ Burlingame's water system also serves portions of unincorporated Burlingame and a few properties in the city of San Mateo and town of Hillsborough.

^j The general plan figure is for the city of Half Moon Bay only, from the 1993 Half Moon Bay Local Coastal Program Land Use Plan (Table 9.3, Chapter 9, page 189). In addition to incorporated Half Moon Bay, the Coastside County Water District serves unincorporated areas of Half Moon Bay and the unincorporated communities of El Granada, Miramar, and Princeton by the Sea.

^k Estero MID serves Foster City and a portion of the city of San Mateo. The general plan figure is for Foster City.

SOURCES: ABAG, 2004; ACWD, 2005; CWS–South San Francisco, 2006; Carrington, 2006; City and County of San Francisco, 2004; City of Belmont, 2002a; City of Burlingame, 2002a; City of Burlingame, 2005; City of Daly City, 2004a; City of Daly City, 2005; City of East Palo Alto, 1999a; City of East Palo Alto, 2006; City of Foster City, 2001a; City of Fremont, 2003a; City of Half Moon Bay, 1993; City of Hayward, 2002a; City of Hayward, 2005; City of Millbrae, 1998a; City of Millbrae, 2005; City of Milpitas, 2002a; City of Milpitas, 2005; City of Mountain View, 2002a; City of Mountain View, 2005; City of Newark, 2002a; City of Palo Alto, 1998a; City of Palo Alto, 2005b; ~~City of Redwood City, 2005b; City of Redwood City, 2007a; City of San Bruno, 2003a; City of San Bruno, 2007; City of Santa Clara, 2002a; City of Santa Clara, 2005; City of South San Francisco, 2002a; City of Sunnyvale, 2002a; City of Sunnyvale, 2005; City of Union City, 2002a; Coastside County Water District, 2005; Estero MID, 2005; Hannaford and Hydroconsult, 2004; Mid-Peninsula Water District, 2006; SFPUC, 2005; Town of Colma, 1999a; Town of Hillsborough, 2002a; URS, 2004a, Westborough Water District, 2005.~~

TABLE E.3.34
COMPARISON OF GENERAL PLAN POPULATION PROJECTIONS TO ABAG PROJECTIONS 2005,
UWMPs, AND WATER CUSTOMER DEMAND PROJECTIONS FOR GENERAL PLAN PROJECTION YEAR

	Population in General Plan Population Year ^a Shown in:			
	General Plan ^b	UWMP	SFPUC Water Customer Projection ^c	Projections 2005
Cities with GP Population Projections for 2005				
Colma	1,285	see note d	see note d	1,350
Cities with GP Population Projections for 2010				
Belmont	27,800	see note f	see note f	26,000
Burlingame	31,500	30,200	31,648	30,200
Foster City	30,803	37,424 ^e	36,284 ^e	29,800
Menlo Park	35,285	10,344 ^g	12,619 ^g	35,600
Mountain View	75,200	75,200	74,422	76,000
Palo Alto	62,880	64,168	62,823	78,300
San Mateo	100,700	see note h	see note h	102,500
Santa Clara	129,900	116,527	115,630	117,400
Cities with GP Population Projections for 2015				
Millbrae	24,860	23,055	23,253	22,800
Cities with GP Population Projections for 2020				
Atherton	8,400	see note i	see note i	7,900
Daly City	113,000	114,291 ^j	112,363 ^j	120,200
East Palo Alto	34,600	29,612	29,844	39,600
Fremont	229,213	236,700	see note k	236,900
Half Moon Bay (incl. unincorporated area)	21,065	23,262	22,679	26,400
Milpitas	94,400 ^l	82,400	79,846	82,400
Newark	49,800	50,000	see note k	49,000
Redwood City	87,100	89,492^m	89,519^m	114,200
San Bruno	46,400	n.a.	45,642	47,700
San Francisco	811,100	840,000	818,954 ⁿ	859,200
South San Francisco+Westborough Water District ^d	67,400	78,200	70,156	68,700
Sunnyvale	154,600	146,900	144,629	146,900
Union City	80,100	86,000	see note k	82,600
Cities with GP Population Projections for 2025				
Hayward	160,300	160,300	158,909	165,900
Hillsborough	11,800	n.a.	12,520	11,600
Cities with GP Population Projections for Years Prior to 2005 or No Applicable GP: Projections for 2030				
Brisbane + Guadalupe Valley MID		n.a.	6,164	5,240
Los Altos Hills		n.a.	see note o	10,700
Los Trancos County Water District ^p		see note q	1,094	n.a.
Pacifica		42,100	47,829	42,200
Portola Valley		see note q	see note q	7,800
San Carlos		see note h	see note h	35,200
Stanford University		n.a.	27,924	n.a.
Woodside		see note q	see note q	7,300

n.a. = Not available.

^a Population shown is for the year of the most distant population projection available in the general plan, housing element, or other relevant local document (see note b). For example, populations in all columns for cities in the group titled "Cities with GP Population Projections for 2005" are populations projected for or estimated in 2005.

^b Population estimates are from each city's general plan (GP) or the general plan's EIR.

^c Estimates for years between 2001 and 2030 are derived by Mundie & Associates, based on linear interpolations of water customer projections, except for the 2020 San Francisco projection, which is included in the Retail Demand Study (Hannaford and Hydroconsult, 2004).

^d CWS – South San Francisco District (Colma, parts of Daly City and South San Francisco, plus unincorporated areas) UWMP projection for 2020 is 64,050, and Westborough Water District (which serves part of South San Francisco) UWMP projection for 2020 is 14,150; the CWS-South San Francisco water customer projection for 2020 is 56,006 and the Westborough Water District water customer projection is the same as its UWMP projection (14,150).

TABLE E.3.36
COMPARISON OF GENERAL PLAN POPULATION PROJECTIONS TO
ABAG PROJECTIONS 2005, UWMPs, AND WATER CUSTOMER DEMAND PROJECTIONS FOR 2030

	General Plan Population Projection	UWMP Population in 2030	SFPUC Water Customer Population Projection for 2030	Projections 2005 Population in 2030
Cities with GP Population Projections for 2005				
Colma	1,285	see note a	see note a	1,860
Cities with GP Population Projections for 2010				
Belmont	27,800	see note c	see note c	28,800
Burlingame	31,500	31,900	34,967 ^d	31,900
Foster City	30,803	40,866	40,096 ^b	32,500
Menlo Park	35,285	11,218 ^{e,i}	13,655 ^{e,i}	41,100
Mountain View	75,200	81,700 ^g	81,670 ^g	89,600
Palo Alto	62,880	69,199	69,199	92,200
San Mateo	100,700	see note h	see note b,h	119,800
Santa Clara	129,900	140,698	140,698	142,100
Cities with GP Population Projections for 2015				
Millbrae	24,860	24,200	25,174	24,500
Cities with GP Population Projections for 2020				
Atherton	8,400	see note f	see note f	8,200
Daly City	113,000 ⁱ	115,651 ^{j,k}	115,651 ^{j,k}	127,200
East Palo Alto	34,600	32,712	32,712	43,600
Fremont	229,213	257,100	see note l	257,200
Half Moon Bay (incl. uninc. area)	21,065	24,973 ^m	24,973 ^m	27,100
Milpitas	94,400 ⁿ	91,400	88,841	91,400
Newark	49,800	53,500	see note l	53,400
Redwood City	87,400	93,329 ^o	93,535 ^o	122,300
San Bruno	46,400	see note p	48,229 ^q	50,700
San Francisco	811,100	871,000	849,942	924,600
South San Francisco+Westborough Water District	67,400	83,450 ^r	73,884 ^r	71,800
Sunnyvale	154,600	159,100	151,610	159,100
Union City	80,100	95,300	see note l	94,100
Cities with GP Population Projections for 2025				
Hayward	160,300	162,800	162,757	171,500
Hillsborough	11,800		12,708 ^s	11,800
Cities with GP Population Projections for Years Prior to 2005 or No Applicable GP Population Projection				
Brisbane + Guadalupe Valley MID		n.a.	6,164	5,240
Los Altos Hills		n.a.	see note t	10,700
Los Trancos Valley Water Dist. ^u		n.a.	1,094 ^v	
Pacifica		42,100	47,829	42,200
Portola Valley		n.a.	see notes f,w	7,800
San Carlos		see note h	see note h	35,200
Stanford University			27,924	n.a.
Woodside			see note f	7,300

^a CWS – South San Francisco District (Colma, parts of Daly City and South San Francisco, plus unincorporated areas) UWMP projection for 2030 is 60,150; water customer projection for 2030 is 59,584.

^b Estero MID (Foster City and part of San Mateo) projection for 2030 is 40,096.

^c Mid-Peninsula Water District (Belmont, part of San Carlos, and portions of unincorporated San Mateo County) UWMP projection for 2030 is 28,930; water customer projection is 27,997.

^d Figure shown is for the City of Burlingame Water Agency, which also serves some unincorporated area.

^e Figure shown is for the portion of Menlo Park (less than half of the city's population) served by the City of Menlo Park Water Agency.

^f CWS – Bear Gulch District (Atherton, parts of Menlo Park, Portola Valley, and Woodside, plus unincorporated areas) projection for 2030 is 73,719; UWMP population projection is 59,220 in 2030.

^g Figure shown is for the City of Mountain View Water Agency, which serves most of Mountain View.

^h CWS – Mid-Peninsula District (parts of the cities of San Mateo and San Carlos plus unincorporated areas) water customer population projection for 2030 is 139,834;

UWMP population projection for 2030 is 134,010.

ⁱ The Housing Element of the Daly City General Plan projects this population within the city limits and a population of 120,000 within the (planning) area that corresponds to the ABAG subregional study area.

^j Figure shown is for the portion of Daly City served by the City of Daly City Water Agency.

^k Parts of Daly City and South San Francisco are served by CWS – South San Francisco District.

^l Alameda County Water District (cities of Fremont, Newark, and Union City) projection for 2030 is 379,931.

^m Figure shown is for the Coastside County Water District, which also serves unincorporated Half Moon Bay.

ⁿ Based on Milpitas General Plan adjusted to include 5,000 housing units added by the Midtown Milpitas Specific Plan (Carrington, 2006).

^o Figure shown is for City of Redwood City Water Agency, which also serves part of the City of San Carlos, part of the Town of Woodside, and portions of unincorporated San Mateo County.

^p San Bruno UWMP (City of San Bruno, 2007) shows two population projections for 2030: 50,700, based on ABAG's *Projections 2005*, and 48,229, based on the City's Adjusted Draft General Plan.

^q Figure shown is for the City of San Bruno Water Agency, which also serves some unincorporated areas.

^r Figures shown are for the CWS – South San Francisco District plus Westborough Water District. For the Westborough Water District, the water customer projection is the same as the UWMP projection.

^s Figure shown is for the Town of Hillsborough Water Agency, which also serves some unincorporated area.

^t Purissima Hills Water District, (part of Los Altos Hills and some unincorporated area) projection is 6,763.

^u Los Trancos County Water District was acquired by CWS in 2006, and is now part of the CWS – Bear Gulch District. Because it was a separate entity when these projections were prepared, it is presented separately in this analysis.

^v Includes a portion of Portola Valley.

^w Portola Valley is served by CWS – Bear Gulch District; a portion of the city was previously served by the Los Trancos County Water District, which is now part of CWS – Bear Gulch.

SOURCE: See sources for Table E.3.34.

In Vol. 5, Appendix E.3, the footnote and source information for Redwood City in Table E.3.34 (p. E.3-39) are deleted as follows:

^{fn} ~~Figure shown is for City of Redwood City water agency, which also serves part of the City of San Carlos, part of the Town of Woodside, and portions of unincorporated San Mateo County.~~

SOURCES: ABAG, 2004; ACWD, 2005; CWS-Mid-Peninsula, 2005 ;CWS-South San Francisco, 2006; Carrington, 2006; City and County of San Francisco, 2004; City of Belmont, 2002; City of Burlingame, 2002a; City of Burlingame, 2005; City of Daly City, 2004; City of Daly City, 2005; City of East Palo Alto, 1999; City of East Palo Alto, 2006; City of Foster City, 2001; City of Fremont, 2003; City of Half Moon Bay, 1993; City of Hayward, 2002; City of Hayward, 2005; City of Menlo Park, 1994; City of Menlo Park, 2006; City of Millbrae, 1998; City of Millbrae, 2005; City of Milpitas, 2002b; City of Milpitas, 2005; City of Mountain View, 2002; City of Mountain View, 2005; City of Newark, 2002; City of Palo Alto, 1998; City of Palo Alto, 2005; ~~City of Redwood City, 2005; City of Redwood City, 2007;~~ City of San Bruno, 2003; City of San Bruno, 2007; City of San Mateo, 2001; City of Santa Clara, 2002; City of Santa Clara, 2005; City of South San Francisco, 2002; City of Sunnyvale, 2002; City of Sunnyvale, 2005; City of Union City, 2002; Coastside County Water District, 2005; Estero MID, 2005; Hannaford and Hydroconsult, 2004; Mid-Peninsula Water District, 2006; SFPUC, 2005; Town of Atherton, 2002; Town of Colma, 1999; Town of Hillsborough, 2002; URS, 2004, Westborough Water District, 2005.

In Vol. 5, Appendix E.3, References – Appendix E.3 (p. E.3-51), the entry for the Downtown Precise Plan is deleted as follows:

~~City of Redwood City, *Downtown Precise Plan Draft Environmental Impact Report* (October 2006) and *Final Environmental Impact Report*, State Clearinghouse #2005052027, certified March 2007.~~

In Vol. 5, Appendix E.4 (p. E.4-14, first full paragraph), the fourth and fifth sentences are revised as follows:

During the 1970s and 1980s, changes in industry and housing occurred, with the craft industries of the city's early years giving way to high-technology and information-age industries (City of Redwood City, 1990). The 1990 Redwood City General Plan indicated that the city was expected to reach a population of 70,000 by the year 2000 (Redwood City, 1990, Chapter 4, p. 4-1). The EIR for the Downtown Precise Plan, ~~a recent amendment of the general plan,~~ cites ABAG's *Projections 2005* forecasts for the city (not including its sphere of influence) of 87,100 in 2020.

In Vol. 5, the entry for Redwood City in Table E.4.1 (p. E.4-3) is revised as shown on the following page.

L_RdwdCty-09 This comment, which accurately characterizes the description of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative, is acknowledged.

TABLE E.4.1
CURRENT POPULATION ESTIMATES AND FORECASTS OF SELECT JURISDICTIONS

City	Actual Population	Current Population Estimates			Forecasts				
	U.S. Census 2000 Population	U.S. Census Estimated 2005 Population	ABAG Projections 2005 Estimated 2005 Population	Department of Finance Estimated 2006 Population	General Plan Buildout (Year) and Population	ABAG Projections 2005 Population Projection for General Plan Buildout Year	Customer- Selected Population Projection for 2030	ABAG Projections 2005 Population Projection for 2030	Percent of Supply (after Conservation) from SFPUC
Alameda County									
ACWD ^a	312,753	311,600	326,900	325,396	(2020) 359,113	368,500	379,931	404,700	25%
Fremont	203,413	200,468	211,100	210,158	(2020) 229,213	236,900		257,200	
Newark ^b	42,471	41,956	44,400	43,486	(2020) 49,800	49,000		53,400	
Union City	66,869	69,176	71,400	71,752	(2020) 80,100	82,600		94,100	
Hayward	140,030	140,293	146,300	146,398	(2025) 160,300	165,900	162,757	171,500	100%
Santa Clara County									
Milpitas ^c	62,698	63,383	65,400	65,276	(2020) 94,400	82,400	88,841	91,400	48%
Santa Clara ^d	102,361	105,402	108,700	110,771	(2010) 129,900	117,400	140,698	142,100	15%
Sunnyvale	131,760	128,902	131,700	133,544	(2025) 154,600	146,900	151,610	159,100	46%
San Mateo County									
East Palo Alto	29,506	32,242	32,700	32,083	(2020) 34,600	39,600	32,712	43,600	100%
Redwood City ^e	75,402	73,114	77,300	76,087	(2000) 20,200 70,000	87,100	93,535	122,300	92%
San Mateo ^f	92,482	91,081	94,900	94,315	(2010) 100,700	98,000	See note f	119,800	100%
South San Francisco ^g	60,552	60,735	61,000	61,824	(2020) 67,400	68,500	73,884	71,800	See note g
City and County of San Francisco	776,733	739,426	798,000	798,680	(2020) 811,100	859,200	849,942	924,600	97%

^a ACWD = Alameda County Water District; U.S. Census, ABAG, Department of Finance (DOF), and general plan figures are the combined estimates for Fremont, Newark and Union City.

^b The Newark general plan projection shown is from the 2002 housing element. The general plan (adopted in 1992) projected a buildout population of 51,942 by the year 2007.

^c The general plan population is based on the population shown in the general plan (77,100) plus the additional population accommodated by the Milpitas Midtown Specific Plan, as advised by Milpitas Planning Department staff (Carrington, 2006), to account for 5,000 additional units with an assumed density of 3.46 persons per unit (i.e., an added population of 17,300). The City has amended to general plan to incorporate the specific plan.

^d The general plan figure for Santa Clara is the average of the range projected in the general plan at buildout of 124,800 to 135,000.

^e The SFPUC provides 100 percent of Redwood City's potable water. The remaining 8 percent of demand indicated here is met by recycled water.

^f The city of San Mateo is served by the CWS–Mid-Peninsula District and Estero MID, both of which serve other jurisdictions as well; therefore, the 2030 population assumed by the wholesale customers is not comparable to projections for the city. The SFPUC supplies all of the CWS–Mid Peninsula District's and Estero MID's water.

^g The customer-selected projection is the combined 2030 estimates for the CWS–South San Francisco District (which also serves Colma and a small portion of unincorporated San Mateo County), based on the 2004 demand study, and the Westborough Water District, based on the district's 2005 UWMP. The SFPUC would supply approximately 85 percent of the CWS–South San Francisco District's water supply in 2030 and 100 percent of Westborough Water District's. The other figures are for South San Francisco only.

SOURCES: ABAG, 2004; California Department of Finance, 2006; Carrington, 2006; City of East Palo Alto, 1999a; City of Fremont, 2003a; City of Hayward, 2002a; City of Milpitas, 2002a; City of Newark, 2002; City of Redwood City, 1990, 2007; City of San Mateo, 2001; City of Santa Clara, 2002; City of Sunnyvale, 2002; City of Union City, 2002a; U.S. Census Bureau, 2000; U.S. Census Bureau, 2006; URS, 2004, Westborough Water District, 2005.

City of San Jose, Mansour Nasser, Deputy Director, Water Resources Division, 9/27/07

- L_SanJose-01 This comment expressing support for the Modified WSIP Alternative is acknowledged.
- L_SanJose-02 This comment summarizes more detailed comments presented in Comments L_SanJose-03 through L_SanJose-07; refer to **Responses L_SanJose-03** through **L_SanJose-07** for the specific responses.
- L_SanJose-03 This comment, which provides additional information regarding the water conservation programs of the San Jose Municipal Water System, is noted.
- L_SanJose-04 This comment provides information about growth permitted under San Jose's North San Jose Area Development Policy ("Policy"), including information on current and future population in the area generally within the North San Jose/Alviso service area of the San Jose Municipal Water System that is served by the SFPUC (San Jose North). San Jose North provides service to only a small portion of San Jose and only a small portion of the area governed by the Policy. As shown in the Draft PEIR (Vol. 5, Appendix E.3, p. E.3-36), the agency's urban water management plan anticipates employment of 3,353 in 2030, an increase from the estimate of 2,500 jobs in 2001. Similarly, the *Wholesale Customer Water Demand Projections Technical Report* (URS, 2004a) estimates a 2001 population of 11,098 in the area served, increasing to 13,686 in 2030.
- This information about additional growth (outside the area served by an SFPUC wholesale customer) does not address the adequacy or accuracy of the PEIR; therefore, no response is provided.
- L_SanJose-05 This comment does not state the location of the alleged Draft PEIR quotation, which is in fact inconsistent with information presented in the Draft PEIR. Table 7.3 (Vol. 4, Chapter 7, p. 7-18) indicates that 96 percent (not 100 percent) of San Jose North's demand was met by SFPUC purchases in 2001. According to the *SFPUC Wholesale Customer Water Demand Projections Technical Report* (URS, 2004a, p. A-5), recycled water supplied the remaining 4 percent. The Draft PEIR customer summary (Vol. 4, Chapter 7, pp. 7-54 and 7-55) states that while the SFPUC would be San Jose North's only source of potable supply *in 2030*, the City has used other sources of water supply. The information on other sources of supply presented in Table 3.3 (Vol. 1, Chapter 3, p. 3-18) and Table 7.2 (Vol. 4, Chapter 7, p. 7-15) is for 2030—the WSIP planning horizon—and does not purport to represent any interim years.

Information on 2030 purchases and conservation is based on the *SFPUC Wholesale Customer 2030 Purchase Estimates Technical Memorandum* (URS, 2004b, Table 9, p. 5-1) and the “Wholesale Customer Best Estimate of Water Purchases from the SFPUC” form submitted by the City of San Jose to the SFPUC (dated November 16, 2004). The purchase estimate technical memorandum indicates that San Jose would receive 97.6 percent of total demand in 2030; conservation savings (shown in Draft PEIR Table 7.2) would meet the remaining demand. The Wholesale Customer Best Estimate of Water Purchases from the SFPUC form submitted by San Jose to the SFPUC states:

Based on the information collected and analyses conducted in developing overall Demand Projections, City of San Jose estimates that it will purchase 6.343 mgd (annual average) from the SFPUC in 2030. It is understood that this estimate will be used by the SFPUC for purposes of planning and environmental review and conforms to the 2030 Water Demand Projection of 6.5 mgd, and the Conservation Savings Range of 0.157 mgd. The estimate is subject to change based on changed conditions, such as the future cost of water, new pricing structures, and other modified contract arrangements.

Thus, according to the submitted form, the SFPUC supply plus conservation would meet the projected demand, as indicated in the Draft PEIR Chapter 7 summary and reflected in Tables 7.2 and 7.3.

With respect to recycled water use discussed in this and the following comment, it is important to note that the focus of the WSIP demand studies was on demand for potable supplies. Existing demand currently met by recycled water that would not be met in the future by potable supplies was not included in the demand baseline. Similarly, the *Wholesale Customer Recycled Water Potential Technical Memorandum* (RMC, 2004) distinguishes between recycled water projects that would replace potable water supply and those that would not. The recycled water shown in Tables 3.3 and 7.2 offset demand for potable water supplies. It appears that at least a portion of the recycled water use described in this comment refers to recycled water that does not replace potable supplies.

San Jose North is one of three wholesale customers served by the South Bay Water Recycling Project, which currently provides 3.1 mgd of recycled water that offsets potable demand (see Draft PEIR Table E.2.5, Vol. 5, Appendix E.2, p. E.2-17). Information on the allocation of this supply among the three participating jurisdictions is not provided in the technical memorandum (and may change from year to year), but San Jose North’s participation in this project is consistent with the City of San Jose’s use of recycled water to meet 4 percent of its 2001 demand. However, as discussed above, the projected use of recycled water is not assumed to offset the 2030 demand according to the purchase estimate form submitted by the City.

- L_SanJose-06 The Draft PEIR (Vol. 1, Chapter 3, pp. 3-16 to 3-22, and Vol. 5, Appendix E, pp. E.2-1 to E.2-20) contains a discussion of the demand projection methodology. As part of this effort, each wholesale customer, including San Jose North, provided an estimate of 2030 purchases from the SFPUC taking into account water savings from conservation and other water supply sources (refer to **Response L_SanJose-05**). This comment states that recycled water accounts for 9 to 11 percent of the San Jose North water supply; however, this information was not indicated as part of the purchase estimate submitted by the City. Based on Figure 2 of this comment, it appears that the use of recycled water and groundwater would not alter the SFPUC purchase estimate of 6.34 mgd, but would alter the City's overall demand projections, which would be approximately 10 mgd (compared to 6.5 mgd shown in the Draft PEIR) in 2030. As discussed in **Response L_SanJose-05**, the difference between the total demand indicated in Figure 2 of this comment and that identified in the WSIP demand studies and the Draft PEIR apparently stems from the inclusion in Figure 2 of all expected recycled water use within San Jose North, whereas the WSIP demand studies considered only water supply sources that would offset demand for potable supplies; this would include some but not all of the recycled water projects in the service area.
- L_SanJose-07 This comment regarding the essential need for a reliable supply from the SFPUC system is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for more discussion.
- L_SanJose-08 This comment, an attachment referenced in Comment L_SanJose-05, contains a list of San Jose North demand projection citations that the commenter asserts are incorrect. However, the numbers mentioned in Tables 3.3 (Vol. 4, Chapter 7, p. 7-18), 7.2 (Vol. 4, Chapter 7, p. 7-15), 7.3 (Vol. 4, Chapter 7, p. 7-18), Section 7.3.6 (Vol. Chapter 7, pp. 7-54 to 7-55), and Tables E.2.1 (Vol. 5, Appendix E, p. E.2-2) and E.2.6 (Vol. 5, Appendix E, p. E.2-18) in the Draft PEIR are consistent with information presented in SFPUC background documents and submitted to the SFPUC by the City of San Jose, as stated in **Response L_SanJose-05**; therefore, no text revisions are necessary. Regarding the commenter's suggested deletion of footnote "c" in Table 3.4 (Vol. 1, Chapter 3, p. 3-19), the "Wholesale Customer Best Estimate of Water Purchases from the SFPUC" form, submitted by the City of San Jose to the SFPUC, indicates that San Jose North would purchase all of its projected 2030 demand, except the portion offset by conservation savings, from the SFPUC (refer to **Response L_SanJose-05**). Thus, this suggested text change is unnecessary. As for the commenter's suggested text change to Table E.2.5 (Vol. 5, Appendix E, p. E.2-17), no text revision is necessary because information obtained from the technical memorandum, *Wholesale Customer Recycled Water Potential Technical Memorandum* (RMC, 2004) is correctly cited and is consistent with the

purchase estimate form submitted by San Jose. Please refer to
Response L_SanJose-05 for additional information regarding these citations in
the Draft PEIR.

City of San Bruno, Barbara A. Brenner, Stoel Rives, Attorneys at Law, 10/1/07

L_SBruno-01 The commenter correctly summarizes the Draft PEIR description of the regional conjunctive-use project. The commenter notes that the Regional Groundwater Projects (a component of WSIP facility improvement project SF-2) has been updated to include development of 15 wells instead of the 10 wells described in Chapter 3 of the Draft PEIR, and notes that the planned groundwater extraction using these 15 wells would be 8,100 acre-feet per year (afy). The Draft PEIR notes that the project descriptions presented in Table 3.10 and Appendix C are based on the best available information at the time the Draft PEIR was prepared and are appropriate for the evaluation of the overall magnitude of effects expected from implementation of the WSIP as a whole (Vol. 1, Chapter 3, p. 3-48). The Draft PEIR also notes that any changes in project details would be addressed during subsequent, project-specific environmental review (Vol. 1, Chapter 3, p. 3-61).

As indicated by the commenter, analysis conducted subsequent to preparation of the Draft PEIR has demonstrated that more than 10 wells will be required to achieve a pumping capacity of 8,100 afy. However, the planned pumping capacity of the Regional Groundwater Projects (SF-2) has not changed (see Vol. 1, Chapter 3, p. 3-39). Therefore, Section 5.6 of the Draft PEIR adequately addresses impacts on the South Westside Groundwater Basin at a program level. Consistent with the approach described in the Draft PEIR, the project-level CEQA analysis of the Regional Groundwater Projects will analyze the effects of the preferred alternative for the conjunctive-use program at a more detailed level, and will address any changes in the planned number and location of wells to be installed in the South Westside Groundwater Basin.

The commenter also questions the references to a pumping capacity of 6 mgd (equivalent to approximately 6,700 afy) on pp. S-18 and 3-56 of the Draft PEIR. While the proposed pumping capacity under the conjunctive-use program of 8,100 afy is approximately equivalent to 7 mgd, the actual pumping rate under the WSIP would be different because of the way that the extraction component of the conjunctive-use program would occur. This is described in the Draft PEIR as follows (Vol. 1, Chapter 3, p. 3-39, footnote 23):

The conjunctive-use program has been designed to provide an extraction capacity of approximately 8,100 acre-feet during a dry year, equivalent to about 7 mgd, over 7.5 years. While the initiation of the extraction component of the conjunctive use program would occur as the first response to anticipated drought, the realization of a drought does not typically occur until the second year of a dry sequence. Thus, in the 8.5-year design drought, the extraction component of the conjunctive-use

program would only occur for 7.5 years. Groundwater pumping of about 7 mgd over 7.5 years is approximately equivalent in volume to 6 mgd over 8.5 years.

A similar footnote is included in Section 5.6 (Vol. 3, Chapter 5, p. 5.6-26, footnote 15). Note that, as discussed in the Draft PEIR, the amount of water withdrawn under the Regional Groundwater Projects (SF-2) would be limited to the amount of groundwater banked through in-lieu delivery of SFPUC system water to participating pumpers, and the participating pumpers would enter into an operating agreement(s) specifying the terms and conditions of groundwater storage and withdrawals to ensure that adverse conditions do not occur (Vol. 3, Chapter 5, pp. 5.6-25 and 5.6-26). These restrictions on groundwater withdrawals and the formation of operating agreement(s) would ensure that impacts related to basin overdraft are less than significant in the South Westside Groundwater Basin.

- L_SBruno-02 The commenter states that San Bruno's projected cessation of groundwater pumping (cited on many pages of the Draft PEIR) is based on a worst-case scenario, and that San Bruno plans on maintaining its groundwater production capacity and utilizing groundwater resources in the future. This comment about potential future use of groundwater by San Bruno is noted. The "worst case scenario" described by the commenter is from the point of view of water supply planning, not from the point of view of potential environmental impacts. As required by CEQA, the Draft PEIR analyzes the potential impacts from the point of view of worst-case environmental impacts, which would be if San Bruno were to pump groundwater for municipal purposes in combination with drought-year pumping under the proposed conjunctive-use program (Impact 5.7.5-2, Vol. 3, Chapter 5, pp. 5.7-90 and 5.7-91).

As summarized in this impact analysis, the combined conjunctive-use and municipal pumping could temporarily exceed historical high groundwater withdrawal rates, but impacts related to this increased pumping rate would be less than significant with implementation of the proposed operating agreement(s) to be executed between the SFPUC and the participating pumpers. The agreement(s) would outline allowable operating parameters for pumping during drought years to avoid adverse long-term conditions. In addition, an operating committee would be formed to develop annual operating maintenance plans as well as an annual operating schedule, and groundwater monitoring and modeling would also be conducted to identify the potential for adverse conditions and inform decisions to modify the recharge or pumping strategy in response to changing conditions over time. These measures would ensure that future municipal groundwater pumping by San Bruno, should it be necessary, would not cause adverse effects in the South Westside Groundwater Basin.

L_SBruno-03 The commenter notes that the proposed conjunctive-use program in the South Westside Groundwater Basin (to be implemented under the Regional Groundwater Projects, SF-2) should be referred to as “proposed” since the local agencies have not agreed to the terms. The Draft PEIR identifies implementation of an operating agreement(s) between the SFPUC and the participating pumpers as a required action that would need approval for the Regional Groundwater Projects (Vol. 1, Chapter 3, p. 3-88; Vol. 2, Chapter 5, pp. 5.6-25, 5.6-26, 5.7-90, and 5.7-91).

L_SBruno-04 The commenter notes that the Regional Groundwater Projects (SF-2) currently include installation of 15 wells in the South Westside Groundwater Basin, instead of the 10 wells described in the Draft PEIR. As described in **Response L_SBruno-01**, project analysis conducted subsequent to preparation of the Draft PEIR has demonstrated that more than 10 wells will be required to achieve a pumping capacity of 8,100 afy. However, the planned pumping capacity of the Regional Groundwater Projects has not changed. Therefore, Section 5.6 of the Draft PEIR adequately addresses impacts on the South Westside Groundwater Basin at a program level. Consistent with the approach described in the Draft PEIR, the project-level CEQA analysis of the Regional Groundwater Projects will analyze the effects of the preferred alternative for the conjunctive-use program at a more detailed level, and will address any changes in the planned number and location of wells to be installed in the South Westside Groundwater Basin.

The commenter also indicates that the Draft PEIR reference to an estimated 14 wells in San Francisco, Daly City, San Bruno, and South San Francisco (Vol. 1, Chapter 3, p. 3-72) is inconsistent with the description of the Regional Groundwater Projects (SF-2) which, in the Draft PEIR, includes development of 10 wells in the South Westside Groundwater Basin. However, the 14 new groundwater wells referenced on p. 3-72 of the Draft PEIR includes four wells proposed in the North Westside Groundwater Basin under the Local Groundwater Projects (also part of SF-2) and 10 wells proposed in the South Westside Groundwater Basin under the Regional Groundwater Projects (see Table 3-12, Vol. 1, Chapter 3, p. 3-67).

L_SBruno-05 This comment stating that San Bruno’s groundwater production in 2006 was 1,955 afy is acknowledged. The Draft PEIR (Vol. 3, Chapter 5, p. 5.7-86) cites a figure of approximately 1,700 afy for San Bruno’s 2006 pumping rate. The groundwater production rate provided in the Draft PEIR is based on studies performed on behalf of the SFPUC and the best available information at that time. This updated information will be incorporated into modeling to be conducted to identify the potential for adverse conditions in the South Westside Groundwater Basin and inform decisions to modify the recharge or pumping strategy (Vol. 3, Chapter 5, p. 5.6-26), and will be addressed as part of the

project-level CEQA analysis of the Regional Groundwater Projects (SF-2) with respect to groundwater pumping impacts on the South Westside Groundwater Basin.

- L_SBruno-06 This comment provides clarification of the Draft PEIR text regarding groundwater monitoring by San Bruno in order to clarify that the wells described as proposed in the Draft PEIR have already been installed. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-17, last sentence of first full paragraph) has been revised as follows:

The City of San Bruno is constructing two monitoring wells clusters in 2006 along the bay side that should have provided additional geologic information and allow for monitoring of groundwater levels and groundwater quality at different depths along the bay margin. insight into the mechanisms preventing seawater intrusion.

- L_SBruno-07 This comment provides clarification of the Draft PEIR text regarding the statement that, in the South Westside Groundwater Basin, manganese has exceeded the secondary drinking water standard in San Bruno and Daly City. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.6-17, third full paragraph, last sentence) has been revised as follows:

In the South Westside Groundwater Basin, manganese has exceeded the secondary drinking water standard in San Bruno and Daly City in the untreated groundwater, but the water is treated to meet secondary standards prior to use in the water supply.

- L_SBruno-08 The commenter suggests that the Draft PEIR should include the basis for the estimated 13,000 afy of groundwater storage in the South Westside Groundwater Basin. The Draft PEIR (Vol. 3., Chapter 5, pp. 5.6-17 and 5.7-86) presents this information as part of the results of the In-Lieu Recharge Demonstration Study through 2005. The estimated 13,000 afy included 6,300 afy in the Daly City area, 3,600 afy in the South San Francisco area, and 3,000 afy in the San Bruno area. The project-level CEQA analysis of the Regional Groundwater Projects (SF-2) will include a more detailed and up-to-date analysis of the conjunctive-use program and will address the information provided by the commenter.

- L_SBruno-09 The commenter provides clarification regarding what types of wells Section 4.68.225 of the San Mateo County Code applies to. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, last paragraph on p. 5.6-21 and ending on p. 5.6-22) has been revised as follows:

In accordance with Section 4.68.225 of the San Mateo County Code, the San Mateo County Environmental Health Division would not grant a well permit for a large well¹² in a public park, cemetery, or golf course that could potentially cause overdraft of the South Westside Groundwater

Basin or be located in an area subject to a specific and localized groundwater problem. The Environmental Health Division could also deny, revoke, or suspend a permit for a large well to avoid pollution or contamination of water resources.

In addition, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-91, last paragraph) has been revised as follows:

Furthermore, as discussed in Section 5.6, the San Mateo County Environmental Health Division would not grant a well permit for a large well ~~in a public park, cemetery, or golf course~~ that could potentially cause overdraft of the South Westside Groundwater Basin or be located in an area subject to a specific and localized groundwater problem.....

L_SBruno-10 The commenter suggests that the text on p. 5.6-25 (in Chapter 5 of the Draft PEIR) should be clarified to state that a portion of the banked groundwater would be introduced into the regional water system under specified conditions. The commenter is correct in noting that some of the banked groundwater could be introduced into the regional system. Impacts related to the introduction of treated groundwater into the distribution system are addressed in Impact 5.6-6 (Vol. 3, Chapter 5, p. 5.6-32), where it is acknowledged that the SFPUC would continue to meet all drinking water standards in the use of groundwater to supplement its current supply during both nondrought and drought periods. The text on p. 5.6-25 referenced by the commenter addresses potential impacts related to basin overdraft due to pumping from the South Westside Groundwater Basin (Impact 5.6-1), and the suggested text changes do not apply to this impact.

L_SBruno-11 This comment provides updated information that the Regional Groundwater Projects (SF-2) would develop 15 wells instead of the 10 wells described in the Chapter 3 of the Draft PEIR, and that the supplemental supply of groundwater would be for the participating pumpers and for the regional system. See **Response L_SBruno-01**.

The text referred to by the commenter (Vol. 3, Chapter 5, p. 5.6-26) addresses potential impacts related to basin overdraft due to pumping from the South Westside Groundwater Basin (Impact 5.6-1). Drought-year system operations are discussed in Section 3.7.1 of the Draft PEIR (Vol. 1, Chapter 3, pp. 3-42 and 3-43), and this section acknowledges that groundwater will be available to the regional system in a drought year.

The commenter also states that the proposed Regional Groundwater Projects (SF-2) does not restrict municipal pumping to previously pumped quantities. The Draft PEIR evaluates the cumulative effects of municipal pumping in combination with drought-year pumping under the Regional Groundwater Projects in Impact 5.7.5-2 (Vol. 3, Chapter 5, pp. 5.7-90 and 5.7-91). This impact analysis does not state that the amount of groundwater pumped would be

restricted to the amount of groundwater previously pumped as well as the amount of banked water resulting from the project. Rather, the analysis concludes that the combined conjunctive-use and municipal pumping could temporarily exceed historical high groundwater withdrawal rates, but that impacts related to this increased pumping rate would be less than significant with implementation of the proposed operating agreement(s) to be executed between the SFPUC and the participating pumpers. The agreement(s) would outline allowable operating parameters for pumping during drought years to avoid adverse long-term conditions. In addition, an operating committee would be formed to develop annual operating maintenance plans as well as an annual operating schedule, and groundwater monitoring and modeling would also be conducted to identify the potential for adverse conditions and inform decisions to modify the recharge or pumping strategy in response to changing conditions over time. These measures would ensure that future groundwater pumping by San Bruno, should it be necessary, would not cause adverse effects in the South Westside Groundwater Basin.

- L_SBruno-12 The commenter requests edits to p. 5.7-87 of the Draft PEIR to reflect revisions to San Bruno's urban water management plan (UWMP) that would be needed if the Regional Groundwater Projects (SF-2) is approved. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-87, first sentence of the third bullet) has been revised as follows:

The 2006 UWMP for the San Bruno does not yet reflect long-term participation in the SFPUC's proposed conjunctive-use program, but, if approved, participation in this program is expected to be included in the next revision of its UWMP.

- L_SBruno-13 The commenter states that the text on p. 5.7-90 of the Draft PEIR should mention municipal pumping in future pumping estimates. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-90, the first sentence of Impact 5.7.5-2) has been revised as follows:

Future and continuing projects identified in the northern portion of the South Westside Groundwater Basin include the WSIP conjunctive-use program (the regional component of SF-2), municipal pumping by the participating pumpers, and continued irrigation pumping at 2,600 afy.

- L_SBruno-14 The commenter states that on p. 5.7-91 of the Draft PEIR, it would be more accurate to say that the combined conjunctive-use and municipal pumping "is anticipated to significantly exceed" historical high groundwater withdrawal rates, rather than "could temporarily exceed" these rates. The commenter also notes that the proposed operational agreement(s) do not alter existing pumpers' rights regarding their use of groundwater. These comments are acknowledged.

As discussed in **Response L_SBruno-11**, the Draft PEIR evaluates the cumulative effects of municipal pumping in combination with conjunctive-use pumping under the Regional Groundwater Projects (SF-2) in Impact 5.7.5-2 (Vol. 3, Chapter 5, pp. 5.7-90 and 5.7-91). This impact analysis concludes that the combined conjunctive-use and municipal pumping could temporarily exceed historical high groundwater withdrawal rates, but that impacts related to this increased pumping rate would be less than significant with implementation of the proposed operating agreement(s) to be executed between the SFPUC and the participating pumpers. The agreement(s) would outline allowable operating parameters for pumping during drought years to avoid adverse long-term conditions. In addition, an operating committee would be formed to develop annual operating maintenance plans as well as an annual operating schedule, and groundwater monitoring and modeling would also be conducted to identify the potential for adverse conditions and inform decisions to modify the recharge or pumping strategy in response to changing conditions over time. These measures would ensure that future groundwater pumping would not cause adverse effects in the South Westside Groundwater Basin, even if groundwater withdrawal rates were to “significantly exceed” historically high withdrawal rates.

L_SBruno-15 This comment suggests adding text to Chapter 5, p. 5.7-91 of the Draft PEIR stating that one method of controlling adverse effects on the South Westside Groundwater Basin under the operating agreement(s) would be to restrict pumping from the conjunctive-use wells if groundwater levels were to fall below historical lows. Comment acknowledged. A number of options could be appropriate for avoiding potentially adverse effects on the South Westside Groundwater Basin during a drought year, and, as discussed in Impact 5.7.5-2 (Vol. 3, Chapter 5, pp. 5.7-90 and 5.7-91), operating agreement(s) between the SFPUC and participating pumpers would outline allowable operating parameters for pumping during drought years to avoid adverse long-term conditions. In addition, an operating committee would be formed to develop annual operating maintenance plans as well as an annual operating schedule, and groundwater monitoring and modeling would also be conducted to identify the potential for adverse conditions and inform decisions to modify the recharge or pumping strategy in response to changing conditions over time. Specific options for avoiding adverse conditions in the South Westside Groundwater Basin are not addressed in the program-level discussion provided in the Draft PEIR, but would be identified on the basis of groundwater monitoring and modeling conducted in accordance with the operating agreement(s). The project-level CEQA analysis of the Regional Groundwater Projects (SF-2) will include a more detailed analysis of options for avoiding adverse conditions in the groundwater basin and will address the information provided by the commenter.

L_SBruno-16 See **Response L_SBruno-11**.

- L_SBruno-17 The commenter requests that the discussion on p. 5.7-100 of the Draft PEIR utilize the final UWMP dated January 2007. In response to this comment, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-87, third bullet) has been revised as follows (edits shown include edits in **Response L-SBruno-12**):

The 2006~~7~~ UWMP for the San Bruno does not yet reflect long-term participation in the SFPUC's proposed conjunctive-use program, but, if approved, participation in this program is expected to be included in the next revision of its UWMP. In its 2006~~7~~ UWMP, the City of San Bruno estimates that overall, groundwater usage will decrease from 2.5 mgd (2,800 afy) in 2010 to zero in 2030 through implementation of conservation measures and increased purchases from the SFPUC. In a drought year, groundwater use between 2010 and 2030 is projected to range from 0.80 mgd (896 afy) to a maximum of 2.5 mgd (2,800 afy) (City of San Bruno, 2006~~7~~).

In addition, the following text from the Draft PEIR (Vol. 3, Chapter 5, p. 5.7-100, sixth reference under Westside Groundwater Basin Resources) has been revised as follows:

City of San Bruno, ~~Public Draft~~ Final Urban Water Management Plan.
~~December 2006~~ January 2007.

- L_SBruno-18 This comment refers to Draft PEIR Table E.3.34 (Vol. 5, Appendix E, p. E.3-38), noting that population projections are available in San Bruno's UWMP (adopted January 2007), contrary to the indication in the table that population projections were not available. Table E.3.34 presents a comparison of projections in the general plan projection year; therefore, the appropriate year for reporting the San Bruno UWMP population estimate is 2020, as this is the year for which a projection is available in the City's adopted general plan housing element.

In response to this comment, Table E.3.34 (Vol. 5, Appendix E.3, p. E.3-38) has been revised as follows:

(City)	General Plan	UWMP	SFPUC Water Customer Projection	Projections 2005
San Bruno	46,400	n-a <u>see note r</u>	45,642	47,700

r The UWMP (Table 2) reports three population projections: the draft general plan (2006), ABAG subregional (2005), and adjusted draft general plan (2001), although the draft general plan (2006) does not include a projection for 2020. The projections for 2020 are, respectively, 43,400 (based on a straight-line interpolation from projections shown for 2005 and 2025), 47,700, and 43,400.

City of Santa Clara Planning Division, Gloria Sciara, Development Review Officer, 8/28/07

L_SClara1-01 This comment states that the City of Santa Clara must review the PEIR if any work associated with the BDPL Nos. 3 and 4 Crossovers project (BD-2) would occur in Santa Clara. The San Francisco Planning Department responded by email on September 18, 2007, indicating that this project would require work in Santa Clara, and a CD of the full Draft PEIR was mailed to the City of Santa Clara on the same day.

City of Santa Clara Water and Sewer Utilities, Robin Saunders, Director of Water and Sewer Utility, 8/23/07

- L_SClara2-01 This comment, which expresses the City of Santa Clara's concern regarding potential service interruptions caused by earthquake damage to the SFPUC system or failure of critical infrastructure as a result of deferred maintenance, is acknowledged. Please see **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14) for more discussion.
- L_SClara2-02 This comment stating the City of Santa Clara's commitment to the efficient use and sustainability of regional water supplies is acknowledged.
- L_SClara2-03 This comment describing water conservation and recycling programs in Santa Clara is acknowledged.
- L_SClara2-04 This comment, which cites the Santa Clara's smart growth planning policies, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no further response is provided.
- L_SClara2-05 This comment illustrating a decrease in per-capita water use over the past 20 years is noted.
- L_SClara2-06 This comment expressing concern about the reliability and sustainability of the regional water system and urging the SFPUC to proceed with the preferred alternative WSIP is acknowledged.

Santa Clara Valley Water District, Water Supply Management Division, Keith Whitman, Deputy Operation Officer, 9/26/07

- L_SCVWD1-01 This comment urging the SFPUC to adopt the WSIP and meet all program goals and objectives is acknowledged.
- L_SCVWD1-02 The commenter states concern with any potential for re-directed impacts on the Santa Clara Valley groundwater basin and local or imported surface water resources due to SFPUC's reduction in supplies or level of service provided to Santa Clara County. The historical information on land subsidence in the Santa Clara Valley due to groundwater pumping provided by the commenter is acknowledged. Under the proposed program, the SFPUC would fully achieve the WSIP goals and objectives and serve wholesale customers' purchase requests during nondrought and drought periods through 2030. The PEIR also includes environmental analysis of a number of alternatives and variants that, while reducing impacts on the Tuolumne River, would reduce the reliability and/or the water supply delivery to customers. These include the No Program Alternative, the No Purchase Request Alternative, Aggressive Conservation/Water Recycling/Local Groundwater Alternative, and the Phased WSIP Variant (see Vol. 4, Chapter 9 for the first three alternatives and Vol. 7, Chapter 13 for the variant). As part of the environmental analyses of these alternatives/variant, the PEIR identifies potential impacts associated with possible water supply acquisition projects that wholesale customers could pursue, including groundwater pumping (see Vol. 4, Chapter 9, Table 9.10, p. 9-35). In addition, please see Section 13.4, Phased WSIP Variant, for a discussion of how a water delivery shortfall could affect the wholesale customers.

Regarding the commenter's request that the SFPUC address potential impacts on water supplies for the State Water Project and the Central Valley Project users, please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14).

- L_SCVWD1-03 This comment, which expresses support for the SFPUC's goal to maximize water conservation, recycling, and desalination, is acknowledged. In addition, the comment regarding the practical limits in "implementability" of water-use efficiency programs is also acknowledged. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for additional information related to conservation programs and recycling projects proposed by SFPUC and its wholesale customers.

Santa Clara Valley Water District, Amy Fowler, Staff Member, 9/19/07

[See Public Hearing Transcript, Palo Alto, pp. 29–32]

- L_SCVWD2-01 This information related to Santa Clara Valley Water District's (SCVWD) service area and water supplies is acknowledged, but as this comment does not address the adequacy or accuracy of the PEIR, no additional response is provided.
- L_SCVWD2-02 This comment expresses support for the WSIP goals and objectives and expresses concern regarding the potential for secondary impacts on the SCVWD's water supplies in the event that the water supplies or level of service provided by the SFPUC to Santa Clara County is reduced. This comment also expresses support for maximizing water conservation, recycling, and desalination and urges the expedient adoption of the PEIR. In addition, the comment regarding the practical limits in "implementability" of water-use efficiency programs is also acknowledged. For additional information related to conservation and recycling measures, please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3).

San Francisco Bay Trail, Laura Thompson, Project Manager, 9/24/07

L_SFBayTrl-01 This comment, which expresses support for the new underground “Bay Tunnel” segment of the Bay Division Pipeline (BDPL) No. 5 under the BDPL Reliability Upgrade project (BD-1), is acknowledged.

L_SFBayTrl-02 The commenter requests a correction in the length of the Bay Trail (from 400 to 500 miles) and in the number of miles that have been completed (from 280 to 290 miles). However, the referenced statement cannot be changed since it refers to the proposed length specified in the adopted *Bay Trail Plan*. Instead, the following text change updates information on the Bay Trail (Vol. 2, Chapter 4, p. 4.12-7, fourth and fifth full paragraphs):

The Bay Trail. Senate Bill 100, passed in 1987, directed the Association of Bay Area Governments (ABAG) to identify an alignment and develop a plan to create a public trail system encircling San Francisco Bay. The *Bay Trail Plan*, adopted by ABAG in 1989, proposed a continuous 400-mile corridor that would eventually link the shorelines of all nine Bay Area counties and 47 cities around San Francisco and San Pablo Bays. Since its adoption, the *Bay Trail Plan* has received widespread public support as a means of preserving and enhancing public access to the San Francisco Bay waterfront. Most of the jurisdictions along the proposed trail alignment have adopted the plan and incorporated the appropriate Bay Trail segments into their local plans and policies. When complete, the Bay Trail corridor will be 500 miles long.

Development of the Bay Trail is overseen by the Bay Trail Project, a nonprofit organization established in 1990. The Bay Trail Project does not own land or easements; instead, it encourages local jurisdictions to construct and maintain segments of the Bay Trail, often in partnership with other local nonprofit groups. ~~As of 2005, a~~ Approximately ~~280~~290 miles, or just over half of the envisioned trail, ~~had~~has been completed. Some portions of the Bay Trail are paved pathways, while others consist of dirt trails or sidewalks. The main trail, referred to as the “spine trail,” follows the San Francisco Bay shoreline to the extent possible. Where it is not able to follow the shoreline, “spur trails” provide access from the spine trail to points of interest along the waterfront. In addition, “connector trails” provide links to other nearby recreational facilities, residential neighborhoods and employment centers (Association of Bay Area Governments Bay Trail Project, 2005). Segments of the Bay Trail exist near the proposed pipeline alignments for the BDPL Reliability Upgrade (BD-1) project.

L_SFBayTrl-03 The commenter strongly recommends that BDPL Nos. 1 and 2 be decommissioned and physically removed to reduce impacts on habitat and

allow for closure of the Bay Trail gap in this area. Please refer to **Response F_USFWS-02** for discussion of issues related to BDPL Nos. 1 and 2.

L_SFBayTrl-04 The commenter requests that the Ravenswood Open Space Preserve and San Francisco Bay Trail be added to the recreational resources located in the vicinity of the BDPL Reliability Upgrade project (BD-1). The requested text additions to Impact 4.12-1 would not alter the significance determination (PSM) identified for this project in the Draft PEIR (Vol. 2, Chapter 4, p. 4.12-24). In response to this comment, the following text changes are made to update information in Table 4.12-2 (Vol. 2, Chapter 4, p. 4.12-22, under BD-1):

**TABLE 4.12-2
 PUBLIC PARKS AND RECREATIONAL FACILITIES IN THE PROJECT VICINITY**

Projects	Potentially Affected Recreational Resources
BD-1: Bay Division Pipeline Reliability Upgrade	Don Edwards San Francisco Bay Regional Wildlife Refuge; Ravenswood Open Space Preserve; San Francisco Bay Trail; local parks in Fremont, Newark, San Mateo County, and Redwood City; numerous school properties in East Palo Alto, Fremont, Menlo Park, Newark, and Redwood City

These resources are also added to the impact discussion under Impact 4.12-1, Bay Division Region (Vol. 2, Chapter 4, p. 4.12-24, first full paragraph):

Of the WSIP projects proposed for construction in the Bay Division Region, the BDPL Reliability Upgrade project (BD-1) would have the greatest potential impact on recreational facilities in the area. The preferred pipeline alignment for the new Bay Division Pipeline (No. 5) would pass beneath the Don Edwards San Francisco Bay Regional Wildlife Refuge, with an approximately five-mile tunnel segment installed beneath marshlands and San Francisco Bay. The two cut-and-cover sections of pipeline (approximately seven miles from the Irvington Tunnel Portal to the Newark Valve House and nine miles from the Ravenswood Valve House to the Pulgas Tunnel Portal) would be located within the existing SFPUC right-of-way. The Ravenswood Open Space Preserve and San Francisco Bay Trail are also located in the vicinity of the Ravenswood Valve House.

L_SFBayTrl-05 The commenter requests that the SFPUC coordinate with the Bay Trail Project, Coastal Conservancy, and Midpeninsula Open Space District to complete this Bay Trail gap. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Sections 14.4.2 and 14.4.3) for detailed discussion of the issues raised by this comment. The Coastal Conservancy's request for coordination with the SFPUC regarding

completion of the Bay Trail gap through SFPUC lands has been noted in Table C.6 (Vol. 5, Appendix C, p. C-26) for consideration in the project-level EIR for the BDPL Reliability Upgrade project (BD-1).

San Francisco City Planning Commission, Christina Olague, Vice President, 9/20/07

**[See Public Hearing Transcript, San Francisco City Hall,
September 20, 2007, pp. 39–41]**

L_SFCPC1-01 This comment expresses an opinion that the public hearing on the Draft PEIR should have been held earlier in the public comment period and recommends that the comment period be extended.

On June 29, 2007, printed copies of the Draft PEIR or CDs of the draft document were distributed to 70 state and local agencies and 365 additional organizations and individuals. The San Francisco Planning Department notified agencies and the public in writing and via email regarding the availability of the Draft PEIR and the public hearing dates and locations. On June 29, 2007, a Notice of Availability (NOA) of the draft document was sent by first class mail to over 1,627 entities (individuals or organizations). On August 27, 2007, a follow-up notice of the public hearings and comment period was distributed to an expanded list of approximately 1,751 entities. Legal notices and display ads of the public hearings and information on how to obtain a copy of the Draft PEIR and provide comments were placed in the legal classified section of local newspapers in Tuolumne, Stanislaus, San Joaquin, San Mateo, and San Francisco Counties. The NOA and notice of public hearings were posted on the SFPUC and San Francisco Planning Department websites. Printed copies of the Draft PEIR and associated reference materials, as well as the NOA and notice of the public hearings were posted in public libraries in Tuolumne, Stanislaus, San Joaquin, Alameda, San Mateo, and San Francisco Counties.

In accordance with CEQA Guidelines Section 15105, when a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period must not be less than 45 days, unless the State Clearinghouse approves a shorter period (but not less than 30 days). CEQA does not require formal hearings at any stage of the environmental review process and allows public comments to be restricted to written communication (CEQA Guidelines Section 15202). However, as stated in CEQA Guidelines Section 15202, “A draft EIR or Negative Declaration should be used as a basis for discussion at a public hearing. The hearing may be held at a place where public hearings are regularly conducted by the Lead Agency or at another location expected to be convenient to the public.”

The public review period on the Draft PEIR, initially scheduled for 90 days (from June 29, 2007 through October 1, 2007), was extended by an additional 15 days, to October 15, 2007. All comments received through December 31,

2007 were accepted by the San Francisco Planning Department and are responded to in this Comments and Responses document. The San Francisco Planning Department initially scheduled five public hearings on the Draft PEIR at: Sonoma on September 5, 2007; Modesto on September 6, 2007; Fremont on September 18, 2007; Palo Alto on September 19, 2007; and San Francisco on September 20, 2007. Following recommendations by the San Francisco City Planning Commission, a sixth public hearing was held in San Francisco, on October 11, 2007. Thus, the public review period provided for the Draft PEIR meets and exceeds all public review requirements under CEQA. Please refer to **Response F_USDAFS-05** and **Appendix J1** (Vol. 8) of this Comments and Responses document for more information on public outreach efforts conducted by the Planning Department's Major Environmental Analysis Division and the SFPUC.

L_SFCPC1-02 While it is true that the SFPUC and not the San Francisco City Planning Commission will ultimately have the authority to approve the program, the Planning Commission is responsible for certifying the Final PEIR on the WSIP.

L_SFCPC1-03 In this comment, Commissioner Christina Olague requested that an informational presentation of the WSIP be held at a subsequent public hearing for the purpose of briefing the Planning Commission on the WSIP and the program elements.

In response to Commissioner Olague's request, a sixth public hearing was held before the San Francisco City Planning Commission on October 11, 2007, and the public review period for the Draft PEIR was extended to October 15, 2007. Prior to opening up the October 11, 2007 hearing for public comment, Tony Irons, SFPUC Deputy General Manager, gave a presentation on the history and current condition of the regional water system, and the facility improvements, water supplies, and operational changes proposed under the WSIP. Diana Sokolove, Senior Environmental Planner with the San Francisco Planning Department, Major Environmental Analysis Division, provided an overview of the organization of the Draft PEIR and of the impacts and mitigation measures identified therein.

San Francisco City Planning Commission, Michael Antonini, Commissioner, 9/20/07

**[See Public Hearing Transcript, San Francisco City Hall,
September 20, 2007, pp. 42–43]**

- L_SFCPC2-01 This comment by Commissioner Michael Antonini, which expresses the fiduciary responsibility of the City and County of San Francisco due to the size of the regional system, is acknowledged. Commissioner Antonini's comment indicating that the seismic upgrades should move forward is also acknowledged.
- L_SFCPC2-02 This comment regarding per-capita water consumption is noted. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2) for information on per-capita water use in the wholesale customer service area (which, as the commenter surmises, is higher than usage within San Francisco).

San Francisco City Planning Commission, Kathrin Moore, Commissioner, 9/20/07

[See Public Hearing Transcript, San Francisco City Hall,
September 20, 2007, pp. 43–44]

L_SFCPC3-01 This comment, which expresses Commissioner Kathrin Moore's opinion that the Draft PEIR lacks sufficient measures aimed at environmental sustainability, is acknowledged. However, it should be noted that the WSIP includes a program goal to enhance sustainability in all system activities (see Vol. 1, Chapter 3, Table 3.2, p. 3-9). The system performance objectives include: manage natural resources and physical systems to protect watershed ecosystems; meet, at a minimum, all current and anticipated legal requirements for protection of fish and other wildlife habitat; and manage natural resources and physical systems to protect public health and safety. Furthermore, as described on p. 3-82, the SFPUC has committed to specific greenhouse gas reduction actions as part of the WSIP. As described in the Draft PEIR (Vol. 1, Chapter 3, Section 3.6.1), the proposed program also includes implementation of local groundwater projects in the North Westside Groundwater Basin, recycled water projects on the west side of San Francisco, and additional conservation programs within the San Francisco retail service area. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for additional information regarding conservation programs and recycling projects proposed by the SFPUC and its wholesale customers.

L_SFCPC3-02 The indirect effects of growth that would be supported by the WSIP are discussed on pp. 7-59 to 7-78 of the Draft PEIR (Vol. 4, Chapter 7); more detailed information on the impacts of growth identified in the EIRs prepared for the general plans that guide development within service area jurisdictions is presented in Draft PEIR Appendix E.5 (Vol. 5). Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.2) for a discussion of the methodologies used by the SFPUC and the Bay Area Water Supply and Conservation Agency to project future water demand.

Impacts on scenic resources are analyzed in Section 4.3, Land Use and Visual Quality, of the Draft PEIR (Vol. 2, Chapter 4). Most of the proposed upgrades would occur at existing SFPUC facilities and along existing pipeline alignments. As discussed in the Draft PEIR (Vol. 4, Chapter 6, p. 6-7), implementation of Mitigation Measure 4.3-2, Facility Siting Studies, would ensure that the SFPUC identifies and evaluates alternative site locations, access roads, building configurations, and facility operations to minimize or avoid land use impacts.

San Francisco City Planning Commission, Kathrin Moore, Commissioner, 10/11/07

[See Public Hearing Transcript, San Francisco City Hall, October 11, 2007, pp. 31–32]

L_SFCPC4-01 This comment expressing Commissioner Kathrin Moore’s approval of working with local people and not outsourcing this project is acknowledged.

L_SFCPC4-02 The commenter asked why there are no WSIP facility improvement projects in the Hetch Hetchy Region. As explained by Tony Irons (the SFPUC’s Deputy General Manager) at the public hearing, improvements needed in the Hetch Hetchy region are limited to periodic maintenance of the granite tunnels; no capital improvements are needed. Therefore, there are no WSIP facility improvement projects in the Hetch Hetchy region.

L_SFCPC4-03 This comment expresses concern with respect to seismic hazards at the Priest and Moccasin Reservoirs. The Priest and Moccasin Reservoirs are in the Sierra Nevada foothills, near Groveland. The nearest active faults to these reservoirs are the Great Valley 7 and Great Valley 8 blind-thrust faults, which are more than 50 miles to the west. These reservoirs lie within the Foothills Fault System, which, as described in the Draft PEIR (Vol. 2, Chapter 4, p. 4.4-5), is considered potentially active. However, the potential for rupture along one of the faults in this system is low, and no known fault traces cross the reservoirs.

As described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3-15 and 3-16), the SFPUC conducted an extensive series of facility reliability and system performance studies to identify critical projects for achieving seismic reliability of the regional water system, as well as achieving the other goals of the WSIP. These studies identified no reservoirs, other than the Calaveras and Lower Crystal Springs Reservoirs, as critical facilities needing upgrade to current seismic standards to reduce the overall vulnerability of the regional water system to earthquake damage.

San Francisco City Planning Commission, Michael Antonini, Commissioner, 10/11/07

L_SFCPC5-01 The commenter questions whether extending an alternative pipeline at a distance away from the pipelines in the San Joaquin Pipeline System could ensure that a seismic event would not take the whole system out of operation. Surface fault rupture presents the greatest potential for seismic damage to pipelines where they cross a fault. The San Joaquin Pipeline System traverses the Great Valley 7 blind-thrust fault at its west end, just east of Tesla Portal, as described in the Draft PEIR (Vol. 2, Chapter 4, Figure 4.4-1b, p. 4.4-8). Thrust faults have no surface expression, and movement along these faults occurs on subsurface planes (see p. 4.4-5 in the Draft PEIR). Therefore, the potential for surface fault rupture associated with this fault is low, and as stated in the Draft PEIR (p. 4.4-32), impacts related to fault rupture would be less than significant for the San Joaquin Pipeline System project (SJ-3). Therefore, constructing an alternative pipeline at a distance away from the San Joaquin system would not provide additional protection from seismic hazards.

Instead, as summarized in Table 3.10 of the Draft PEIR (Vol. 1, Chapter 3, p. 3-49), the San Joaquin Pipeline System project (SJ-3) includes additional facilities to upgrade the hydraulic capacity of the San Joaquin Pipeline System and to provide redundancy to the existing pipeline, and the Rehabilitation of Existing San Joaquin Pipelines project (SJ-4) includes rehabilitation and reconditioning of the existing pipelines. The goal of both of these projects is to increase the reliability of the water system. Although the San Joaquin Pipeline System could be subjected to strong groundshaking in the event of an earthquake on the Great Valley 7 fault, or one of the other regional faults, the proposed improvements would be designed to withstand seismic hazards and maintain water service in accordance with the SFPUC's *General Seismic Design Requirements* (Vol. 2, Chapter 4, p. 4.4-32), which would reduce the potential for damage to the system in the event of an earthquake.

L_SFCPC5-02 The commenter asks whether the new pipes for the San Joaquin Pipeline System project (SJ-3) would be constructed of non-concrete or a material with greater tensile strength. The proposed new pipeline would be a welded-steel pipe lined with cement-mortar or low-profile material, with a dielectric coating. The final design will not be available until the SFPUC has completed value engineering and detailed cost estimating.

L_SFCPC5-03 The commenter asks whether the portions of the Bay Division Pipelines Nos. 1 and 2 that are aboveground and traverse the bay would remain or be removed. Please refer to **Response F_USFWS-02** for a discussion of issues related to these two pipelines. Please also refer to **Section 14.4, Master Response on**

PEIR Appropriate Level of Analysis (Vol. 7, Chapter 14, Section 14.4.2) for discussion regarding the intent of the programmatic impact analysis.

- L_SFCPC5-04 The commenter's suggestion that the Bay Division Pipelines Nos. 1 and 2 pipelines serve as an alternative line if needed in an emergency is acknowledged. Please refer to **Response F_USFWS-02** for discussion of this issue. Please also see **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for additional discussion regarding the intent of the programmatic impact analysis.

Landmarks Preservation Advisory Board, Robert Cherny, Vice President, 9/27/07

- L_SFLandmarks-01 The commenter's suggestion to include historic trees, gardens, and landscaping in project-level evaluations is acknowledged. The San Francisco Planning Department, Major Environmental Analysis Division staff will ensure that, where appropriate, evaluations of historic cultural and designed landscapes are performed during project-level CEQA review for each WSIP facility improvement project.
- L_SFLandmarks-02 The Draft PEIR (Vol. 4, Chapter 9, pp. 9-98 and 9-99) identifies impacts and potential strategies to avoid or lessen significant effects as part of the alternatives identification and screening process. As noted on p. 9-99, the Draft PEIR identified potentially significant impacts on cultural and historic resources associated with facility siting and design issues. These include potentially significant and unavoidable (PSU) impacts for the Calaveras Dam Replacement (SV-2), New Irvington Tunnel (SV-4), Crystal Springs/San Andreas Transmission Upgrade (PN-2), and Lower Crystal Springs Dam Improvements (PN-4) projects. However, in some cases, the PSU impacts were identified as such because there was not enough site-specific information at the program level of analysis to determine whether the impact would be less than significant, or whether the identified mitigation measures could reduce the severity of the impact to a less-than-significant level. The programmatic strategies identified to avoid or minimize impacts on cultural resources include refinement of project site selections and/or facility layout designs. However, as discussed on p. 9-112, this approach to reducing impacts on cultural and historic resources is more appropriately considered during the project-level environmental review of individual WSIP projects, at which time more detailed and site-specific project and siting information will be available. Please note that the CEQA alternatives section in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-4 to 9-21) focuses on water supply alternatives that would meet most of the project's basic objectives and avoid or lessen the significant environmental impacts of the proposed program. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2), and **Response L_SFLandmarks-08** for additional response.
- L_SFLandmarks-03 The commenter recommends that mitigation measures include provisions to salvage examples of historic materials and equipment. In response to this comment, the following text is added to the end of Mitigation Measure 4.7-4a (Vol. 2, Chapter 6, p. 6-27):

Representative features such as aqueduct/pipe sections, valves subject to replacement, decorative elements, or plaques/inscriptions from buildings or other portions of structures demolished as a part of the WSIP projects could be preserved and displayed. Most of these types of structures are of sufficient size that they would form “monumental” commemorative structures. For example, an original pipeline valve replaced by modern equipment might be mounted and displayed on publicly accessible SFPUC property with informative placards. Such displays, if located in other jurisdictions, might be subject to those jurisdiction’s requirements related to public art, safety, and liability considerations.

L_SFLandmarks-04 The commenter suggests including in the historical context information regarding the opposition to building the system from various interests. In response to this comment, the following text is added to the Draft PEIR context statement (Vol. 2, Chapter 4, p. 4.7-24, after the first partial paragraph):

Opposition to construction of the Hetch Hetchy project came from a variety of interests. Understandably, the Spring Valley Water Company opposed this project, which effectively ended the company’s role as the utility company supplying San Francisco with its municipal and domestic water.^{21a} The Hetch Hetchy project was designed to transmit electrical power to San Francisco from a power plant at Moccasin. A politically charged conflict over this electric power and associated revenue pitted public power advocates against the privately financed electric power industry. Opposition came from electrical power-generating companies like Pacific Gas and Electric Company (PG&E) and Great Western Power Company (GWP), two utilities that served San Francisco and the Bay Area. These private power companies opposed the competing generation and sale of electricity by public agencies, which was a provision of the Raker Act. The CCSF planned to acquire PG&E’s and GWP’s distribution systems within its service area, but between 1927 and 1941 the public consistently rejected bond issues required to fund their acquisition; allegedly, this opposition to the bond measures was largely funded by PG&E.^{21b} The CCSF’s agreements to have PG&E (which had acquired GWP in the 1930s) wheel its power through the company’s existing transmission and distribution systems for delivery to San Francisco agencies, and its purchase of city power for resale, caused a longstanding controversy between the federal government, public power advocates, and the CCSF.^{21c}

The corresponding references are added to the Draft PEIR (Vol. 2, Section 4.7):

^{21a} Elmo R. Richardson, “The Struggle for the Valley: California’s Hetch Hetchy Controversy, 1905–1913,” *California Historical Society Quarterly*, Vol. 38, 1959.

^{21b} Norris Hundley, *The Great Thirst: Californians and Water, 1770s–1990s*. University of California Press, pp. 187–189, 1992; Stephen P. Sayles, “Hetch Hetchy Reversed: A Rural Urban Struggle for Power.” *California History*, 64:4, p. 256, Fall 1985.

^{21c} San Francisco Public Utilities Commission (SFPUC), *San Francisco Water and Power*, pp. 57–61, June 1949.

The commenter also recommends adding a discussion of the federal government’s role in funding O’Shaughnessy Dam improvements in the 1930s. In response to this comment, the following text is added to the Draft PEIR (Vol. 2, Chapter 4, p. 4.7-25, after the third full paragraph):

O’Shaughnessy Dam was designed and built in a manner that would allow it to be raised. In the 1930s, President Franklin D. Roosevelt sought to provide America with a New Deal, a government-sponsored socioeconomic initiative that among its most prominent programs included dam construction projects as massive public works. Not long after Roosevelt’s election (November 1932) and the start of the New Deal (after his inauguration in March 1933), the CCSF received a grant from the federal government covering 30 percent of the cost of labor and materials for raising O’Shaughnessy Dam. The money came from the National Recovery Administration, which was formed by the National Industrial Recovery Act of June 1933. The SFPUC reported that on November 7, 1933, the citizens of San Francisco passed a bond measure for \$3.5 million to cover the city’s portion of the cost of enlarging O’Shaughnessy Dam. The federal grant also stipulated that all available unemployed workers in Tuolumne County had to be put to work before unemployed people from San Francisco could be used. Soon thereafter, the state requested that the CCSF use 500 to 600 unemployed laborers it had available for “maintenance of municipal property” under the State Emergency Relief Act (SERA). By March 1934, the CCSF had erected seven SERA work camps capable of housing and feeding nearly 700 workers. Later, the state’s SERA program for unemployment relief was absorbed into the federal Works Progress Administration. The CCSF issued the contract for the Hetch Hetchy Dam enlargement project on April 8, 1935 to the Transbay Construction Company, and the dam’s raising was completed more than three years later, on July 1, 1938.^{22a}

The corresponding references are added to the Draft PEIR (Vol. 2, Section 4.7):

^{22a} San Francisco Public Utilities Commission (SFPUC), *San Francisco Water and Power*, pp. 59–60, June 1949; Ted Wurm, *Hetch Hetchy and its Dam Railroad*, Trans-Anglo Books, Glendale, CA, p. 251, 1973.

L_SFLandmarks-05 The commenter requests clarification in the historical property list and confirmation that the eligibility information came from state and federal agencies. In response to this comment, the following footnote is added to the Regulatory Framework section of the Draft PEIR (Vol. 2, Chapter 4, p. 4.7-37, end of second full paragraph, before bullet list):

^{29a} These properties have been determined eligible for listing in the National Register through consensus between a federal agency and the State Historic Preservation Officer. Information regarding National Register eligibility was acquired through a records search conducted at the Northwest Information Center at Sonoma State University, which is one of regional offices of the California Historical Resources Information System established by the California Office of Historic Preservation.

L_SFLandmarks-06 The commenter suggests that the historical context statement in the Draft PEIR examine the labor history and significance of the Hetch Hetchy project with respect to the population groups that worked on it. In response to this comment, the following text is added to the Draft PEIR (Vol. 2, Chapter 4, p. 4.7-24, after the third full paragraph):

Multi-purpose dam and water conveyance projects proliferated within river basins throughout America in the early decades of the 20th century. The projects were built for a variety of purposes: municipal water supplies, federal land reclamation, irrigation, and electric power generation. Thousands of workers contributed to this construction work, often under tight schedules and difficult, even dangerous, conditions. Hetch Hetchy water project contract workers and wage laborers consisted of a varied group of individuals stratified by skill, race, and ethnicity. The largest proportion was low-paid, unskilled laborers, both native-born and immigrants. Above them were the better-paid skilled workers and craftsmen, and at the top was a smaller group consisting of managers, supervisors, administrative personnel, and skilled professionals such as civil and electrical engineers, hydrographers, and surveyors. Over more than 25 years of construction activity, the Hetch Hetchy project provided employment to many thousands of workers in many fields of industrial labor; these workers built everything from mountain roads, railroads, labor camps, buildings, bridges, and trestles that served as project infrastructure, to dams, tunnels, pipelines, siphons, and penstocks that stored and conveyed municipal water. Many of the lesser-skilled construction laborers were highly migratory, non-unionized workers whose employment was seasonal, with peak employment coming during the summer and autumn and minimal opportunities in winter and spring.

While some workers were more sedentary and lived in towns or work camps with their families, the majority of the workers—who

were predominantly unmarried, mobile, and male—resided in boardinghouses or labor camps near their work sites. The ethnic makeup of the workingmen’s boarding houses was often quite diverse, according to 1920 census records. For example, one lumber camp near Groveland was operated by an American civil engineer whose wife kept house with the assistance of one cook. Twenty-five boarders lived there, including painters, carpenters, contractors, lumberjacks, millwrights, and the lumberyard foreman. While the nationality of the boarders was predominately native-born, there were also Hungarians, Poles, Swedes, Germans, and Italians represented among the lodgers. Similarly, a tunnel camp in Groveland Precinct in 1920 contained boarding houses operated by a Swedish immigrant and a Canadian-born mine superintendent. While the Swedish-run operation catered mostly to about 20 Swedish, Norwegian, and native-born tunnel workers, the Canadian establishment lodged a diverse clientele of 22 workers, including tunnel miners and laborers, blacksmiths, foremen, and electricians. They were a diverse lot by nationality, including Canadians, native-born Americans, Spanish, German, Swedish, Italian, Irish, and Austrian workers. This pattern of boarding house occupation by workers of various nationalities was borne out at other tunnel camps and dam construction camps located outside the town of Groveland and at Lake Eleanor.^{21d}

Unsafe working conditions and inadequate wages were issues that periodically contributed to labor strife and fostered efforts to unionize the rural industrial labor force assembled to construct the Hetch Hetchy project. During August of 1920, workers at some of the city’s construction camps, particularly in the Mountain Tunnel Division, staged a general strike that lasted until May 1921. City officials, particularly O’Shaughnessy, had expressed general support for trade or craft unionism, but objected to “radicals” who organized the day laborers/construction workers hired by the CCSF and advocated worker solidarity, class conflict, and direct action (strikes) at the point of production. These radical labor leaders included representatives of the Industrial Workers of the World (I.W.W., or “Wobblies”), which variously functioned as an umbrella labor organization and revolutionary social movement, and the International Union of Mine, Mill & Smelter Workers, a labor union with militant roots in the copper, nickel, lead, and gold mines of the American West and British Columbia. During the 1920s and 1930s, Mine and Mill, as the union was known, made concerted efforts to organize unskilled national minorities such as Mexican-Americans and African-Americans in the American Southwest. City records indicated that Swedish/Finnish tunnel crews and Mexican laborers were among the more ardent supporters of the radical unionization effort.^{21e}

Construction of Hetch Hetchy Dam, ancillary water storage structures, the city’s extensive water conveyance system, and its

power plant at Moccasin proceeded over several decades, from 1913 into the late 1930s. In 1925, in his report to the CCSF on Hetch Hetchy's progress, O'Shaughnessy made little mention of labor problems or strife over organizing, and no comments related to national groups and/or the ethnic composition of the workforce. He reported that the total number of men productively employed on the project ranged widely between 1914 and mid-1925: there were over 500 at the end of 1914 and less than a hundred at the beginning of 1915, with a gradual increase (with ebbs and flows) to about 750 in 1919. Thereafter the numbers increased quickly, reaching over 2,000 in 1922 before dropping off again to less than 400 by mid-1925.^{21f} After 1925, the bulk of the construction effort shifted to the Foothill and Coast Range Tunnels and installation of the San Joaquin Pipeline, leading eventually to the delivery of Hetch Hetchy water into the city in October 1934.^{21g}

The corresponding references are added to the Draft PEIR (Vol. 2, Section 4.7):

^{21d} U.S. Census Bureau, MSS Population, Groveland Precinct, Tuolumne County, CA, 1920.

^{21e} Ted Wurm, *Hetch Hetchy and its Dam Railroad*, Trans-Anglo Books, Glendale, CA, pp. 121–122, 1973; Melvyn Dubofsky, *We Shall Be All: A History of the Industrial Workers of the World*, Urbana: University of Illinois Press, 1988; Mario T. Garcia, *Mexican Americans: Leadership, Ideology and Identity, 1930–1960*, Urbana: Yale University Press, pp. 175–198, 1989; City and County of San Francisco (CCSF), Moccasin Archives, n.d.

^{21f} M.M. O'Shaughnessy, *Hetch Hetchy Water Supply*, Bureau of Engineering of the Department of Public Works, report prepared for the City and County of San Francisco, p. 42, October 1925.

^{21g} Warren D. Hanson, *San Francisco Water and Power: A History of the Municipal Water Department and Hetch Hetchy System*, City and County of San Francisco, pp. 55–56, 1994.

L_SFLandmarks-07 The commenter requests clarification regarding project-level impacts and coordination under the National Historic Preservation Act (i.e., whether there should be any federal involvement). The Draft PEIR identifies potential cultural resources impacts at a program level of detail. The project-level CEQA review will identify and evaluate impacts associated with each facility improvement project based on more detailed project information. Please refer to **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.2) for additional discussion regarding this issue.

Several WSIP facility improvement projects will require review and approval by the U.S. Army Corps of Engineers and other federal agencies. If a project is considered a federal undertaking, appropriate Section 106 studies will be completed.

- L_SFLandmarks-08 The commenter states an interest in ensuring that the historical value of the water system as a whole is evaluated during individual project-level environmental review, and that this historical value is not lost during project implementation. The overview presented in the Draft PEIR regarding the nature and historical development of the SFPUC's water facilities addresses this issue (Vol. 2, Chapter 4, pp. 4.7-11 to 4.7-27). Also, Impact 4.7-3 (Vol. 2, Chapter 4, pp. 4.7-69 to 4.7-75) addresses this issue by identifying impacts on the historical significance of a historic district or a contributor to a historic district. This analysis assesses impacts on potentially interrelated groups of facilities and resources (united by historical plan and function) that could be considered discrete historic districts. The WSIP would have an effect on potential historic districts within the water system if it were to remove or alter individual resources within a district in a manner that would diminish the district's historical integrity. Mitigation Measure 4.7-3 requires evaluation, by a qualified historian, of all water system facilities affected by the WSIP facility projects to determine whether they contribute to a historic district. The CCSF is currently undertaking supplemental studies to assess potential historic districts containing water system facilities that could be affected by one or more WSIP project(s). The results of those supplemental studies will be presented in project-specific CEQA documentation as appropriate.

San Joaquin Valley Air Pollution Control District, Arnaud Marjollet, Permit Services Manager, 10/1/07

L_SJVAPCD-01 The commenter's contact information and concurrence with the air quality analysis in the Draft PEIR (Vol. 2, Chapter 4, pp. 4.9-1 to 4.9-48) are acknowledged.

San Luis & Delta-Mendota Water Authority, Westlands Water District, and Kern County Water Agency, Daniel Nelson, Executive Director; Thomas W. Birmingham, General Manager; and James Beck, General Manager, 10/1/07

L_SLDWWKC-01 This comment raises concerns that the Draft PEIR does not adequately address the WSIP's effects on the San Joaquin River or the Delta. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for a review of the PEIR analysis and additional discussion of the WSIP's effects on the San Joaquin River and the Delta.

L_SLDWWKC-02 The SFPUC Water Enterprise Environmental Stewardship Policy is discussed in the Draft PEIR in the section on plans and policies relevant to the WSIP water supply option and system operations (Vol. 3, Chapter 5, pp. 5.2-24 to 5.2-25 and 5.2-29). As described in the Draft PEIR, the WSIP would be consistent with the *underlying* [emphasis added] goals of this policy, particularly with respect to the WSIP sustainability goal and the WSIP system performance objective to "manage natural resources and physical systems to protect watershed ecosystems." The Draft PEIR acknowledges and analyzes the potential effects on stream flow and downstream habitats that would occur under the WSIP in the Tuolumne River, Alameda Creek, and Peninsula watersheds (Chapter 5, Sections 5.3, 5.4, and 5.5, respectively). Mitigation measures described in Chapter 6 identify measures to reduce potential impacts on fisheries and other biological resources, including operational approaches to managing releases from SFPUC reservoirs.

As a measure of its commitment to the stewardship policy, the SFPUC is coordinating with a wide range of stakeholders in each of the watersheds as part of its overall stewardship policy implementation efforts. These include the Tuolumne River Stakeholder Group, the Alameda Creek Fisheries Restoration Workgroup, and Pilarcitos Creek Restoration Workgroup. These activities are being conducted in conjunction with, but independent of, the PEIR.

The Draft PEIR evaluates eight CEQA alternatives in detail, as listed in Table 9.3 (Vol. 4, Chapter 9, pp. 9-7 and 9-8). Two of the alternatives would not involve increased diversions from the Tuolumne River—the Aggressive Conservation/Water Recycling and Local Groundwater Alternative with no supplemental Tuolumne River supply, and the

Year-round Desalination at Oceanside Alternative. Both of these alternatives meet the requirements of the San Francisco Board of Supervisors Resolution No. 321-07.

- L_SLDWWKC-03 This comment, which provides general comments on the role of CEQA in an EIR, is acknowledged.
- L_SLDWWKC-04 This comment provides a summary of three key issues raised by the commenter regarding the adequacy of the Draft PEIR. These three issues are presented in detail in the following three comments. Please refer to **Reponses L_SLDWWKC-05, L_SLDWWKC-06, and L_SLDWWKC-07**. Also refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for additional information.
- L_SLDWWKC-05 This comments states that the Draft PEIR does not adequately address potential impacts on the Delta and does not analyze the potential indirect effects of the WSIP on Central Valley Project (CVP) and State Water Project (SWP) operations. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for further discussion of the WSIP's effects on the Delta and on CVP and SWP operations and users.
- L_SLDWWKC-06 This comment states that the baseline used in the Draft PEIR to describe existing conditions is inaccurate and irrelevant. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for a discussion of the baseline used in the PEIR impact analysis.
- L_SLDWWKC-07 This comment raises concerns about the Draft PEIR analysis of alternatives. One concern is that the PEIR does not adequately analyze impacts on the San Joaquin River or the Delta and therefore does not appropriately identify an alternative(s) to address impacts on the San Joaquin River and the Delta. However, the PEIR does analyze the WSIP's impacts on the San Joaquin River and the Delta (Vol. 3, Chapter 5, Section 5.3). Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for a review of the PEIR analysis of these issues and for further discussion of WSIP effects. The Draft PEIR analysis and the supplemental analysis conducted for this Comments and Responses effort concluded that the WSIP's effects on the San Joaquin River and the Delta, as well as indirect effects on the CVP and SWP systems and uses supported by these systems, would be less than significant. While mitigation is not required to address these less-than-significant effects, Mitigation Measure 5.3.6-4a, Avoidance of Flow Changes by Reducing Demand for Don Pedro Reservoir Water, proposed

to address the WSIP's effects on fisheries and riparian habitat in the lower Tuolumne River; this measure, which calls for the SFPUC to acquire conserved water for the proposed water transfer element of the WSIP, would also further reduce WSIP effects on the San Joaquin River and the Delta. Further, the Draft PEIR does analyze alternatives that would reduce or avoid additional diversions from the Tuolumne River compared to those under the WSIP and therefore would also reduce or avoid effects on the San Joaquin River and the Delta. The Draft PEIR evaluates eight CEQA alternatives in detail, as listed in Table 9.3 (Vol. 4, Chapter 9, pp. 9-7 and 9-8). Two of the alternatives would involve no increased diversions from the Tuolumne River—the Aggressive Conservation/Water Recycling and Local Groundwater Alternative with no supplemental Tuolumne River supply, and the Year-round Desalination at Oceanside Alternative. Other alternatives would reduce Tuolumne River diversions. The Draft PEIR provides a thorough review of potential alternatives to the proposed program. Furthermore, Section 13.4 (Vol. 7, Chapter 13) of this Comments and Responses document contains additional discussion regarding the Phased WSIP Variant.

The comment raises concerns about the analysis of the No Program Alternative, stating that the scenario described and analyzed in the PEIR may not come to pass. The Draft PEIR evaluates eight CEQA alternatives in detail (Vol. 4, Chapter 9) and provides a reasoned discussion of likely actions expected to occur under the No Program Alternative. If the WSIP were not implemented, it is assumed that the SFPUC would continue to make water deliveries to its customers through the regional system. Deliveries could increase as customer purchase requests increase over time and would be met by the SFPUC to the extent possible under its existing water rights on the Tuolumne River. As described, the SFPUC has sufficient existing water rights to continue to meet projected customer demands through 2030 in normal and above-normal hydrologic years. In dry years and drought periods, customers would experience increasing delivery shortages. Further, under the No Program Alternative, the SFPUC would not implement the proposed comprehensive program of system facility upgrades and improvements. The regional system facilities would continue to age and would have to be repaired and replaced on a piecemeal basis over time as they deteriorate and/or fail. The system would remain vulnerable to substantial risk of seismic damage and deteriorating reliability. As described accurately in the Draft PEIR, the No Program Alternative is not a scenario under which the SFPUC limits diversions from the Tuolumne River to existing levels. The PEIR accurately describes and adequately discusses the potential effects of the No Program Alternative.

City of Sunnyvale, Jamie McLeod, Associate Planner, and James Craig, Superintendent of Field Services, 9/28/07

- L_Sunnyv1-01 The Draft PEIR (Vol. 4, Chapter 7, Table 7.2, p. 7-15) states that the City of Sunnyvale's projected use of recycled water for 2030 is 1.5 mgd, consistent with the information provided in this comment. This comment, which states that Sunnyvale is seeking to build more housing units to accommodate existing demand as well as future growth in the South Bay, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_Sunnyv1-02 The preliminary schedule for implementation of the WSIP projects is presented in Figure 3.6 of the Draft PEIR (Vol. 1, Chapter 3, p. 3-62). This schedule is based on the priority of each project with respect to its vulnerability to seismic damage, importance to system operations, system operational requirements, and projected funding. As discussed on p. 3-61 of the Draft PEIR, the project schedule is considered preliminary and will be subject to further refinement as the SFPUC proceeds with development of the WSIP. The Calaveras Dam Replacement project (SV-2) is a high-priority project that is scheduled to start in 2009, and the Seismic Upgrade of BDPL Nos. 3 and 4 at Hayward Fault (BD-3) is scheduled to start in 2010.
- L_Sunnyv1-03 The commenter's recommendation that the conveyance system be designed to provide the full amount of the future projected need for the Bay Area, and that the volume of water flowing through the system be based on policy and programs, not limited by capacity, is acknowledged. As stated in the Draft PEIR (Vol. 1, Chapter 3, p. 3-25), the WSIP proposes levels of service for the regional water system that are intended to meet system performance objectives through 2030 and to provide design criteria for the facility improvement projects. The SFPUC designed the WSIP to provide comprehensive improvements in the overall system reliability for its customers, including the need to serve future water demands. Designing for system reliability improvements is integrated with designing for increased capacity and involves a host of interrelated system parameters that affect water deliveries, including factors related to physical facilities and water supply sources. The WSIP as designed would meet the system reliability and future (2030) capacity needs of the customers as defined by the goals and objectives in Table 3.2 (Vol. 1, Chapter 3, p. 3-9).
- L_Sunnyv1-04 This comment, which expresses the City of Sunnyvale's recommendation for an overall plan to maximize the utility of the water used while maintaining basic water levels in the streams to address environmental concerns, is acknowledged. The Draft PEIR (Vol. 1, Chapter 3) presents the WSIP goals and objectives for water supply and delivery reliability as well as sustainability and watershed

ecosystem protection, and describes the facility improvement projects needed to implement the WSIP.

- L_Snnyv1-05 This comment expressing the City of Sunnyvale's support of solutions that minimize negative impacts on the environment is acknowledged. The commenter's reference to "hydrogenation" may be misdirected ("hydrogenation" refers to a class of chemical reactions). Assuming the commenter is referring to the WSIP's impact on hydropower generation, the Draft EIR addresses this issue in Impact 5.3.9-1 (Vol. 3, Chapter 5, pp. 5.3.9-2 and 5.3.9-3), which describes how the proposed changes in water supply and system operations would result in a net increase in hydropower generation compared to the existing conditions.
- L_Snnyv1-06 This comment advocating a system maintenance fund for the ongoing maintenance of the system is noted.
- L_Snnyv1-07 This comment, which states that Sunnyvale is seeking to build more housing units to accommodate existing demand as well as future growth in the South Bay, is acknowledged. As it does not address the adequacy or accuracy of the PEIR, no response is provided.
- L_Snnyv1-08 This comment describing the City's water conservation programs is acknowledged.
- L_Snnyv1-09 This comment expressing the City of Sunnyvale's support of the WSIP is acknowledged.
- L_Snnyv1-10 Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14), as well as **Response L_BAWSCA1-47** for additional discussion and analysis of this alternative.

Stanislaus County Environmental Review Committee, Raul Mendez, Senior Management Consultant, 8/27/07

L_StanCoERC-01 The commenter is concerned that any site containing an existing or former residence or farm be fully investigated (i.e., that Phase I and II studies be completed as necessary) prior to issuing a grading permit. SFPUC Construction Measure #7 (see Draft PEIR, Chapter 6, Vol. 4, p. 6-7) will be applied to all WSIP projects, and requires completion of a site assessment to evaluate the potential for soil or groundwater contamination at each site prior to construction. This assessment is intended to ensure that contaminated materials are handled in accordance with applicable laws and regulations, and that a contingency plan is prepared that specifies measures to be taken should unanticipated contamination be identified during construction. If a site assessment performed during project-level CEQA review of any WSIP facility project identifies a potentially significant impact, implementation of Mitigation Measures 4.14-1a and 4.14-1b (preparation of a site health and safety plan and materials disposal plan) (Vol. 4, Chapter 6, pp. 6-45 and 6-46) will be required to control exposure to contaminants and ensure proper handling of contaminated soil. Such measures would reduce this impact to a less-than-significant level.

The Draft PEIR (Vol. 2, Chapter 4, pp. 4.3-21 and 4.3-22) indicates that additional right-of-way/easement could be required for associated power requirements and access roads for the San Joaquin Pipeline System project (SJ-3). The Draft PEIR (Vol. 2, Chapter 4, p. 4.2-9) also indicates that the SFPUC is exempt from complying with local building and zoning ordinances when locating or constructing facilities for the production, generation, storage, treatment, or transmission of water. Therefore, the rezoning requirements (evaluation of pesticide levels) specified by the commenter may not apply.

Stanford University, Clifford (Mike) Goff, Director of Utilities, 10/1/07

- L_Stanford-01 This comment expressing Stanford University's support for the WSIP goals and objectives is acknowledged. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for more discussion and analysis of this alternative and the potential for coordination efforts between SFPUC and BAWSCA in support of water conservation of agricultural uses on the lower Tuolumne River.
- L_Stanford-02 This comment regarding Stanford University and associated hospitals' reliance on a high-quality water supply is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.2) for relevant discussion.
- L_Stanford-03 This comment regarding the critical importance of completing the WSIP and improving the system with respect to seismic hazards is acknowledged. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.3) for more discussion.
- L_Stanford-04 This comment describes reductions in water use at Stanford and expresses concern about the need to make further reductions during a drought. The Draft PEIR acknowledges the difficulties of implementing water cutbacks in the future due to demand hardening, and characterizes in general terms the socioeconomic, environmental, and health effects based on data from the 1987–1992 drought (Vol. 4, Chapter 9, pp. 9-29 to 9-31).
- L_Stanford-05 This comment, which provides additional information on water use, conservation programs, use of recycled water, campus growth, and Stanford's water consumption, is acknowledged.
- L_Stanford-06 The commenter correctly notes that the WSIP proposes a level of service for drought-year rationing of up to 20 percent systemwide. However, the WSIP does not provide details regarding the allocation of rationing requirements among customers in the event of an extended drought. The proposed drought-year system operations (see Draft PEIR Vol. 1, Chapter 3, pp. 3-42 and 3-43) would consist of a four-stage response program to ensure that water is delivered to customers continuously through the duration of a drought. The first stage of response would be to initiate dry-year water supplies and would not affect customer deliveries. Stages 2 and 3 of the response program would include up to 10 and 20 percent systemwide rationing, respectively. The procedures would include customer notification, customer allocation if necessary, and evaluation of customer performance.

The SFPUC would implement the drought response program in close coordination with all retail and wholesale customers and the Bay Area Water Supply and Conservation Agency (BAWSCA). As described in the Draft PEIR (Vol. 1, Chapter 2, p. 2-26), in 2000 the SFPUC adopted the *Interim Water Shortage Allocation Plan* in collaboration with BAWSCA; the plan identifies a water allocation method to be used to determine the share of water for wholesale customers during shortages caused by drought, and the WSIP would not affect any aspect of this plan.

The comment, which describes Stanford University's current efforts to implement conservation and water saving programs and the associated difficulties in implementing further reductions due to rationing, is acknowledged. Please refer to **Response L_Stanford-04**, above, regarding demand hardening issues.

It should be noted that hydrologic modeling conducted for the environmental analysis in the Draft PEIR indicates that the frequency of the need to implement 20 percent rationing would be very low. Based on the 82-year hydrologic record, there would be only 2 out of the 82 years (or 1 in 41 years) that 20 percent systemwide rationing would be required if the WSIP is implemented.

Tuolumne County Chamber of Commerce, George Segarini, President & CEO, 10/1/07

- L_TCCC-01 The opinion of the Tuolumne County Chamber of Commerce opposing any additional diversions from the Tuolumne River is acknowledged.
- L_TCCC-02 This information (related to the policy statement on water adopted by the Tuolumne County Chamber of Commerce) stating the importance of protecting existing water sources in the county is noted; however, as it does not address the adequacy or accuracy of the PEIR, no additional response is provided.
- L_TCCC-03 The opinion of the Tuolumne County Chamber of Commerce supporting the alternatives that protect the Tuolumne River from new diversions is acknowledged. The comment indicating that requiring more water conservation, efficiency, and recycling is the best way to lessen impacts on the Tuolumne River is acknowledged. The Draft PEIR identifies two alternatives that would not increase diversions from the Tuolumne River: the Aggressive Conservation/Water Recycling and Local Groundwater Alternative (with no supplemental Tuolumne River supply), and the Year-round Desalination at Oceanside Alternative.
- L_TCCC-04 The opinion of the Tuolumne County Chamber of Commerce expressing that the SFPUC should adopt a policy of reducing diversions from the Tuolumne River is noted. Regarding the request for additional watershed studies to assess the environmental impacts of the WSIP, the San Francisco Planning Department has determined that the currently available information is sufficient for conducting the environmental review of potential impacts. CEQA Guidelines Section 15151 states that an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information enabling them to make a decision that intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.

Tuolumne Utilities District, Peter J. Kampa, General Manager, 9/28/07

L_TUD1-01 The Draft PEIR (Vol. 4, Chapter 9, pp. 9-1 to 9-128) evaluates eight alternatives at a comparative level detail to the evaluation of the WSIP, as required by CEQA Guidelines Section 15126.6. The eight alternatives represent a broad range of options in terms of how to implement key aspects of the proposed program while at the same time avoiding or substantially lessening the potentially significant or significant adverse impacts identified for the WSIP. Six of the eight alternatives include a variation on the water supply sources—either for nondrought years, drought years, or both—compared to that proposed for the WSIP. Draft PEIR Table 9.4 (p. 9-11) describes the differences in water supply sources among the eight alternatives. The water supply sources evaluated under these six alternatives encompass a diverse range of sources other than Tuolumne River water and include the following: (1) varying levels of regional recycled water/conservation/groundwater in the wholesale service area; (2) diversion of Tuolumne River water near the confluence with the San Joaquin River instead of at Hetch Hetchy Reservoir; (3) year-round desalination of seawater; and (4) regional desalination of brackish water. The various water sources under each alternative are used in combinations that would attain *most* of the WSIP's basic objectives, including the water supply objectives for nondrought and drought periods where feasible. Similar to the example provided by the commenter, the Year-round Desalination at Oceanside Alternative would include a small desalination plant on the west side of San Francisco as well as recycled water projects in San Francisco (WSIP facility improvement project SF-3) that would provide irrigation water for parks, the San Francisco Zoo, and median strips.

L_TUD1-02 The No Purchase Request Increase Alternative analyzed in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-40 to 9-47) is based on the assumption that the SFPUC would limit the wholesale customers' future purchases to the terms of the existing Master Water Sales Agreement instead of providing them the full amount of their 2030 purchase request. In accordance with CEQA, the Draft PEIR discusses the SFPUC actions, wholesale customer actions, feasibility issues, and ability to meet the WSIP objectives associated with this alternative as well as its environmental impacts compared to those of the WSIP. The Draft PEIR does not, as the commenter asserts, address the political and economic impacts of the alternative (which is not required under CEQA), although it does discuss institutional and legal issues associated with this alternative.

The commenter's suggestion that a wholesale customer's new purchase requests could be limited based on its performance level with regard to conservation and recycling efforts is acknowledged. The statement that limiting new purchase requests would result in increased public acceptance of recycled water and

enhanced tolerance of aggressive conservation measures is also acknowledged. As described in the Draft PEIR (Vol. 1, Chapter 2, pp. 2-43 and 2-44), the SFPUC currently holds individual agreements with its wholesale customers based on the Master Water Sales Agreement, which requires that wholesale customers employ best efforts to use all sources of water owned or controlled by them. In addition, some of the wholesale customers are solely dependent on the SFPUC for their water supply, while others have other sources of water available to them (see Vol. 1, Chapter 3, Table 3.1, p. 3-7). The 27 wholesale customers vary widely in their population and land use characteristics, including their abilities to implement recycled water and conservation programs. Refer to **Response S_CDFG2-07** and **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for further discussion on this issue.

L_TUD1-03 This comment, which expresses the Tuolumne Utilities District's support of the comments and concerns submitted by Tuolumne County on October 18, 2005 during the public scoping period and on September 25, 2007 during public review of the Draft PEIR, is acknowledged. Both letters are on file with the San Francisco Planning Department as part of the WSIP PEIR environmental review record. The comment letter from Tuolumne County dated September 25, 2007 included its October 18, 2005 letter as an attachment; therefore, both letters referenced by the commenter are included in this Comments and Responses document (coded as L-Tuol1), and the responses to the 20 comments are provided herein.

L_TUD1-04 The first paragraph in this comment asserts that the Draft PEIR estimated that requests to wholesale customer agencies to implement conservation measures at 20 percent during drought would result in a commensurate 20 percent reduction in supply needs, and that (according to the commenter) conservation measures would need to be set at a higher percentage in order to achieve 20 percent reduction in usage. While it is correct that the SFPUC could impose systemwide rationing of up to 20 percent in any one year of a drought as part of the drought supply planning under the WSIP, the statement that the PEIR estimated that requests to implement conservation measures at 20 percent would result in a commensurate 20 percent reduction in use is incorrect. The Draft PEIR describes the rationale for adopting the 20 percent rationing policy (Vol. 1, Chapter 3, p. 3-32 and pp. 3-36 to 3-39). As described, the SFPUC's drought response is a multi-step program to achieve the targeted system firm yield through: (1) existing local watersheds and Tuolumne River resources; (2) conservation, water recycling, and groundwater supply programs (implemented in all years); (3) water transfers; (4) groundwater conjunctive-use programs; and (5) restoration of storage in Crystal Springs and Calaveras Reservoirs. As stated in the Draft PEIR, the SFPUC would first pursue other strategies (e.g., groundwater pumping) before resorting to implementation of up to 20 percent

systemwide rationing. The 20 percent systemwide rationing would not be implemented uniformly among all of the customers (because of differences among the customers with respect to their reliance on the regional system, ability to access alternative supply sources, etc.). The specific policies that the wholesale and retail customers would adopt to meet mandatory cutbacks would differ somewhat, in part based on different water use patterns within their respective service areas. Differences between actual and planned cutbacks can be expected and have been documented in previous droughts; as with previous droughts, water agencies can adapt drought rationing policies to make them more effective. There is sufficient discretionary water use on a systemwide basis to accommodate 20 percent cutbacks. (For information on the experiences of water agencies and their customers during the 1987–1992 drought, refer to Draft PEIR Vol. 4, Chapter 9, p. 9-29.)

The comment regarding demand hardening requires clarification. As stated in the Draft PEIR (Vol. 4, Chapter 9, p. 9-28), demand hardening refers to the increasing difficulty and expense of achieving short-term water conservation levels during droughts as more long-term conservation measures are implemented and water use efficiency increases. The *California Water Plan Update 2005* (DWR, 2005) acknowledges that demand hardening is a concern for California water agencies (see quoted text from the *California Water Plan Update 2005* in the Draft PEIR, Vol. 4, Chapter 9, p. 9-28). Where long-term conservation measures save water that would have been saved through short-term, drought-year measures (e.g., replacement of turf with water-efficient landscaping), then the latter will be less effective. Nonetheless, water agencies will adopt the measures needed to achieve the requisite cutbacks.

Contrary to this comment, the Draft PEIR does not attempt to validate “the level at which [the] wholesale agencies are currently enforcing conservation.” Rather, the PEIR documents existing and planned levels of long-term conservation in the retail and wholesale customer service areas based on data used in, and generated by, modeling for the demand projections. **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) provides additional information on existing and planned levels of conservation. Regarding the “level of customer performance during previous years,” in the 1976–1977 and 1986–1992 droughts, Bay Area water agencies used a variety of short-term conservation measures (steeply inclining block rate pricing, public education campaigns, water restrictions, and ordinances, some of which threatened to shut off water to non-responsive customers) to reduce water use temporarily from about 20 to over 50 percent (Association of California Water Agencies, 1991).

The third paragraph in this comment asserts that the statement in the PEIR—that water conservation and recycling can partially, but not fully, meet the WSIP

delivery reliability and water supply performance objectives—is based on cursory input from the wholesale customers rather than research, analysis, and factual data. This assertion, which apparently refers to the analysis of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative, is incorrect. As part of the planning effort for the proposed program, the SFPUC, in conjunction with its wholesale customers, conducted extensive studies—including technical studies on conservation and recycled water use potential and water demand studies that involved detailed evaluation of existing water use—in order to establish base-year conditions. These studies are described in the Draft PEIR (Vol. 1, Chapter 3, pp. 3.16 to 3-22, and Vol. 5, Appendix E.2); Section 14.2.3 (Vol. 7, Chapter 14) presents an expanded discussion of existing and planned conservation.

The *SFPUC Wholesale Customer Recycled Water Potential Technical Memorandum* (RMC, 2004) entailed a review of existing documents on water recycling in the area, including the only comprehensive study on recycled water potential in the Bay Area, the *1999 Bay Area Regional Water Recycling Program Master Plan*; technical memoranda from the Draft Bay Area Water Quality and Water Supply Reliability Program, a CALFED-supported program that includes water recycling as one of the elements being examined; and recycled water planning studies completed by agencies in the wholesale service area. This information was updated as needed through contacts with the wholesale customers. The recycled water use potential in the retail service area was identified in the *City and County of San Francisco Recycled Water Master Plan* (RMC, 2006).

In addition to the technical studies prepared for the proposed program, the SFPUC, in cooperation with its wholesale customers and the Bay Area Water Supply and Conservation Agency (BAWSCA), undertook a study to assess the potential for additional conservation and recycled water projects, including potential regional projects, that were not already considered to be implemented locally by 2030 as part of the WSIP purchase estimates, as described in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-47 to 9-51). The results of this study, *Investigation of Regional Water Supply Option No. 4 Technical Memorandum* (SFPUC, 2007) provided the basis for the Aggressive Conservation/Water Recycling and Local Groundwater Alternative evaluated in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-47 to 9-59) as well as an element of the Modified WSIP Alternative (Vol. 4, Chapter 9, pp. 9-78 to 9-84). The PEIR assessment of this alternative is based on these extensive background studies, contrary to the assertion in this comment. In addition, although the Draft PEIR concludes that the feasibility of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative (Vol. 4, pp. 9-47 to 9-59) depends on numerous technical, institutional, financial, and public acceptance issues that would need to be overcome prior to implementation, the Modified WSIP Alternative recognizes

that the analysis conducted by the SFPUC and BAWSCA of additional conservation and recycled water projects, including potential regional projects, indicates there is more potential for both additional conservation and water recycling than is currently included in the WSIP. The Draft PEIR identified this alternative as the environmentally superior alternative. For more information on this alternative, please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14).

Regarding the list of data items this comment states is missing from the PEIR, note that CEQA does not require that alternatives be evaluated at the same level of detail as a proposed project. Consistent with CEQA Guidelines Section 15126.6(d), the Draft PEIR includes sufficient information about and analysis of the Aggressive Conservation/Water Recycling and Local Groundwater Alternative, the Modified WSIP Alternative, and each of the other program alternatives considered in the Draft PEIR (Vol. 4, Chapter 9) to afford decision-makers and the public a meaningful comparison with the proposed program.¹ Also consistent with Section 15126.6(d), the Draft PEIR discusses the significant effects of each alternative.

L_TUD1-05 The commenter states that the Raker Act requires San Francisco to utilize local water sources before increasing Tuolumne River diversions. This is a misinterpretation of Raker Act Section 9(h). The Raker Act does not require the City and County of San Francisco (CCSF) to develop and use local water sources before it diverts out of the Tuolumne River watershed.

As described in the Draft PEIR (Vol. 1, Chapter 2, pp. 2-33 and 2-34), the Raker Act of 1913 granted to the CCSF rights-of-way and use of public lands in Yosemite National Park and Stanislaus National Forest to develop and use water and power. The act imposed many conditions and obligations on the CCSF, including the requirement that Tuolumne River water could be used in the Bay Area for municipal and domestic purposes, but not for agricultural irrigation. Specifically, Section 9(h) of the Raker Act provides that San Francisco:

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

The commenter also asserts that the PEIR does not adequately evaluate the impacts of reduced wastewater discharges into receiving waters throughout the Bay Area. Changes in wastewater discharges into receiving waters in the SFPUC

¹ While the data items listed in this comment are not needed to provide sufficient evaluation and analysis of the program alternatives, note that the information requested as item (a) in the comment is included in the Draft PEIR (Vol. 1, Chapter 3); aggregated information on existing levels of conservation is presented on p. 3-16 (footnote 16) and disaggregated information on planned conservation is presented on p. 3-18.

service area would be an indirect effect associated with implementation of the WSIP. Insofar as the WSIP would result in changes in municipal and domestic water use patterns, there would also be associated changes in wastewater discharge patterns for municipal and industrial uses, with much of the change attributed to population growth. The Draft PEIR addresses the indirect effects of growth in Chapter 7 (Vol. 4, pp. 7-60 to 7-78); as this chapter indicates, these indirect effects, including impacts on wastewater treatment facilities and wastewater treatment capacities, were identified as significant but mitigable in the environmental impact reports for the general and specific plans in the service area. In the cases where the WSIP would result in increased use of recycled water, the associated effects on wastewater discharges will be addressed in the project-level environmental documentation for the recycled water projects.

L_TUD1-06 As part of the feasibility issues associated with the Aggressive Conservation/ Water Recycling and Local Groundwater Alternative, the Draft PEIR notes that public acceptance issues exist in some communities with regard to recycled water use (Vol. 4, Chapter 9, p. 9-53). However, this discussion is separate and distinct from the analysis of the environmental impacts of the alternative, and this information is not relied upon in the Draft PEIR to determine the environmentally superior alternative.

L_TUD1-07 As part of the feasibility issues associated with the Year-round Desalination at Oceanside Alternative, the Draft PEIR notes that there could be public acceptance issues from residents on the west side of San Francisco as well as from recreational users in the area with regard to desalination and the associated facilities (Vol. 4, Chapter 9, p. 9-69). However, this discussion is separate and distinct from the analysis of the environmental impacts of the alternative, and this information is not relied upon in the Draft PEIR to determine the environmentally superior alternative. Preliminary studies for both the regional desalination plant and the Oceanside desalination plant provided adequate information for the comparative analysis of the environmental impacts of the WSIP alternatives, as provided for in CEQA Guidelines Section 15126.6. Thus, the impacts described are general in nature based on preliminary studies and analysis of similar projects, and as stated by the commenter, not based on detailed study or data. With only preliminary information available, the discussion of environmental impacts is necessarily conservative, rather than “overstated” as asserted by the commenter.

L_TUD1-08 The commenter correctly describes the alternative strategy presented in the Draft PEIR, which involves an intertie with the Santa Clara Valley Water District (SCVWD), and correctly identifies the reason for rejecting this strategy (i.e., that the SCVWD does not have the capacity or need for additional water supplies during wet years) (Vol. 4, Chapter 9, pp. 9-122 and 9-123).

The conjunctive-use program included as part of the proposed WSIP dry-year supply (described in Vol. 3, Chapter 5, pp. 5.6-25 and 5.6-26) does not include active recharge of the groundwater basin during wet years; rather, the participating pumpers would receive potable water from the regional system during wet years, and the groundwater basin would recharge naturally. The PEIR does not evaluate the option of recharging the groundwater basin with water from the SCVWD during wet years because the SCVWD uses its excess supply in wet years to bank in their groundwater storage systems and has no excess supplies available to the SFPUC.

L_TUD1-09 This comment addresses the proposed dry-year water transfer included in the WSIP. The SFPUC proposes to secure a water transfer to help meet its dry-year water supply needs and identified the Turlock and Modesto Irrigation Districts (TID and MID) as the first agencies it would pursue for such an arrangement. The SFPUC has conducted a preliminary assessment of such a water transfer with TID and MID and determined it would be technically feasible and cost-effective because the existing infrastructure is adequate to implement this transfer and no additional facilities would be required. The existing agreements among the SFPUC, TID, and MID regarding storage space in Don Pedro Reservoir (see Draft PEIR, Vol. 1, Chapter 2, pp. 2-37 to 2-39) allow for the exchange of water among these agencies, and the proposed water transfers under the WSIP would be implemented through supplemental agreements with TID and MID. Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14, Section 14.3.2) for further discussion on this issue.

The analysis in the Draft PEIR is based on the worst-case assumption (in terms of environmental consequences) that the proposed water transfer from TID and MID would originate from water stored in Don Pedro Reservoir; TID and MID would presumably have the legal authority to approve such transfers based on their water rights and as owners and operators of the reservoir. The analysis of the impacts of this water transfer on the Tuolumne River, described in Impact 5.3.1-4 (Vol. 3, Chapter 5, pp. 5.3.1-30 to 5.3.1-38), examined the potential effects of the WSIP based on 82 years of historical hydrology and on assumptions that are consistent with those used in the modeling of the San Joaquin River for the Department of Water Resources and in the modeling for MID's recent water treatment plant project. This 82-year hydrologic record includes several extended drought sequences, and the modeling conducted for the PEIR analysis using the Hetch Hetchy/Local Simulation Model indicated that the WSIP water supply level of service could be achieved during drought periods with the combination of the proposed water transfer, a conjunctive-use program in the Westside Groundwater Basin, and a maximum systemwide rationing of 20 percent. While SFPUC staff has had some preliminary discussion with TID and MID, there has been no formal transfer request or negotiations.

As indicated in the Draft PEIR, the proposed WSIP would result in potentially significant impacts on fisheries and on riparian habitat along the Tuolumne River below La Grange Dam. Implementation of Mitigation Measure 5.3.6-4a (Vol. 4, Chapter 6, p. 6-48) would avoid these impacts by reducing the demand for Don Pedro Reservoir water. This measure states, “The SFPUC will pursue a water transfer arrangement with MID/TID and/or other water agencies such that the water acquired is developed through actions that result in reduction of demand on Don Pedro Reservoir as a result of conservation, improved delivery efficiency, interagency water transfer, or use of an alternative supply such as groundwater.” The Draft PEIR acknowledges that MID/TID and/or other agency might be involved in the proposed transfer, but does not imply one way or the other that the water transfer would be from the Oakdale Irrigation District. However, as mentioned in the Draft PEIR (Vol. 4, Chapter 6, p. 6-60), regardless of the source of the water transfer, there would be additional CEQA environmental review of potential effects for any source other than stored water in Don Pedro Reservoir (which was already analyzed in the Draft PEIR). Consistent with CEQA Guidelines Section 15126.4(a)(1)(D), the Draft PEIR includes a section describing the potential impacts of mitigation measures (Vol. 4, Chapter 6, pp. 6-60 to 6-64), including the potential impacts of measures that affect other water sources. Thus, the Draft PEIR reviews the potential effects of implementing a water transfer that involves conserved water rather than stored water. It is expected that the appropriate transferring agency (TID, MID, or other agency) would conduct additional CEQA review if needed to address any aspects of the water transfer proposal not already analyzed in the PEIR. Nonetheless, agreements or approvals from MID, TID, or any other water agencies regarding the proposed water transfer are not required prior to certification of the PEIR and adoption of the WSIP, and the absence of such agreements does not affect the validity of the environmental analysis presented in the Draft PEIR.

Please refer to **Section 14.3, Master Response on Proposed Dry-Year Water Transfer** (Vol. 7, Chapter 14) for more detail on the proposed water transfer from MID/TID to the SFPUC. See also **Response L_MID-TID1-05 and L_MID-TID-06**.

- L_TUD1-10 See **Response L_TUD1-05** regarding interpretation of the Raker Act. The commenter is correct in noting that the SFPUC has available options for increasing its water supply. One of the objectives of the WSIP is for the SFPUC to diversify its water supply options during drought and nondrought periods, and the proposed WSIP water supply includes the following new sources: recycled water/groundwater/conservation in San Francisco, a conjunctive-use program in the Westside Groundwater Basin, and dry-year water transfers.
- L_TUD1-11 The position of the Tuolumne Utilities District vigorously opposing additional diversions from either the Tuolumne or Stanislaus Rivers is acknowledged. The

analyses of the WSIP and alternatives contained in the Draft PEIR are based on extensive studies, as evidenced by the numerous and lengthy lists of references cited in each chapter of the PEIR. All information and supporting data used in the Draft PEIR are available for review at the San Francisco Planning Department. See **Response L_Tuol1-04** regarding Tuolumne County's County of Origin water rights.

Tuolumne Utilities District, Barbara Balen, Board President, 9/10/07

L_TUD2-01 This comment, which expresses support for aggressive recycling and reuse as well as the need to protect the Tuolumne River's environment, is acknowledged. Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for further discussion of the conservation and recycling practices within the SFPUC service area.

Tuolumne Utilities District, Peter J. Kampa, General Manager, 9/5/07

[See Public Hearing Transcript, Sonora, pp. 34–36]

- L_TUD3-01 Please refer to **Response L_SFCPC1-01** for information regarding extension of the public review period.
- L_TUD3-02 Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for further discussion of the conservation and recycling practices within the SFPUC service area.
- L_TUD3-03 Refer to **Response L_TUD1-09** for a response to this comment.
- L_TUD3-04 The opinion of the Tuolumne Utilities District that 20 percent rationing is below the industry standard is acknowledged. In conducting the drought planning and water supply studies in support of the WSIP, the SFPUC addressed the problems and issues that occurred from the drought periods in the last 30 years, notably the 1976–1977 and 1987–1992 droughts, as described in the Draft PEIR (Vol. 1, Chapter 2, pp. 2-25 to 2-27). These studies were used in the development of the WSIP proposed rationing scenario (the level of service objective of limiting rationing to a maximum of 20 percent systemwide), which was ultimately selected by the SFPUC commissioners (see Vol. 1, Chapter 3, p. 3-14).
- L_TUD3-05 Please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14, Section 14.2.3) for further discussion of the conservation and recycling practices within the SFPUC service area.

Tuolumne County, Mark Thornton, Chairman, Tuolumne County Board of Supervisors, 9/25/07

L_Tuol1-01 The Draft PEIR analyzes two alternatives to the proposed program that would include increased levels of water conservation compared to the WSIP (Vol. 4, Chapter 9), and the Comments and Responses describes and analyzes the Phased WSIP Variant which also addresses increased levels of water conservation (Vol. 7, Chapter 13). The alternatives with increased levels of conservation are the Aggressive Conservation/Water Recycling and Local Groundwater Alternative and the Modified WSIP Alternative. The Aggressive Conservation/Water Recycling and Local Groundwater Alternative focuses on *maximizing* water conservation/water recycling and local groundwater in the wholesale customer service area (up to 19 mgd) with the objective of avoiding or minimizing increased diversions from the Tuolumne River (see Vol. 4, Chapter 9, pp. 9-47 to 9-59). The Modified WSIP Alternative would include increased levels of water conservation/water recycling/local groundwater (up to 10 mgd) as well as implementing agricultural conservation in the San Joaquin Valley (see Vol. 7, **Section 14.10, Master Response on Modified WSIP Alternative**). The Phased WSIP Variant would defer a long term decision on additional diversions from the Tuolumne River until additional effort is made towards implementing additional local recycled water, groundwater, and demand management actions (see Vol. 7, Section 13.4, Phased WSIP Variant).

In addition the Draft PEIR identifies four additional alternatives that would divert less water from the Tuolumne River than would be diverted under the WSIP. These alternatives are shown in Table 9-5 (Vol. 4, Chapter 9, p. 9-13) and are as follows: No Program Alternative; No Purchase Request Increase Alternative;; Year-round Desalination at Oceanside Alternative; and Regional Desalination for Drought Alternative. These alternatives represent a range of reduced diversions from the Tuolumne River (i.e., the increase in average annual diversions under these alternatives would range from 0 to 20 million gallons per day (mgd), compared to the 27 mgd average annual increase that would occur under the WSIP).

L_Tuol1-02 The first part of this comment addresses the effects of reduced stream flows under the WSIP and the related effects on fisheries and recreation. The Draft PEIR analyzes the potential effects of the WSIP on the trout, salmon, and steelhead fisheries in the Tuolumne River (Vol. 3, Chapter 5, pp. 5.3.6-1 to 5.3.6-35). This analysis examined the fishery impacts along two reaches of the Tuolumne River below O'Shaughnessy Dam. Although the WSIP would result in changes in the existing flow and water temperature patterns in the reach between Hetch Hetchy and Don Pedro Reservoirs, the PEIR analysis demonstrated that the extent and frequency of the changes would not result in adverse effects on the resident fisheries, including rainbow trout; therefore, this impact (Impact 5.3.6-2) was

determined to be less than significant, and no mitigation would be required. However, for the impact on the fishery resources along the Tuolumne River below La Grange Dam (Impact 5.3.6-4), the Draft PEIR concluded that the WSIP's effects on flow and temperature would infrequently contribute to potentially significant effects on fishery resources, but that implementation of Mitigation Measure 5.3.6-4a (Vol. 4, Chapter 6, p. 6-48) would ensure flow changes are avoided by reducing demand for Don Pedro Reservoir water, which would reduce this impact to a less-than-significant level. Due to the uncertainty in implementing this measure or in the event this measure proves to be infeasible, the Draft PEIR also includes Mitigation Measure 5.3.6-4b (Vol. 4, Chapter 6, pp. 6-48 and 6-49); this measure, which requires fishery habitat enhancement, would reduce these adverse impacts to a less-than-significant level.

With regard to the effect on whitewater recreation, Impact 5.3.8-2 in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.8-27 to 5.3.8-34) analyzed the effects of the WSIP on whitewater rafting in the Tuolumne River between Cherry Creek and Don Pedro Reservoir, and in Cherry Creek between Holm Powerhouse and the Tuolumne River. In both cases, the PEIR concluded that the effects on whitewater rafting would be less than significant, since the difference between the WSIP and existing conditions would typically be limited to a few days in May or June. Thus, this small change from existing conditions would not be expected to result in noticeable effects for the Sierra communities associated with seasonal recreation.

The Draft PEIR also considers other past, present, and future projects or activities and analyzes cumulative impacts on resources in the Tuolumne River watershed, including fisheries and recreation (Vol. 3, Chapter 5, pp. 5.7-5 to 5.7-52). The PEIR analysis demonstrated that cumulative impacts on fisheries and recreation would be less than significant (Impacts 5.7.2-1 and 5.7.2-2 for the Tuolumne River from Hetch Hetchy to Don Pedro Reservoir, and from Don Pedro Reservoir to the San Joaquin River, respectively), and no additional mitigation beyond those measures described above would be required.

The San Francisco Planning Department, as the CEQA lead agency, acknowledges receipt of Resolution 40-07 by the Board of Supervisors of the County of Tuolumne; this resolution formalizes the County's opposition to the SFPUC's proposed diversion of additional water from the Tuolumne River and indicates its intent to seek legal remedies to see that no further water diversions occur from the Tuolumne River. Note that the San Francisco Planning Department is responsible for the preparation of the PEIR in compliance with CEQA, but it is the responsibility of the SFPUC, the project sponsor, to select and adopt the WSIP or an alternative to the WSIP based on review and consideration of the certified PEIR. Please see the Draft PEIR (Vol. 1, Chapter 3, pp. 3-86 to 3-88) for a description of the required actions and approvals. The underlying substantive County of Origin water rights issue is addressed in **Response L_Tuol1-04**, below.

The descriptions of 13 conditions (prefaced by the term “whereas”) listed in Resolution 40-07 by the Board of Supervisors of the County of Tuolumne are acknowledged. The following discussion provides a response to the listed conditions where corrections or clarification is warranted:

- The ninth condition in the resolution contains misinformation. The 265 mgd described in the Draft PEIR represents the average annual *purchase requests* currently served by the SFPUC. It does not represent the current level of *diversions* from the Tuolumne River. Please refer to **Section 14.5, Master Response on Water Resources Modeling** (Vol. 7, Chapter 14, Section 14.5.9) for a description of the difference between the increase in purchase requests and the increase in diversions from the Tuolumne River.
- The tenth condition in the resolution contains misinformation. Consistent with CEQA guidelines, the Draft PEIR addresses and identifies the impacts of the WSIP that could affect Tuolumne County, as presented in both Chapter 4 (Vol. 2) and Chapter 5 (Vol. 3). Chapter 4 (pp. 4.3-1 to 4.17-64) includes the programmatic analysis of all environmental impacts of the proposed construction and operation of the portions of the San Joaquin Pipeline System (SJ-3) and Rehabilitation of Existing San Joaquin Pipelines (SJ-4) located in Tuolumne County, including activities in the vicinity of the Oakdale Portal. It identifies environmental impacts related to rural and urban land uses (Section 4.3), recreational resources (Section 4.12), and agricultural resources (Section 4.13), as well as impacts on visual resources (Section 4.3), geology (Section 4.4), hydrology (Section 4.5), biological resources (Section 4.6), cultural resources (4.7), traffic and transportation (Section 4.8), air quality (Section 4.9), noise (Section 4.10), services and utilities (Section 4.11), hazards (Section 4.14), and energy (Section 4.15).

Chapter 5 (pp. 5.3.1-1 to 5.3.9-3) provides the analysis of water supply and system operations impacts on the Tuolumne River watershed and downstream water bodies. The analysis in Chapter 5 includes environmental impacts on environmental resources in Tuolumne County related to stream flow and reservoir water levels (Section 5.3.1), geomorphology (Section 5.3.2), surface water quality (Section 5.3.3), surface water supplies (Section 5.3.4), groundwater (Section 5.3.5), fisheries (Section 5.3.6), terrestrial biological resources (Section 5.3.7), recreational and visual resources (Section 5.3.8), and energy (Section 5.3.9). The proposed water supply option under the WSIP would not affect the Stanislaus River or related resources, and therefore the Draft PEIR does not discuss impacts on the Stanislaus River.

For a response to the last three conditions, please refer to **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14) for a detailed discussion of those issues.

L_Tuol1-03 In response to items 1 and 2 regarding conservation and recycling, the Draft PEIR (Vol. 1, Chapter 3, pp. 3-16 to 3-22) discusses assumptions used in determining the existing and future water demands, including conservation and recycled water potential; in addition, please refer to **Section 14.2, Master Response on Demand**

Projections, Conservation, and Recycling (Vol. 7, Chapter 14) for a detailed discussion of those issues. The Draft PEIR also analyzes more aggressive conservation and water recycling strategies as part of the alternatives analysis in Chapter 9.

In response to item 3 regarding stormwater, Table 9.14 in the Draft PEIR identifies this as an alternative concept raised during the PEIR scoping process (Vol. 4, Chapter 9, p. 9-109). The concept of capturing and storing stormwater runoff was determined not to meet any of the basic program objectives for delivery reliability or water supply. However, the concept is considered under a component of one of the WSIP facility improvement projects, Groundwater Projects (SF-2), in which treated urban stormwater could be used to maintain water levels in Lake Merced.

In response to item 4 regarding desalination, the Draft PEIR considers and analyzes two possible approaches to supplementing the SFPUC water supply with desalination. The Draft PEIR analyzes the SFPUC's participation in a regional desalination program as a supplemental drought supply both as a variant to the WSIP (Vol. 4, Chapter 8, pp. 8-10 to 8-33) and as a CEQA alternative (Vol. 4, Chapter 9, pp. 9-74 to 9-78). The PEIR also analyzes year-round desalination at the Oceanside plant in San Francisco to avoid additional diversions from the Tuolumne River as a CEQA alternative (Vol. 4, Chapter 9, pp. 9-66 to 9-74).

In response to item 5, studies conducted to evaluate options for reducing the need for diversions from the Tuolumne River yielded six alternatives (including the No Program Alternative), which are described and evaluated in Draft PEIR Chapter 9 (Vol. 4). All six alternatives would divert less water from the Tuolumne River than would be diverted under the WSIP, but none of the alternatives would divert less than under existing (2005) conditions. The Aggressive Conservation/Water Recycling and Local Groundwater Alternative specifically considered the potential for these water demand and supply options to completely offset proposed diversions from the Tuolumne River (refer to Draft PEIR Vol. 4, Chapter 9, pp. 9-47 to 9-59).

- L_Tuol1-04 The commenter asserts that the PEIR must analyze the impacts of the WSIP on Tuolumne County's County of Origin water rights. The California Water Code contains three provisions that are known as the area of origin rights. The County of Origin statute (Water Code Section 10505) only applies to water rights held by the Department of Water Resources for the State Water Project. The Watershed of Origin statute (Water Code Sections 11460 et seq.) only applies to water rights held by the Department of Water Resources and the U.S. Bureau of Reclamation for the State Water Project and the Central Valley Project. Finally, the Area of Origin statute (Water Code Sections 1215 et seq.) only applies to appropriative surface water rights initiated after January 1, 1985; the City and County of San Francisco's (CCSF) Tuolumne water rights are not subject to the statute, as its Tuolumne River

water rights were filed before 1914. Any attempt to analyze impacts on Tuolumne County's inchoate County of Origin water rights, if any, to the Tuolumne River would be speculative. The CCSF notes that the Tuolumne Utilities District has determined it has the water resources to meet Tuolumne County's needs through the year 2035, and that it intends to seek its next increments of water supply from New Melones Reservoir and water rights filings on the South Fork Stanislaus River, as described in the *Tuolumne Utilities District Urban Water Management Plan, 2005 Update* (pp. 14 and 15).

L_Tuol1-05 This comment states that an economic analysis must be completed to determine the environmental effects on Tuolumne County residents, businesses, and tourism prior to approval of additional diversions of water from the Tuolumne River. Please refer to **Section 14.1, Master Response on WSIP Purpose and Need** (Vol. 7, Chapter 14, Section 14.1.6) for a response to this comment.

L_Tuol1-06 The WSIP as designed would meet the system reliability and capacity needs of SFPUC customers, as defined by the goals and objectives shown in Draft PEIR Table 3.2 (Vol. 1, Chapter 3, p. 3-9). The need for increased capacity of specific transmission components and treatment plants is largely created by two independent functions: (1) the SFPUC must retain the ability to provide capacity to replenish local storage following a drought, seismic event, unplanned shutdown, or maintenance shutdown period (ensuring that the local system has enough stored water to meet three months of demand strictly from the local system); and (2) the SFPUC must retain the ability to meet demand while performing maintenance or in the event of a seismic outage.

Thus, system reliability addresses a host of interrelated parameters affecting water deliveries, such as seismic reliability, delivery reliability, and the ability to maintain water quality standards. These same factors are also considered in planning efforts to provide capacity to serve planned growth, so it is difficult to make a clear distinction between system reliability and capacity for additional customers. The SFPUC has determined that the design capacity of the WSIP project facilities would be the same regardless of whether the WSIP were implemented as proposed or whether average annual diversions from the Tuolumne River were to remain within the current historical record (SFPUC, 2008b). Nevertheless, the Draft PEIR (Vol. 4, Chapter 7, Impact 7-1, pp. 7-60 to 7-78) recognizes that the WSIP would support planned growth in the SFPUC service area and considers this indirect growth-inducement impact to be significant and unavoidable.

L_Tuol1-07 In general, the SFPUC uses the historical hydrology specific to the regional system for future water supply planning. The historical records for the Hetch Hetchy system date back to 1920, with even earlier records for parts of the Peninsula watershed, and these records encompass a wide range of hydrologic conditions.

However, the SFPUC also keeps abreast of statewide water planning efforts, including the Department of Water Resources' *California Water Plan Update*. Please refer to **Section 14.11, Master Response on Climate Change** (Vol. 7, Chapter 14, Section 14.11.5) for further discussion of the SFPUC's actions to address climate change.

L_Tuol1-08 The Draft PEIR (Vol. 3, Chapter 5, pp. 5.7-2 to 5.7-51) provides an assessment of cumulative effects on the Tuolumne River system and downstream water bodies consistent with the CEQA Guidelines, Sections 15065(a) and 15130. This analysis considers the effects of past, present, and reasonably foreseeable future projects and evaluates the WSIP's contribution to cumulative impacts. In addition to SFPUC projects, the analysis considers projects by other agencies or jurisdictions, including the Turlock Irrigation District, Modesto Irrigation District, National Park Service (NPS), and a host of project sponsors involved in projects that could contribute to cumulative effects on the San Joaquin River and/or Delta (see Table 5.7-1, pp. 5.7-14 to 5.7-21).

L_Tuol1-09 The Draft PEIR (Vol. 4, Chapter 5, pp. 5.2-1 to 5.2-29) includes a discussion of how the WSIP relates to applicable land use and resource plans and policies. Under the Wild and Scenic Rivers Act, the NPS administers the designated wild and scenic rivers or reaches of rivers located within the national park system; the U.S. Forest Service administers the designated wild and scenic rivers located within national forests. The NPS is currently preparing the *Tuolumne Wild and Scenic River Comprehensive Management Plan* (Wild and Scenic Plan) for the 54 miles of designated wild and scenic reaches of the Tuolumne River within Yosemite National Park, but the plan has not been adopted. A discussion of the plan and related reports prepared by NPS is provided in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.2-16 and 5.2-17). As the Wild and Scenic Plan is still under development and is not yet adopted, no determination regarding the consistency of the WSIP with its provisions is made in the PEIR.

The Draft PEIR (Vol. 3, Chapter 5, pp. 5.2-15 and 5.2-16) provides a description of the Wild and Scenic Plan as it applies to the 29 miles of the Tuolumne Wild and Scenic River located outside of Yosemite National Park. As stated in the Wild and Scenic Rivers Act (Section 3[a] [53]), the Wild and Scenic Plan does not apply to the exercise of the CCSF's water rights under the Raker Act. However, overall WSIP consistency with the management objectives, standards, and guidelines contained in the Wild and Scenic Plan related to biological resources planning and recreational/visual resources is discussed in the Draft PEIR in Sections 5.3.7 and 5.3.8, respectively. As indicated in the discussion of Impact 5.3.7-7 (Vol. 3, Chapter 5, pp. 5.3.7-26 and 5.3.7-27), potential conflicts with the provisions of the Wild and Scenic Plan with respect to biological resources planning would be less than significant. The effects of the WSIP on recreational resources along the Tuolumne River are discussed under Impact 5.3.8-2 (Vol. 3, Chapter 5,

pp. 5.3.8-27 to 5.3.8-34) and would also be less than significant. With respect to the aesthetic values of the Tuolumne Wild and Scenic River, no significant effects are expected, as discussed under Impact 5.3.8-3 (Vol. 3, Chapter 5, pp. 5.3.8-34 and 5.3.8-35).

- L_Tuol1-10 The Draft PEIR (Vol. 3, Chapter 5) analyzes potential impacts downstream of the confluence of the Tuolumne and San Joaquin Rivers with respect to stream flow changes (Impact 5.3.1-5, pp. 5.3.1-38 and 5.3.1-39), water quality (Impact 5.3.3-3, pp. 5.3.3-19 and 5.3.3-20), surface water supplies (Impacts 5.3.4-1 and 5.3.4-2, pp. 5.3.4-5 to 5.3.4-11), fisheries (Impact 5.3.6-5, pp. 5.3.6-32 and 5.3.6-33), and recreation (Impact 5.3.8-2, pp. 5.3.8-27 to 5.3.7-34). All of the listed impacts were determined to be less than significant. As described in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.1-38 and 5.3.1-39), the WSIP would not alter flow in the San Joaquin River below its confluence with the Tuolumne River such that flow would be substantially outside the range experienced under existing conditions.
- L_Tuol1-11 The Draft PEIR addresses the concept of an alternative that would require filtration of the Sierra source water as part of the overall alternatives analysis (Vol. 4, Chapter 9). As indicated by the commenter, the concept of filtering the Sierra source water was raised during the scoping period, and it is discussed in the Draft PEIR (Vol. 4, Chapter 9, pp. 9-119 and 9-120). As a stand-alone alternative, this concept would not meet any of the basic program objectives, would not avoid or lessen any of the impacts of the WSIP, and would result in additional construction and operational impacts associated with a new treatment facility. However, one of the alternatives analyzed in the Draft PEIR, the Lower Tuolumne River Diversion Alternative (Vol. 4, Chapter 9, pp. 9-59 to 9-66), would include construction of conveyance and treatment facilities for diversions from the lower Tuolumne River near the confluence with the San Joaquin River rather than increasing diversions from Hetch Hetchy Reservoir. One of the overall goals of the WSIP is to maintain high-quality water for the regional water system, and one of the performance objectives is to meet current and future federal and state water quality regulations. The WSIP facility improvements include the Advanced Disinfection project (SJ-1), which would be designed to provide treatment for *Cryptosporidium*.
- L_Tuol1-12 This comment regarding the devastating effects of a catastrophic fire in the Groveland Community Services District (GCSD) is acknowledged. In the event of a water shortage, the SFPUC would work with the GCSD to determine appropriate rationing levels, regardless of whether or not the WSIP is implemented. The rationing levels described in the Draft PEIR are in terms of systemwide rationing, and the appropriate level for individual customers would be determined as necessary on a case-by-case basis.

- L_Tuol1-13 The proposed program includes a groundwater conjunctive-use program as part of its proposal for water supply during drought (see Draft PEIR Vol. 1, Chapter 3, p. 3-37).
- L_Tuol1-14 This comment regarding groundwater infiltration to Mountain Tunnel and the GCSD's payment of a surcharge for lost power revenue is acknowledged. The issue of GCSD's water payments is outside the scope of the PEIR, since it is not related to potential physical environmental effects.
- Infiltration to Mountain Tunnel and accretions and depletions within the regional water system are accounted for within the hydrology incorporated into the SFPUC's modeling. The SFPUC model accounts for flows under the Hetch Hetchy Water and Power project in the water balance for the basin upstream of La Grange Dam.
- If infiltration to Mountain Tunnel is considered to be groundwater, this phenomenon has been occurring for years, and its use by the SFPUC would therefore be in compliance with Tuolumne County Ordinance Code Section 13.20 pertaining to groundwater.
- The comment requesting assistance for the GCSD in finding an alternative water supply during times of tunnel maintenance is acknowledged.
- L_Tuol1-15 This comment regarding the GCSD's role in paying for the proposed system improvements is acknowledged; since this comment does not address the adequacy of the environmental analysis in the PEIR, no response is required.
- L_Tuol1-16 The Draft PEIR (Vol. 1, Chapter 3, pp. 3-86 to 3-88) describes the required actions and approvals necessary for overall adoption of the WSIP and subsequent implementation of the proposed program. As indicated in the PEIR, no federal approvals are required for the overall WSIP as a program, and therefore the overall program is not subject to the National Environmental Policy Act (NEPA). However, individual facility improvement projects under the WSIP might require federal permits and approvals and associated NEPA compliance; this determination will be made as part of the project-level environmental review of each project.
- L_Tuol1-17 This question regarding the merging of Hetch Hetchy water and hydroelectric systems is acknowledged; since this comment does not address the adequacy of the environmental analysis in the PEIR, no response is required.
- L_Tuol1-18 Please refer to **Response L_Tuol1-02**. In addition, the Draft PEIR (Vol. 4, Chapter 6, pp. 6-60 to 6-64) acknowledges that some of the mitigation measures could result in significant effects separate from the identified WSIP impacts, and it includes a section that describes the impacts of mitigation measures.

- L_Tuo11-19 This comment regarding local Tuolumne County contractors is noted; since this comment does not address the adequacy of the environmental analysis in the PEIR, no response is required.
- L_Tuo11-20 The Draft PEIR (Vol. 4, Chapter 9, pp. 9-1 to 9-128) evaluates eight alternatives at a comparative level detail to that provided for the WSIP, as required by CEQA Guidelines Section 15126.6. The eight alternatives represent a broad range of options in terms of how to implement key aspects of the proposed program while at the same avoiding or substantially lessening potentially significant or significant adverse impacts identified for the WSIP. The alternatives analysis focuses on the comparative merits of the alternatives with respect to physical environmental effects, although it includes a discussion of feasibility issues associated with each alternative. In some cases, the alternatives have feasibility issues that could have economic implications (pp. 9-27 to 9-31), but there is no clear relationship between any economic effects and direct physical effects on the environment. Further, as provided by CEQA Guidelines Section 15064, economic changes resulting from a project are not to be treated as significant effects on the environment. Therefore, the PEIR does not include an economic analysis of alternatives.

The concept of restoring the Hetch Hetchy Valley is discussed in the Draft PEIR as an alternative concept that was raised during the scoping period (Vol. 4, Chapter 9, pp. 9-127 and 9-128).

Tuolumne County, Mark Thornton, District 4 Supervisor, Tuolumne County, 10/15/07

- L_Tuol2-01 The effects of the WSIP on rafting flows in the Tuolumne River and Cherry Creek are described in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.3.8-27 to 5.3.8-32). The effects of the WSIP on the availability of water for river rafting are minor and are judged to be less than significant. CEQA does not require an analysis of economic effects unless they would result in indirect physical environmental effect (CEQA Guidelines Section 15131). Please refer to **Response L_Tuol1-05**.
- L_Tuol2-02 The City and County of San Francisco (CCSF) is unaware of any water-right permits or licenses held by Tuolumne County, Tuolumne Utilities District (TUD), or TUD's predecessor, the Tuolumne County Water District No. 2, on the Middle or South Forks of the Tuolumne River. In the past, Tuolumne County agencies filed or joined filings for water-rights applications on several projects within the Tuolumne River watershed, but all applications were dismissed by the State Water Resources Control Board after the agencies terminated the projects. Please refer to **Response L_Tuol1-04** regarding Tuolumne County water-right issues.
- L_Tuol2-03 This comment states that there is a lack of adequate baseline data for the Tuolumne River, and that without such data it is not impossible to properly analyze the environmental consequences of additional diversions. As described in the Draft PEIR (Vol. 3, Chapter 5, pp. 5.1-7 to 5.1-18), the basic approach to the analysis of impacts on water and related resources was to first evaluate the changes in the river flow and reservoir levels that would occur with the WSIP, then to estimate changes in water quality and temperature, and finally to combine this information to determine potential impacts on fisheries and other biological resources. The analysis used the existing 82-year historical hydrologic record, coupled with the Hetch Hetchy/Local Simulation Model to depict the overall regional water system operations and to project the extent of changes in flow that could occur in the future. These results were used for the PEIR water supply and system operations impact analysis.

As described in **Section 14.4, Master Response on PEIR Appropriate Level of Analysis** (Vol. 7, Chapter 14, Section 14.4.4), the CEQA Guidelines (Section 15151) impose a standard of adequacy that is "reasonably feasible" and sufficient to allow decision-makers to make a decision that takes account of environmental consequences. Data gathering need not be "exhaustive." The Draft PEIR analysis of the WSIP water supply and system operations with respect to fisheries and biological resources along the Tuolumne River was based on current knowledge of the composition and condition of the resources and in consideration of the potential interactive responses of plant and animal species to the hydrologic changes resulting from the WSIP as indicated by the model results. The analysis

relied on ecological principles, scientific literature, existing data, and site visits. The Draft PEIR analysis was conservative in finding that an impact could be potentially significant if there was a possibility of impacts from the WSIP water supply and system operations.

The San Francisco Planning Department believes these data are sufficient to reasonably assess the general magnitude, frequency, and extent of the WSIP's environmental consequences, and to identify appropriate mitigation measures to offset potentially significant impacts on the Tuolumne River watershed and related resources. The mitigation measures were developed to include performance standards based on ecological principles, with the understanding that data from ongoing and future studies could be useful in augmenting the baseline data and in refining the implementation of each measure. As described in Draft PEIR Mitigation Measure 5.3.7-2 (Vol. 4, Chapter 6, pp. 6-49 and 6-50), **Section 14.6, Master Response on Upper Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.6.2), and **Section 14.7, Master Response on Lower Tuolumne River Issues** (Vol. 7, Chapter 14, Section 14.7.2), several studies of the Tuolumne River are in progress by the SFPUC, National Park Service, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, and other agencies. Data from these studies would be used to augment the existing data and allow for refinement of the implementation of the mitigation measure to better achieve the identified performance standards.

- L_Tuol2-04 Please refer to **Response L_Tuol1-01** and **Section 14.2, Master Response on Demand Projections, Conservation, and Recycling** (Vol. 7, Chapter 14) for a detailed discussion of these issues.
- L_Tuol2-05 The Draft PEIR provides background information on the existing regional water supply, including a description of the agreements between the SFPUC and the Turlock and Modesto Irrigation Districts regarding the New Don Pedro Project (Vol. 1, Chapter 2, pp. 2-37 to 2-39). One of the agreements allocates storage space in Don Pedro Reservoir for a specified volume of Tuolumne River water within the CCSF's entitlement under the Raker Act.
- L_Tuol2-06 This comment states that the Draft PEIR is deficient in addressing WSIP consistency with the Sierra Nevada Framework and CALFED; in this response, "CALFED" is interpreted to mean the Bay Delta Conservation Plan. In response to this comment, the Draft PEIR is revised to include the following discussion under the heading Federal Statutes and Agreements (Vol. 3, Chapter 5, p. 5.2-6).

National Forest Management Act

The National Forest Management Act, enacted by Congress in 1976, is the primary statute governing the administration of national forests. The act requires the Secretary of Agriculture to assess forest lands, and to develop

and implement a resource management plan for each unit of the National Forest System. The management plans must: ensure consideration of both economic and environmental factors; provide for wildlife and fish; provide for the diversity of plant and animal communities; ensure timber harvesting will occur only where water quality and fish habitat are adequately protected from serious detriment; and ensure clearcutting and other harvesting will occur only where it may be done in a manner consistent with the protection of soil, watersheds, fish, wildlife, recreation, aesthetic resources, and regeneration of the timber resource. The management plans must be updated at least once every 15 years. In the overall WSIP region, the Sierra Nevada Framework is the management plan governing Stanislaus National Forest. The provisions of the Sierra Nevada Framework are implemented by the U.S. Forest Service.

The Draft PEIR is revised to include the following discussion under the heading Relevant Plans, Policies, and Planning Actions (Vol. 3, Chapter 5, p. 5.2-14).

U.S. Forest Service, Sierra Nevada Framework

In January 2001, the U.S. Forest Service adopted the Sierra Nevada Forest Plan Amendment (SNFPA or Sierra Nevada Framework), a plan for the management of 11 national forests and 11.5 million acres of national forest land in the Sierra Nevada mountain range, including Stanislaus National Forest. In January 2004, in response to concerns about the flexibility and compatibility of the SNFPA with other programs related to wildland fire management, the U.S. Forest Service amended the Sierra Nevada Framework to provide additional provisions for fire and fuels treatments. The amended Framework outlines procedures used to manage and protect forests, wildlife habitats, and communities from a variety of threats, including catastrophic fires, and provides a programmatic framework within which project-level decisions are designed and implemented. Key aspects of the SNFPA include: a commitment to restoration and protection of old-growth forest habitat; protection of all trees greater than 30 inches on 11 million of the 11.5 million acres of public land managed by the U.S. Forest Service; designation of riparian conservation areas; improvement and protection of suitable habitat for California spotted owl (*Strix occidentalis occidentalis*), northern goshawk (*Accipiter gentiles*), and willow flycatcher (*Empidonax traillii*); adoption of an integrated vegetation management strategy with the primary objective of protecting communities and modifying landscape-scale fire behavior to reduce the size and severity of fires; and provisions for increased land use management, including grazing, timber production, road construction, and recreation activities. The SNFPA is administered by the U.S. Forest Service (USDA Forest Service, 2004). As no WSIP facility improvement projects are proposed within Stanislaus National Forest, and the resources protected by the SNFPA would not be affected by the WSIP water supply and system operations, the WSIP would be consistent with the provisions of the SNFPA.

Bay Delta Conservation Plan

The Bay Delta Conservation Plan (BDCP) is an effort driven by Delta water users to provide for the conservation and management of certain aquatic species, both listed and non-listed, and their habitats, while providing for regulatory assurances related to water supply reliability and water quality for the Sacramento–San Joaquin River Delta. Activities that would be covered under the BDCP include water supply operations related to the State Water Project and the Central Valley Project, and the power plant operations of the Mirant Corporation. Under the BDCP, water users would pay for new infrastructure, wetlands restoration, and other related projects in return for guaranteed stable water supplies. As the BDCP is still under development and is not yet adopted, no determination regarding potential conflicts of the WSIP with its provisions has been made.

The following reference is added to the Draft PEIR (Vol. 2, Chapter 4, Section 4.2, p. 4.2-19):

USDA Forest Service, *Sierra Nevada Forest Plan Amendment Final Supplemental Environmental Impact Statement*, January 2004.

Alameda County Flood Control and Water Conservation District, Zone 7, G.F. Duerig, General Manager, 10/1/07

- L_Zone7-01 Please refer to **Section 14.9, Master Response on Alameda Creek Fishery Issues** (Vol. 7, Chapter 14, Section 14.9.3).
- L_Zone7-02 Zone 7's support for the Modified WSIP Alternative is acknowledged. Please refer to **Section 14.8, Master Response on Delta and San Joaquin River Issues** (Vol. 7, Chapter 14) for further discussion of the WSIP's effect on the San Joaquin River and the Delta, including potential effects on State Water Project operations and resulting indirect effects. Please refer to **Section 14.10, Master Response on Modified WSIP Alternative** (Vol. 7, Chapter 14) for further discussion and analysis of the Modified WSIP Alternative.
- L_Zone7-03 This comment, which expresses Zone 7's support for the exploration of interconnections and water exchanges among the SFPUC and other jurisdictions, such as the Dublin San Ramon Services District, is acknowledged. As discussed in Draft PEIR Section 9.4.4 (Vol. 4, Chapter 9, p. 9-116), the SFPUC explored some options for interconnections and water exchanges during development of the WSIP, but the SFPUC eliminated this concept from further consideration because it would not provide a reliable future water source consistent with the WSIP goals and objectives. However, as part of its overall water supply planning (irrespective of the WSIP), the SFPUC will continue to work with other Bay Area water agencies.