

3.0 ENVIRONMENTAL SETTING

3.1 EXISTING SITE CHARACTERISTICS

The Guadalupe River drainage basin (Figure 2-1) covers approximately 170 square miles, of which the upper Guadalupe River drainage area (upstream of Los Gatos Creek) comprises approximately 95 square miles. Elevations within the watershed range from 0 to 3,790 feet above sea level (NGVD datum). Along the river's course through the feasibility study area, there is less than a 100-foot change in elevation. The drainage basin is bounded on the south and southwest by the Santa Cruz Mountains, on the west by the drainage basins for San Tomas and Saratoga Creeks, on the east by the Coyote Creek Basin, and on the north by San Francisco Bay. Land uses in the watershed are mostly rural in the higher elevations and heavily urbanized in the lower reaches (COE 1998).

The headwaters to the Guadalupe River and Guadalupe, Calero, and Alamitos creeks originate in the Santa Cruz Mountains near the summit of Loma Prieta and converge to form the Guadalupe River channel about ¼ mi. upstream (south) of Blossom Hill Road. The river flows northwesterly for about 14 miles before discharging into Alviso Slough at San Francisco Bay. Tributaries to the Guadalupe River include Ross, Canoas, and Los Gatos Creeks. Ross Creek, with a drainage area of 10 square miles, and Canoas Creek, with a drainage area of 19 square miles, are the two tributaries within the upper Guadalupe River feasibility study area.

Much of Santa Clara Valley and nearly all of the lands along the 5.5-mile segment of the upper Guadalupe River under study are highly urbanized. Development within the floodplain consists of medium- to high-density single- and multi-family residences, and commercial properties including light industry facilities, small business offices, car dealerships, and neighborhood retail stores. Other modifications in the natural character of the river have occurred from the construction of numerous erosion control features, past flood control efforts, and water resource development projects. The area around Reach 12, in particular, has been greatly altered by sand and gravel mining that was conducted in the river from the 1930s until the late 1960s. These excavated areas are now used for percolation ponds for groundwater aquifer recharge (restoring the natural reservoirs from which wells draw the public water supply) and recharge along the river channel.

Mining for mercury ore (quicksilver) was conducted upstream, in the headwaters area between Alamitos and Guadalupe creeks, from around 1846 until 1890 and intermittently from the 1920s to the 1970s. Mercury contamination has been recorded in river sediments and trace concentrations of mercury continue to be detected in the recent river water samples (COE 1998).

The upper Guadalupe River is crossed by 12 public roads and two railroad lines. The Santa Clara County Transit District operates bus lines in the study area. Located in the median of SR 87, the Guadalupe Corridor Light Rail line runs the entire length of the study area. Utility lines serving the local community are located along the project corridor. Utility services are provided and operated by the San Jose Water Company (SJWCo), the City of San Jose Municipal Water System, Pacific Bell Company, American Telephone & Telegraph Company, and Pacific Gas & Electric Company (COE 1998).

Vegetation along the upper Guadalupe River consists of riparian forest, freshwater marsh, non-native weedy communities, and landscaped areas. Vegetation along the Guadalupe River represents one of the last remaining riparian forest corridors in Santa Clara Valley. The riparian forest in the lower reaches of the feasibility study area, while possibly more narrow than its historic extent, is relatively abundant and dense. In Reach 12, the riparian forest is much more discontinuous and degraded as a result of past gravel mining, the creation of percolation ponds, and other disturbances. The riparian forest and freshwater marsh along the river provide habitat for a variety of bird species, small mammals, reptiles, and amphibians. The river and adjacent riparian habitat also provides a corridor for wildlife movement through the highly urbanized region of greater San Jose. The aquatic habitat in the river channel, including the component identified as shaded riverine aquatic (SRA) cover, has also become degraded due to urbanization, previous channel modifications for flood control, gravel mining, and water resources development in the watershed. In spite of these disturbances, the river is used by anadromous fish species for spawning and rearing (COE 1998).

3.2 SURROUNDING LAND USES

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A brief description of surrounding land uses is provided below. A more detailed discussion is in section 4.8, Land Use.

Residential development borders one and occasionally both sides of the river from Reach 7 through 10. The recently completed Tamien light rail transit station borders the east river bank in Reach 7. The San Jose Elks Lodge is on the parcel south of West Alma Avenue on the east bank in Reach 7. Commercial uses occupy the west side of the river just south of West Alma Avenue, and a small commercial/industrial area is on the east bank, just south of Willow Street.

In Reach 10B, open lands exist on the west bank adjacent to the Almaden Expressway, including a neighborhood park on the east bank. These lands are owned by the SCVWD. The Valley View Packing Plant complex and orchards are on the east bank of Reach 10C. Commercial uses occupy the west bank in Reach 10C and also the east bank upstream from the packing plant, and just upstream from the Capitol Expressway in Reach 11. Residential development continues on both banks upstream in Reach 11.

In both the northern and southern edges of Reach 12, office/commercial property borders the river, while residential properties are contiguous with the right-of-way on the east side of the river for most of the length of the reach outside this land use. Midway along this reach, beside both the east and west banks of the river, percolation ponds have been developed for groundwater recharge purposes. The central two-thirds of the western side of the reach are in active agricultural production.

Residential uses abut Ross and Canoas Creek banks.

3.3 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The regulatory framework that would govern the proposed upper Guadalupe River flood control project includes several executive orders; numerous federal, state, and local regulations; and other governmental plans and policies. The relevance of these statutes to the proposed action is described below. Compliance of the proposed action is summarized in the EIS Summary, Table S-3. Situations of partial compliance or non-compliance in this table are explained in the text of this section.

3.3.1 Federal Regulations

National Environmental Policy Act of 1969 (42 USC 4341 et seq.)

The National Environmental Policy Act (NEPA) was established to ensure that the environmental consequences of federal actions are incorporated into agency decision-making. It establishes a process whereby the parties most affected by the impact of a proposed action are identified and their opinions are solicited. A Draft Environmental Impact Statement (EIS) that presents sufficient information to evaluate the suitability of the proposed and alternative actions is developed by the lead agency. The proposed action and alternatives are evaluated in relation to their environmental impacts, and a tentative selection of the most appropriate alternative is made. A Notice of Availability, announcing that the Draft EIS can be obtained for comment, is published in the *Federal Register*. After the Draft EIS comment period, the comments are addressed, revisions are made to the Draft EIS, and the document is published as a Final EIS. For the proposed action, the Corps is the lead agency under NEPA. This document fulfills the NEPA EIS requirement.

The Council on Environmental Quality (CEQ) has published NEPA implementation regulations at 40 CFR Parts 1500 to 1508. The Corps regulations for implementation of NEPA are published at 33 CFR Part 230. The U.S. EPA's NEPA implementation regulations are published at 40 CFR Part 6.

Clean Air Act of 1969 (42 USC Section 7401 et seq.)

The purpose of the Clean Air Act (CAA) is to protect the nation's air quality by regulating emissions of air pollutants. The CAA is applicable to permits and planning procedures related to project activities onshore and within the territorial sea. The territorial sea is defined as waters 3 miles seaward of the nearest shoreline. Section 118 of the CAA (42 USC

7418) requires that all federal agencies engaged in activities that may result in the discharge of air pollutants comply with state and local air pollution control requirements. In addition, Section 176 of the CAA (42 USC 7506) prohibits federal agencies from engaging in any activity that does not conform to an approved State Implementation Plan. Emissions from the project would comply with all federal and state air regulations and standards, including the conformity provisions of Section 176(c). However, emissions would exceed one of the local thresholds that the Bay Area Air Quality Management District (BAAQMD) has defined as significant under CEQA, i.e., more than 150 pounds per day of NO_x. Additional information on the CAA and other air quality regulations is in Appendix A.

Clean Water Act of 1977 (33 USC 1251 et seq.)

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. Specific sections of the Act control the discharge of pollutants and wastes into aquatic and marine environments.

The major section of the CWA that applies to the proposed project is Section 401, which requires certification that the permitted project complies with the state water quality standards for actions within state waters. Under Section 301, states must establish water quality standards for all state waters, including the territorial sea. Project activities may not cause the concentrations of chemicals in the water column to exceed state standards. To receive state certification, a permit applicant must demonstrate that these standards would not be exceeded.

Section 404(b)(1) of the CWA establishes guidelines for the discharge of dredged or fill material into the aquatic ecosystem. Subpart A, Section 230.1(c) of the Section 404(b)(1) (40 CFR) guidelines states the following: "Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge would not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." The Section 404(b)(1) guidelines are equally important and are discussed in Appendix G of this document.

Although sections 401 and 404(b) of the CWA apply, by their own terms, only to applications for federal permits, the Corps has made a policy decision to apply them to their own projects. This policy is set out in Corps regulations at 33 CFR Part 336. Section 336.1(a) of that regulation states, "Although the Corps does not process and issue permits for its own activities, the Corps authorizes its own discharges of dredge or fill material by applying all applicable substantive legal requirements, including public notice, opportunity for public hearing, and application of the Section 404(b)(1) guidelines."

For discharge of wastewater into non-navigable waters of the state (e.g., from dewatering of sediments), Regional Water Quality Control Boards (RWQCBs) also issue National Pollutant Discharge Elimination System (NPDES) permits under Section 402 of the CWA.

At this time, the project is considered in partial compliance with the CWA until the following conditions are satisfied. The Corps and the SCVWD would need certification from the RWQCB that water quality standards will not be violated during construction. An NPDES permit would also be necessary since ground disturbance would cover more than 5 acres.

Fish and Wildlife Coordination Act of 1958 (16 USC 661 et seq.)

The Fish and Wildlife Coordination Act requires that whenever any body of water is proposed or authorized to be impounded, diverted, or otherwise controlled or modified, the lead federal agency must consult with the USFWS, the state agency responsible for fish and wildlife management (in California, the Department of Fish and Game), and for projects affecting marine fisheries, the National Marine Fisheries Service (NMFS). Section 662(b) of the Act requires the lead federal agency to consider USFWS and other agencies' recommendations. The recommendations may address wildlife conservation and development, damage to wildlife attributable to the proposed action, and measures proposed to mitigate or compensate for these damages. Input from the USFWS is usually provided in a Coordination Act Report

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(CAR). The Revised Draft CAR for the proposed project is included as Appendix F to this document. The Act is applicable to Corps and EPA evaluations of consistency with CWA Section 404 requirements.

Endangered Species Act of 1973 (16 USC 1531 et seq.)

The Endangered Species Act protects threatened and endangered species by prohibiting federal actions that would jeopardize the continued existence of such species or that would result in the destruction or adverse modification of any critical habitat of such species. Section 7 of the Act requires that consultation regarding protection of such species be conducted with the USFWS (and/or NMFS) prior to project implementation. An updated list provided by the USFWS of proposed and listed threatened and endangered species that could be present in the project area is provided in Appendix D.

During the project planning process, the USFWS evaluates the potential impacts of all aspects of the proposed action on threatened or endangered species. Their findings are contained in letters that provide an opinion on whether a proposed action would jeopardize the continued existence of endangered species or modify critical habitat. If a jeopardy opinion is issued, the resource agency will provide reasonable and prudent alternatives, if any, that would avoid jeopardy.

A non-jeopardy opinion may also be accompanied by reasonable and prudent measures to minimize incidental take (loss or disturbance of individuals) caused by the proposed action. This EIR/S serves as the Biological Assessment required by this Act. The project is in partial compliance with the Endangered Species Act pending concurrence from USFWS regarding the biological conclusions in this document.

National Historic Preservation Act of 1966 (16 USC 470 et seq.)

The National Historic Preservation Act established the National Register of Historic Places (NRHP), which is a catalog of properties including sites, districts, buildings, structures, and objects considered significant for their historic, architectural, engineering, archaeological, or cultural value. Properties of local, state, or national significance may be eligible for inclusion in the NRHP. Under the statute, federal agencies are required to consider the effects of a proposed action on properties listed or determined eligible for listing in the NRHP. This is accomplished through coordination between the federal agency and the State Historic Preservation Officer (SHPO), leading to a plan that either avoids damaging any National Register property or satisfactorily mitigates adverse effects caused by a proposed action.

A records search has been performed that indicates there are recorded prehistoric or historic archaeological sites with value as cultural resources within the footprint of the proposed project. A field reconnaissance of the project site confirmed these findings. The findings to date will be coordinated with the SHPO. Any unavoidable archaeological or historical resource impacted by the project will require consultation with the SHPO to review and approve a treatment plan including excavation, analysis, or recordation to ensure full compliance with this statute.

Archaeological and Historical Preservation Act of 1974 (88 Stat. 174)

This Act amends the Reservoir Salvage Act of 1960 to extend its provisions and to provide funding to protect historical and archaeological remains found at dams and reservoirs during any alteration of the terrain caused by any federal construction project or federally licensed activity or program. This Act does not apply to the project because no dams or reservoirs would be affected by the proposed project.

Federal Water Project Recreation Act of 1965 (Public Law 89-72)

This Act established the federal policy that any investigation or plan for any federal navigation, flood control, reclamation, hydroelectric, or multi-purpose water resource project must give full consideration to the opportunities for outdoor recreation and for fish and wildlife enhancement. Wherever any such project can reasonably serve either or both of these purposes, it must be constructed, operated, and maintained accordingly. The proposed project would support the goals of this Act. The proposed wetland restoration would enhance fish and wildlife resources, and it may be enjoyed by recreationists.

Rivers and Harbors Act (33 USC § 403 et seq.)

Section 10 of this Act prohibits the obstruction or alteration of navigable waters of the United States without a permit from the Corps. Specifically, all types of development in or over navigable waters including bridges, dams, dikes, piers, wharfs, booms, weirs, jetties, dredging, and filling are regulated by requiring a Corps permit for such actions. Navigable waters are defined in 33 CFR Part 329 as those waters that are subject to the ebb and flow of the tide and/or have been used in the past, or may be used in the future to transport interstate or foreign commerce. Hence, Section 10 (and Corps) jurisdiction extends to the *historic* limits of navigability, including historic tidelands that have been diked and drained.

This Act, read in conjunction with the Fish and Wildlife Coordination Act (16 USC §§ 661-666) and NEPA of 1969 (42 USC §§ 4331-4347), permits the Corps to refuse on conservation grounds to grant a permit to dredge or fill in navigable waters. Again, the Corps does not issue itself a permit for Corps-proposed projects, but all Corps projects are planned and implemented to conform with the requirements of Section 10 of the Rivers and Harbors Act.

3.3.2 Executive Orders

Executive Order 11593, Protection and Enhancement of the Cultural Environment (36 FR 8921, 5/15/71)

Executive Order 11593 states that the federal government shall provide leadership in preserving, restoring, and maintaining the historic and cultural environment of the Nation. The Order directs federal agencies to locate, inventory, and nominate to the National Register of Historic Places potentially eligible properties under their jurisdiction. Properties that have been nominated to the National Register are to be protected from inadvertent damage, destruction, or transfer until their eligibility has been evaluated. The Order encourages the preservation of cultural resources on federal lands, and stipulates that federal plans and programs be developed to help preserve and enhance cultural resources located on non-federal lands. Compliance with the Order will be ensured through the Corps coordination with the SHPO.

Executive Order 11988, Floodplain Management (36 FR 26951, 5/25/77)

Executive Order 11988 states that each federal agency shall provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. Federal agencies are directed to determine whether a proposed action will occur in a floodplain and, if so, to consider alternatives to avoid adverse effects and incompatible development in the floodplain. If development in a floodplain is deemed necessary, the federal agency must prepare and circulate a notice explaining why the action is proposed for the floodplain area. Agencies are to provide opportunity for early public review of any proposed actions in floodplains. The proposed project, by designing for a major flood and widening an inadequate floodplain, directly supports the intent of this Executive Order to minimize the impacts of floods. The NEPA/CEQA process also provides for early public involvement in this process.

Executive Order 11990, Protection of Wetlands (42 FR 26961, 5/25/77)

Executive Order 11990 states that each federal agency shall provide leadership and take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. The Order does not apply to the issuance by federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-federal property. Agencies are to provide opportunity for early public review of any proposed plans or proposals for new construction in wetlands. The project is consistent with this Executive Order.

Executive Order 12088, Federal Compliance with Pollution Control Standards (43 FR 47707, 10/13/78)

Executive Order 12088 states that the head of each Executive agency is responsible for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to federal facilities and activities under the control of the agency. This Order applies to federal property and operations, including military bases,

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open lands, office buildings, and other structures such as research laboratories. The head of each Executive agency is responsible for compliance with applicable pollution control standards. Each Executive agency shall cooperate with the EPA, and state, interstate, and local agencies in the prevention, control and abatement of environmental pollution. Since the project is not located on federal property, this Executive Order does not apply to the project.

Executive Order 12898, Environmental Justice

A Presidential Memorandum and this Executive Order, entitled Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, were signed by President Clinton on February 11, 1994. The Executive Order requires that, "To the greatest extent practicable . . . each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations . . ." The Presidential Memorandum further requires that each federal agency ensures that opportunities are presented for affected communities to provide input into the NEPA process, including identification of mitigation measures.

Consideration of this Executive Order in NEPA documentation ensures that two questions are asked: (1) is a federal project with significant adverse environmental impacts being proposed in a community that comprises largely minority or low-income persons, and (2) would any significant adverse human health or environmental effects of the project disproportionately affect minority or low-income persons?

Executive Order 12898 provides for an Environmental Justice Working Group with a 24-month environmental justice strategy development schedule. However, the Presidential Memorandum accompanying the Executive Order directs each federal agency to begin implementing specific directives immediately. One of the directives requires federal agencies to identify and address environmental justice issues in NEPA documents and to include measures to mitigate significant and adverse environmental effects of proposed federal actions on minority and low-income populations.

This Executive Order would not apply to the Channel Widening Plan or the Bypass Channel Plan, because in neither case would construction disproportionately affect minority or low-income populations.

3.3.3 State Regulations

California Environmental Quality Act of 1973 (Public Resources Code [PRC] Section 21000 et seq.)

CEQA establishes requirements similar to those of NEPA (section 3.3.1.1) for consideration of environmental impacts and alternatives, and for preparation of an Environmental Impact Report (EIR) prior to implementation of applicable projects. CEQA, however, requires that significant environmental impacts be mitigated to a level of insignificance, or to the maximum extent feasible. If full mitigation is not feasible, the state lead agency must make a finding of overriding considerations before approving the project. The proposed action falls under the purview of CEQA. This document fulfills the CEQA EIR requirement. The proposed mitigation measures in this document satisfy CEQA requirements because (1) mitigation measures are identified for every significant impact, (2) the extent of the impact after mitigation is noted (see column titled "Significance After Mitigation" in Table S-1), and the party responsible for implementing the measure is noted (see column titled "Responsible Party in Table H-1). CEQA further requires that any significant effects resulting from implementing a mitigation measure also be discussed in the EIR; there would be no such significant effects associated with any of the mitigation measures associated with the proposed project.

The SCVWD is lead agency for the Bypass Channel Plan under CEQA. Responsible agencies (public agencies other than the lead agency that have responsibility for carrying out or approving a project) include USFWS, the California Department of Fish and Game (CDFG), Caltrans, RWQCB, and the City of San Jose.

Porter-Cologne Water Quality Control Act of 1966 (California Water Code Sec. 13000 et seq.; CCR Title 23, Chapter 3, Subchapter 15)

The Porter-Cologne Act is the primary state regulation that addresses water quality. The requirements of the Act are implemented by the State Water Resources Control Board (SWRCB) at the state level and, at the local level, RWQCBs. Under the direction of the SWRCB, the RWQCBs carry out planning, permitting, and enforcement activities related to water quality in California. The San Francisco Bay RWQCB has jurisdiction over the project area. The Act provides for waste discharge requirements and a permitting system for discharges to land or water. The Act also provides for Basin plans to identify beneficial uses of water resources and to implement appropriate controls.

Project construction activities must not result in adverse impacts on the quality of the surface water and groundwater in the vicinity of the site. In addition, discharge of water associated with possible dewatering operations must comply with water quality objectives established under this Act.

California Endangered Species Act of 1984 (Fish and Game Code Section 2050 et seq.)

The California Endangered Species Act provides for the recognition and protection of rare, threatened, and endangered species of plants and animals. The Act requires state agencies to consult with the CDFG to ensure that state-authorized or funded actions do not jeopardize the continued existence of a listed species. The Act prohibits the taking (collection, killing, or injury, whether intentional or accidental) of listed species without authorization from the CDFG. CDFG may authorize the taking of a listed species through a Memorandum of Understanding that establishes the extent of a taking permitted by CDFG and establishes required mitigation. The list of protected species identified by the State of California is provided in Table 4.4-8.

California Department Fish and Game Wildlife Habitat Mitigation Policy

The CDFG's wildlife habitat mitigation policy is one of no net loss of habitat value. The project would be in compliance with this policy through the proposed mitigation.

California Wetlands Conservation Policy (California Executive Order W-59-93)

The state policy recognizes the value of marshlands and other wetlands. The policy is that there be (1) no net loss of wetland acreage; and (2) a long-term gain in the quantity, quality, and permanence of wetland acreages and values in California. This policy is to be implemented in a manner that fosters creativity, stewardship, and respect for private property. The California Resources Agency and its various departments do not authorize or approve projects that fill or otherwise harm or destroy coastal, estuarine, or inland wetlands. Exceptions may be granted if all the following conditions are met: (a) the project is water-dependent; (b) no other feasible alternative is available; (c) the public trust is not adversely affected; and (d) adequate compensation is proposed as part of the project. The CDFG and Fish and Game Commission policy stresses the need to compensate for the loss of wetland habitat on an acre-for-acre basis. Compensation for the loss of wetland habitat values to fish and wildlife resources requires the creation of habitat values at the compensation site that at least duplicate those habitat values that are lost due to project implementation. Mitigation for lost habitat values may be accomplished in one of four ways (listed from most acceptable to least acceptable): in-kind, on-site; in-kind, off-site; out-of-kind, on-site; and out-of-kind, off-site. The project, with mitigations, will be consistent with this policy. Some current, although minor, jurisdictional wetlands along the existing creek channel would be lost or temporarily disturbed, but a larger area of equivalent wetlands would be created along the margins of the new channel.

3.3.4 Local Regulations

The project area is within the San Jose city limits, with a short segment of Reach 10 that borders County land. The project would be subject to the City of San Jose's Horizon 2000 General Plan and the Santa Clara County General Plan.

Two other applicable documents are the City of San Jose's Riparian Corridor Policy Study (City of San Jose 1994) and the City's local park plan. The latter two documents are discussed in sections 4.4, Biological Resources, and 4.5, Aesthetics and Recreation, respectively.

County of Santa Clara General Plan

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The Santa Clara County General Plan (1990) identifies a number of measures to protect creeks and streamside areas in its Natural Environment, Land Use, and Public Safety Elements. Its Natural Environment (NE) Element details the following eight policies that are relevant to the flood control project and for which the SCVWD shares responsibility with the County for proper implementation:

1. The remaining riparian vegetation associated with the streams and creeks of Santa Clara County shall be protected through the following means:
 - a. By setback from the top of the bank.
 - b. Regulation of the removal of trees and other vegetation.
 - c. Reduction or elimination of the use of herbicides by public agencies.
 - d. Controlling and designing of grading, road construction, and bridges near streams to minimize loss of riparian vegetation.
2. Public projects shall be designed to avoid damage to the stream environments.
3. Where possible, riparian woodlands, marshes, and floodplains that have been altered should be allowed to return to a natural state.
4. In floodplains that are not already developed, land uses shall be restricted to avoid need for major flood control alterations to the streams.
5. Flood control modifications to be made in streams that have substantial existing natural areas should use a floodplain design that avoids alterations of the creek and its immediate environments.
6. Public projects should preserve the stream environment and should provide multiple use for such purposes as parks, open space preserves, trails and flood control.
7. Lands near creeks and streams shall be considered to be in a buffer area consisting of the following land:
 - a. An area extending 150 feet from top bank line landward where the creek is predominantly in its natural state (has not been converted to a concrete or riprap channel).
 - b. An area extending 100 feet from high water line landward where the creek has had major alteration, such as concrete or riprap channelization.
 - c. If (a) or (b) above is not applicable, establish an area sufficient to protect the creek from negative influences of adjacent development such as sedimentation, biochemical degradation, thermal pollution and aesthetic degradation.
8. Within these buffer areas, the following restrictions should apply to public projects and to private non-residential development:
 - a. No building structure (except those required for flood control maintenance, reinforcement or bridging, etc.) or major parking lot shall be allowed.
 - b. No grubbing, clearing, tree cutting, grading, debris disposal or any other despoiling action shall be allowed, except for removal of dead or diseased material after investigation has established that wildlife habitat of value for particular species will be retained.

- c. Screen the buffer area from obtrusive or unsightly aspects of a project outside the buffer in a manner that will create a feeling of continuity with the buffer, being careful to protect the native plant communities.
- d. Protect wildlife and endangered plant species within the area.
- e. Provide for trails and other compatible recreational uses when indicated in the County or City General Plans.

The Implementation portion of the Element requests, among other provisions, the following:

Restore, when possible, riparian vegetation which has been lost through past actions (NE(i) 19).

In addition, the Land Use (LU) Element of the Plan specifically provides for creek and streamside protection and restoration when possible, as well as the avoidance of "building, parking, clearing or despoliation within the creek buffer area" (LU 10). Allowable Uses are defined accordingly:

Creeks and streamsidess shall be preserved in their natural state providing for drainage, percolation, wildlife habitat, aesthetic relief and open space. Recreational uses that are environmentally compatible are allowable within the creek buffer area (LU 9).

The Public Safety (PS) Element considers flood control measures in the context of advancing other community goals, including "recreation, resource conservation, preservation of natural riparian vegetation and habitat, and preservation of the scenic values of the county's streams and creeks" (PS 21). It requires that flood control projects, whenever possible, "be designed to maintain creeks in their natural state" (PS 19).

City of San Jose Horizon 2000 General Plan

The Horizon 2000 General Plan (City of San Jose 1987) seeks to balance the need to protect the community from the risk of flood damage (which is the primary goal for Flood Policies) with the protection of the City's remaining riparian corridors. Among San Jose's six flooding-related policies, one in particular is applicable:

New development should be designed to provide protection from potential impacts of flooding during the '1%' or '100-year' flood.

At the same time, the City seeks to protect riparian resources and special-status species. The goal of the General Plan's Riparian Corridors and Upland Wetlands policies in the Natural Communities and Wildlife Habitats section is to:

Preserve, protect, and restore riparian corridors and upland wetlands within the City of San Jose's Sphere of Influence.

Policy 2 states that:

Creeks and natural riparian corridors and upland wetlands should be preserved whenever possible. When disturbances cannot be avoided, appropriate measures should be required to restore, or compensate for damage to, the creeks or riparian corridors.

The goal of the General Plan's Species of Concern policies in the Natural Communities and Wildlife Habitats section is to:

Preserve habitat suitable for Species of Concern, including threatened and endangered species.

Policy 2 for this element states that:

Habitat areas that support Species of Concern should be retained to the greatest extent feasible.

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The goal of the General Plan's Marine Life and Wildlife Resources section is to:

Preserve areas of special marine and wildlife habitation, particularly those containing endangered species, as living research and recreational resources, and as indispensable parts of the total environment.

Policy 5 states that:

Significant creeks and natural riparian corridors within the Urban Service Area should be preserved whenever possible. When disturbances cannot be avoided, appropriate measures should be required to restore, or compensate for damage to the creeks or riparian corridors.

While consistent with flood control land use policies, the Channel Widening Plan and the Bypass Channel Plan would conflict with some land use policies related to protection of streams, stream buffer zones, and natural habitats (particularly riparian and wetland habitats). Because the two alternatives would be consistent with some policies (those mainly related to flood control) and inconsistent with other policies (those mainly related to protection of biological habitats), they are designated as "PC" in Table S-3. The Bypass Channel Plan approach to flood control appears to be the most consistent with these two objectives, while the Channel Widening Plan approach would be unavoidably inconsistent with the City and County policies regarding stream and natural habitat preservation. The Bypass Channel Plan would be consistent with the City of San Jose policy calling for new development to provide an approximately 100-year flood level of protection; the Channel Widening Plan, providing an approximately 50-year flood level of protection, would be inconsistent with this policy. Either of the alternatives would be consistent with the City and County policies calling for restoration of unavoidable impacts on streams and riparian corridors. The channel widening approach would appear to be inconsistent with the Santa Clara County General Plan (Natural Environment Element) policy that calls for flood control modifications to use a design that avoids alteration of natural creek environments. The channel widening approach may also be inconsistent with the Public Safety Element policy (PS 19) that requires flood control projects be designed to maintain creeks in their natural state whenever possible (Parsons Engineering Science 1997).

Interagency coordination would continue to ensure that the recreational features and uses for the Guadalupe River Corridor Park are incorporated into the design of the flood control project. Key representatives from the San Jose Department of Recreation, Parks and Community Services, the City of San Jose, and the SCVWD have been meeting and should continue to meet at the beginning of each design phase of the project. The purpose of such meetings is to identify and reconcile differing perspectives and to maintain compatibility between the park master plan for the corridor and the corresponding elements of the flood control design. Compatibility with the appropriate policies of the City and County Land Use Elements related to discouraging the disturbance of riparian habitat by development and/or recreational uses would be retained by coordinating trail design with the San Jose Department of Recreation, Parks and Community Services. Whenever trail placement could adversely affect the habitat value of the riparian corridor, the trail would avoid those portions of the corridor sensitive to human intrusion.

Corps of Engineers

- RWQCB certification pursuant to Section 401 of the Clean Water Act that water quality standards will not be violated during construction.

Construction Contractor

- NPDES Permit. An NPDES permit would be necessary from the RWQCB since ground disturbance would cover more than 5 acres, and for stormwater discharge.

3.4 PROJECTS CONSIDERED IN THE CUMULATIVE ANALYSIS

The following "past, present, and reasonably foreseeable future actions" (40 CFR 1508.7) are considered cumulative projects affecting the Guadalupe River that are subject of the EIR/S analysis (Parsons Engineering Science 1997).

1. **Downtown Guadalupe River Project from I-880 to I-280.** The Corps project would remove 30.6 acres of riparian habitat and replant 64.3 acres. It is under construction and expected to be completed by 1999.
2. **Guadalupe River Park.** The project is sponsored by the City of San Jose Redevelopment Agency and is located adjacent to the lower Guadalupe River project. It includes a river walk system along the top of river banks (River Walk Project), and riverbank gabions and pedestrian bridge over Los Gatos Creek. Impacts include removal of 0.8 acre of riparian habitat and planting of 4.7 acres.
3. **Guadalupe River Park South Corridor Master Plan from I-280 to Coleman Avenue.** The San Jose City project would include trails and recreational amenities, resulting in potential disturbances to sensitive wildlife and riparian vegetation.
4. **SR 87 Freeway Upgrade Project from US 101 to Julian Street.** This completed project impacted 4.5 acres of riparian habitat and 1.1 acres of Corps jurisdictional wetlands, and included planting 7.5 acres of riparian habitat.
5. **SR 85 Transportation Corridor Project.** Completed improvements to the state route including bridge construction over the Guadalupe River impacted 0.1 acres of riparian vegetation on the river and indirectly, 4.5 acres on Los Gatos and Ross creeks. Over 12 acres of riparian vegetation was planted on site and 0.2 acre off site.
6. **San Jose International Airport Expansion Plan.** Airport expansion under construction includes replacement of the Airport Parkway Bridge, addition of a new bridge south of Airport Parkway Bridge, and widening Airport Boulevard adjacent to the Guadalupe River.
7. **San Jose Riparian Corridor Policy Study.** The City of San Jose Riparian Corridor Policy Study could affect the Guadalupe River watershed. This study provides policy and development guidelines for riparian areas along all creeks in the City, including defining the riparian corridor and development guidelines for setbacks, access control, landscaping and lighting, and compatible land uses. The City is reviewing the study and may propose its adoption in the future. Adoption and implementation of riparian corridor development guidelines could help to reduce the severity of cumulative impacts in the Guadalupe River watershed.
8. **Santa Clara Valley Water District Guadalupe River Flood Control Project.** The SCWVD proposes flood control improvements on the Guadalupe River extending north of the proposed project addressed in this EIS/R. Reach A includes a stretch nearly 2 miles long between U.S. 101 and U.S. I-880, approximately 2 miles north and downstream of Reach 7, which would be improved with widened channels, some floodwalls, and levees to provide a 100-year level of flood protection. Reach 6 includes a 2,800-foot stretch of the river from I-280 to the SPRR Bridge, and would include a bypass channel lined with steep gabions to provide a 100-year level of flood protection. The SCWVD also proposes floodwalls on both banks of Canoas Creek and culverts between Guadalupe River and the Nightingale culvert to provide a 100-year level of flood protection. These improvements would be constructed as related elements to the proposed project development on Reaches 7 through 12.
9. **Almaden Road Widening.** The City of San Jose plans to widen Almaden Road within the feasibility study area. Widening of the road would require disturbances very close and likely within the proposed Bypass Channel Plan recreational trail corridor. A wider right-of-way for this segment of Almaden Road and partial reconstruction of portions of the road within this stretch of the feasibility study areas would be necessary to build the recreational trail. The City of San Jose would coordinate its land acquisition and road reconstruction with construction of the Bypass Channel Plan (William DeJager 1997).

Environmental Setting
