Chapter 13
Land Use and Planning

13.1 Environmental Setting

13.1.1 Introduction and Sources of Information

This chapter provides the environmental and regulatory background necessary to analyze land use and agricultural resources effects associated with the proposed project. It includes regulatory, regional, and project settings to provide a context for analyzing the effects of the project.

Applicable county and regional plans and policies were reviewed for information on existing land uses and policies. The California Department of Conservation, Napa County Planning Department, Solano County Planning Department, and Sonoma County Planning Department were consulted to assess existing conditions of agricultural resources on and surrounding the project area. The Napa and Sonoma County General Plans, City of American Canyon General Plan EIR, and the Novato General Plan provided land use goals and existing land use designations necessary to compare project-related impacts/conflicts with surrounding land uses.

13.1.2 Regulatory Setting

13.1.2.1 Countywide General Plans

Under Sections 65300–65403 of the California Government Code, all cities and counties in California are required to provide comprehensive long-range plans containing seven mandatory elements for lands within their jurisdictions: land use, housing, conservation, open space, noise, and safety. The project area is in Solano ~~and~~, Sonoma and Napa Counties. Portions of Sonoma and Marin Counties, as well as portions of Novato and the City of American Canyon, may also be a part of the project area if recycled water is used in the ~~desalination~~salinity reduction process. The Solano, Napa, Sonoma, and Marin County General Plans, the City of American Canyon General Plan EIR, and the Novato General Plan were reviewed for this chapter.

13.1.2.2 San Francisco Bay Plan/McAteer-Petris Act

The McAteer-Petris Act established the BCDC and mandated the preparation of the Bay Plan. Completed in 1969, the Bay Plan describes the values associated with the bay and presents policies and planning maps to guide future uses of the bay and surrounding shorelines. Under the Bay Plan, suitable uses include port- and water-related industry, airports, wildlife refuges, and water-related recreation. In addition, the Bay Plan supports public access via marinas, waterfront parks, and beaches. The Bay Plan also calls for extensive public access along the bay's waterfront and shorelines. BCDC is responsible for permitting new placement of dredged material or fill in the bay and implementing the policies of the Bay Plan.

13.1.2.3 Regional and Local Planning Documents

~~Petaluma Watershed Enhancement Plan~~

~~This plan identifies four goals designed to enhance the Petaluma River watershed. The goals are to~~

- ~~create a local watershed council that would assist in organizing activities and circulating information,~~
- ~~improve water quality in the Petaluma River watershed such that the Petaluma River could be removed from the San Francisco Bay RWQCB Impaired Waterbody List,~~
- ~~help make agriculture more viable within the community, and~~
- ~~protect and preserve wildlife habitat.~~

San Francisco Estuary Project's Comprehensive Conservation and Management Plan

The San Francisco Estuary Project (SFEP) was established by EPA in 1987 because of growing public concern related to the health of the bay and the Delta. SFEP is jointly sponsored by EPA and the State of California and is part of the National Estuary Program. The primary focus of the CCMP is to "restore and maintain the chemical, physical, and biological integrity of the bay and Delta." The CCMP provides a thorough implementation strategy describing various actions to protect the Bay-Delta estuary. Ten program areas are identified in the CCMP. For each program area, the CCMP presents a problem statement, discusses existing management, identifies program area goals, recommends approaches, and states objectives and actions specific to the program. With regard to wetlands, the CCMP focuses on the restoration and ultimate enhancement of ecological productivity and habitat value.

Baylands Ecosystem Habitat Goals

The Baylands Ecosystem Habitat Goals (Goals Project 1999) Report (*Habitat Goals* report) is a report compiled by the San Francisco Bay Area Wetlands Ecosystem Goals Project to identify wetland restoration goals within the baylands. Recommendations in this report were developed through a consensus process with the input of more than 100 participants representing local, state, and federal agencies, academia, and the private sector. The report recommends the types, areal extent, and distribution of habitats needed to sustain healthy ecosystems in the Bay-Delta estuary and identifies the Napa River Unit as a key area to restore in the north bay.

Ecosystem Restoration Program Plan

The CALFED Bay-Delta Program (CALFED) developed the Ecosystem Restoration Program Plan (ERPP) as one of four Common Programs. The main objective of the ERPP is to address problems related to ecosystem quality of the Bay-Delta system. The CALFED Ecosystem Restoration Program will use the goals outlined by the ERPP in the restoration of physical and biological processes related to formation and maintenance of habitats of the Bay-Delta.

Water Use Efficiency Program Plan

CALFED developed the Water Use Efficiency Program Plan to "help ensure that California's water supplies are used efficiently and result in multiple benefits." CALFED's definition of *efficient water use* is the implementation of local water management actions that increase the achievement of CALFED goals and objectives. One of the primary objectives of the CALFED Program is to improve water supply reliability for California. Water recycling can help meet this objective in its ability to

- provide an additional source of water that is local rather than imported;
- provide increased water for one beneficial use without taking water allocated for other beneficial uses; and
- provide a source of water that is relatively resistant to drought, making it available when it is most needed.

Recycling projects can also aid in achieving CALFED Program objectives of water quality and ecosystem restoration by making available a greater water supply without increasing Delta export or reducing Delta outflow (CALFED Bay-Delta Program 2000).

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Bay Trail Plan

The Bay Trail is a planned recreation corridor that will provide 400 miles of biking and hiking trails when completed. It will link nine counties, 47 cities, and 130 parks and recreation areas around San Francisco and San Pablo Bays. As mandated under Senate Bill 100, ABAG developed the Bay Trail Plan as a framework to provide guidance in the selection and implementation of the Bay Trail project. The main goal of the Bay Trail Plan is to provide public access to the bay and its surrounding shorelines.

Petaluma Watershed Enhancement Plan

This plan identifies four goals designed to enhance the Petaluma River watershed. The goals are to

- create a local watershed council that would assist in organizing activities and circulating information,
- improve water quality in the Petaluma River watershed such that the Petaluma River could be removed from the San Francisco Bay RWQCB Impaired Waterbody List,
- help make agriculture more viable within the community, and
- protect and preserve wildlife habitat.

13.1.3 Regional Setting

The north bay region (made up of parts of Solano, Napa, Sonoma, and Marin Counties, including the cities of American Canyon, Novato, San Rafael, and Vallejo) consists predominantly of two land uses: extensive and intensive agriculture and rural land (60%) and wildlife and open space areas (23%). Remaining land uses in the area—residential, commercial and light industry, public facilities, and heavy industry—each comprise less than 10% of the north bay region. Land use trends include the following (San Francisco Bay Conservation and Development Commission 1997):

- transition of rangeland and pastureland in southern Napa and Sonoma Counties to vineyards,
- development of urban uses along the U.S. 101 and SR 29 corridors, and
- acquisition of large rural areas by federal and state wildlife agencies for wildlife habitat.

East of the project, land use designations are mixed, ranging from general industrial to land intensive agriculture and residential uses. On Edgerley Island immediately east of Pond 8, there is a strip of residential development. South of the project area, Mare Island has been designated by Solano County for industrial use. The land north of the project area has been designated by Napa County as open space. Land west and northwest of the project area across Napa Slough has been designated by Sonoma County as land extensive agriculture, consisting mainly of hay production (Solano County 1999, Napa County 1996, Sonoma County 1998.)

The nearest farmland currently in production is located approximately 500 feet from the project area west of Napa Slough across from Ponds 6 and 6A. Vineyards are approximately 0.25 mile north of Pond 7A.

North of the project area, in Napa County, there are lands designated as *prime farmland*, *land of local importance*, and *farmland of statewide importance*. West of the project area, across Napa Slough, there are farmlands of local importance. Southwest of the project area, in Sonoma County, portions of Tubbs Island are also considered farmland of local importance. The project area does not include any Williamson Act contracts (Domequez pers. comm., Tuter pers. comm.).

13.1.4 Project Area

The project area has an interesting history of land uses. Reclamation of the Napa-Sonoma Marsh began as early as 1850 and peaked between 1880 and 1910. Between 1910 and 1950 the site was used largely for grazing and dryland crops. In 1950, Leslie Salt Company acquired approximately 10,000 acres composed of diked farmland, adjacent marshes, and waters. Leslie Salt Company then converted the land to salt ponds. Salt production began in 1959 and continued until 1990. ~~when t~~The property was sold to the State of California in 1994. Since 1994 the project area has been managed by DFG as part of the NSMWA. The project site is used for recreation. Hunting, fishing, and other recreational opportunities are available on the project site and are described in Chapter 15, "Recreation, Public Access, Visual Resources, and Public Health."

The Bay Plan identifies the project site as wildlife area and managed wetlands. Two proposed alignments of the Bay Trail surround the northern and eastern boundaries of the project area. The eastern alignment is located east of the Napa River. Neither alignment transects the NSMWA.

Portions of the project site located in Solano County are designated as *land extensive agriculture*. These are agricultural lands that tend to have low production per acre and are not irrigated (Solano County 1999). Limited recreational activities, such as hunting, fishing, and boating, take place on these lands. Portions of the project in Napa County are designated as *agriculture, watershed and open space*, which falls under the broader category of open space. The eastern portion of Marin County is primarily designated for open space and recreation as well as extensive agriculture and residential use. Pockets of commercial and light industry and heavy industry border the U.S. 101 corridor. Along Lakeville Road through Sonoma County, land uses are designated primarily for extensive agriculture and, to a lesser extent, intensive agriculture.

According to applicable county general plans and staff at the California Department of Conservation, the project area is classified as farmland (Solano County 1999; Napa County 1996; Sonoma County 1998; Patch pers. comm.).

13.2 Environmental Impacts and Mitigation Measures

13.2.1 Methodology and Significance Criteria

The impacts of the proposed project on land use and agricultural resources were analyzed qualitatively, focusing on consistency between planned and permitted uses under applicable land use plans.

Criteria based on the State CEQA Guidelines were used to determine the significance of land use and planning–related impacts. The project would have a significant impact on land use and planning if it would

- conflict or be incompatible with the land use goals, objectives, or guidance of applicable land use plans or regulations of an agency with jurisdiction over the project;
- substantially alter present or planned land uses of a site in the surrounding area;
- disrupt or divide the physical arrangement of a community; or
- result in a substantial conversion of farmland.

13.2.2 No-Project Alternative

As described in Chapter 2, "Site Description and Options," implementation of the No-Project Alternative would result in degraded habitat conditions for wildlife. Under this alternative salinity levels would continue to increase in the ponds closed to tidal influence. Ponds would be expected to dry out and water control structures would deteriorate. Ultimately, this would reduce DFG's ability to

manage water and salinity levels for wildlife. Therefore, this alternative would be incompatible with the land use identified in the Bay Plan and multiple regional planning documents, including SFEP's CCMP, CALFED's ERPP, and the ~~*Baylands Ecosystem Ecosystem*~~ *Habitat Goals* report. The No-Project Alternative would not alter present or planned land uses of the project site in the surrounding area because land use would not change, and growth would not be induced. Land uses would not change under the No-Project Alternative; consequently, existing communities would not be disrupted or divided. There are no Williamson Act contracts on the project site or any farmland (i.e., prime farmland, unique farmland, or farmland of statewide or local importance) on the project site; therefore, no conflicts with Williamson Act contracts or conversion of farmlands would occur. In addition, the No-Project Alternative would not spur development in the area or lead to the conversion of other farmland to nonagricultural uses.

13.2.3 Salinity Reduction Option 1A: Napa River and Napa Slough Discharge

13.2.3.1 Impact LU-1: Compatibility with Land Use Goals and Objectives

Implementation of Salinity Reduction Option 1A would be compatible with existing land use goals and objectives outlined in applicable general plans and regional plans because reducing salinity would lead to the restoration of the marsh. Both Napa County's and Solano County's land use designations of the project site allow for use as open space and recreation. The Bay Plan identifies the project site as wildlife area and managed wetlands. Proposed alignments of the Bay Trail that surround the northern and eastern boundaries of the NSMWA would not conflict with this option. This option would be consistent with the ERPP and SFEP's CCMP because it contributes to the process needed for the restoration of marsh habitat in San Francisco Bay. This impact is considered less than significant. No mitigation is required.

13.2.3.2 Impact LU-2: Consistency with Existing or Planned Land Uses

Implementation of this option would not substantially alter existing or planned land uses of the surrounding area. The project site has been managed as a wildlife refuge since 1994; such management would continue. There are a variety of uses surrounding the project site, including agricultural use west of Napa Slough. Surrounding land uses would be unaffected because salinity reduction would not encourage growth or development of surrounding land uses. Recreational use is expected to increase as a result of the restoration project, but the intensity of use would be minimal and localized to the project site. This option would not disrupt or divide the physical arrangement of a community

because land use on the project site would not change. The project site would still be managed as a wildlife area. This impact is considered less than significant. No mitigation is required.

13.2.4 Salinity Reduction Option 1B: Napa River and Napa Slough Discharge and Breach of Pond 3

Impacts under Salinity Reduction Option 1B (Impacts LU-1 and LU-2) are nearly the same as those under Salinity Reduction Option 1A. Salinity Reduction Option 1B would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses.

13.2.5 Salinity Reduction Option 1C: Napa River and Napa Slough Discharge with Breaches of Ponds 3 and 4/5

Impacts under Salinity Reduction Option 1C (Impacts LU-1 and LU-2) are nearly the same as those under Salinity Reduction Option 1A. Salinity Reduction Option 1C would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses.

13.2.6 Salinity Reduction Option 2: Napa River and San Pablo Bay Discharge

Impacts under Salinity Reduction Option 2 (Impacts LU-1 and LU-2) are nearly the same as those under Salinity Reduction Option 1A. Salinity Reduction Option 2 would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses.

13.2.7 Water Delivery Option

13.2.7.1 Impact LU-1: Consistency with Land Use Goals and Objectives

Subsurface utilities such as the proposed Sonoma, CAC, and Napa Pipelines do not, in and of themselves, typically conflict with or generally relate to land use goals, objectives, and guidance. Construction activities associated with the pipelines can, however, pose the potential to conflict with existing uses.

Land Use Compatibility during Construction

Water Delivery Project Component (Sonoma Pipeline)

Placement of the new Sonoma Pipeline through the wildlife preserve would be within the northern portion of the ROW. There are scattered homes bordering the construction corridor along the first 3 miles of new pipeline. The remaining portion of the new Sonoma Pipeline would extend along the existing access road to the Napa River Unit.

Construction of the pipeline would proceed in increments approximately 200–300 feet long within a construction corridor width of approximately 30 feet. Noise from equipment operation could adversely affect nearby land uses, including homes as close as 300 feet from the construction area. As described in Chapter 12, "Noise," construction noise impacts on sensitive receptors such as homes would be a less-than-significant impact of the Sonoma Pipeline. Given the undeveloped rural nature of the surrounding area and the relatively short-term and isolated nature of construction activities occurring at any given time, no significant land use conflicts are anticipated for construction of the Sonoma Pipeline. This impact is considered less than significant. No mitigation is required.

~~Water Delivery Project Component (CAC Pipeline)~~

~~Construction of the new CAC Pipeline is proposed along Green Island Road and Mezzetta Road. The southern segment of this route is bordered by a mix of vacant land and residential and industrial land uses; the northern segment is bordered by residential and commercial land uses. During construction occurring immediately adjacent to existing residences and businesses, access to and from these uses may be periodically affected; however, access limitations, if any, would be very short-term and the construction contractor would coordinate in advance with the affected homes and businesses to reduce potential inconveniences.~~

~~Installation of the pipeline along Green Island Road and Mezzetta Road would include operation of heavy-duty construction equipment such as a crane, excavator, front-end loader, and pipe truck. The noise from equipment operation could adversely affect nearby land uses, including homes located as close as 50 feet from the road. As described in Chapter 12, "Noise," construction noise impacts related to construction of the CAC Pipeline on sensitive receptors such as homes would constitute a short-term significant impact. Implementation of Mitigation Measure N-1, "Decrease Noise Levels with Use of Noise Reduction Devices," would reduce this impact, but not to a less-than-significant level. This measure is described in Chapter 12.~~

Water Delivery Project Component (Napa Pipeline)

Construction of the Napa Pipeline is proposed along Buchli Station Road, Las Amigas Road, across the Stanly Ranch property, along Stanly Lane, and under the Napa River. Segment 1, which has been evaluated previously, was found to be consistent with land uses, goals, and objectives. Pipeline placed in Segment 2 would be bordered by primarily residential land uses (a winery also exists along Segment 2). As stated above for the CAC Pipeline, access to these properties

may be limited periodically; however, the limitations, if any, would be very short-term and would be coordinated in advance with the affected home or business owner.

Installation of the pipeline would include operation of heavy-duty construction equipment. The noise from equipment operation is considered a short-term significant impact, as described in Chapter 12, "Noise." Implementation of Mitigation Measure N-1, "Decrease Noise Levels with Use of Noise Reduction Devices," would reduce this impact, but not to a less-than-significant level. This measure is described in Chapter 12.

Water Delivery Project Component (CAC Pipeline)

Construction of the new CAC Pipeline is proposed along Green Island Road and Mezzetta Road. The southern segment of this route is bordered by a mix of vacant land and residential and industrial land uses; the northern segment is bordered by residential and commercial land uses. During construction occurring immediately adjacent to existing residences and businesses, access to and from these uses may be periodically affected; however, access limitations, if any, would be very short-term and the construction contractor would coordinate in advance with the affected homes and businesses to reduce potential inconveniences.

Installation of the pipeline along Green Island Road and Mezzetta Road would include operation of heavy-duty construction equipment such as a crane, excavator, front-end loader, and pipe truck. The noise from equipment operation could adversely affect nearby land uses, including homes located as close as 50 feet from the road. As described in Chapter 12, "Noise," construction noise impacts related to construction of the CAC Pipeline on sensitive receptors such as homes would constitute a short-term significant impact. Implementation of Mitigation Measure N-1, "Decrease Noise Levels with Use of Noise Reduction Devices," would reduce this impact, but not to a less-than-significant level. This measure is described in Chapter 12.

Water Delivery Program Component

Exact alignments and construction methods have not yet been determined for the pipelines associated with the Program Component of the Water Delivery Option. Land use considerations for each pipeline are described below based on the general locations of potential alignments.

The pipelines for the City of Petaluma, Novato SD, and LGVSD would border commercial, residential, agricultural, and industrial areas. There is a potential for construction-related land-use conflicts along these potential pipeline routes, such as from construction activity near residential development and schools, and from traffic detours near commercial areas.

As discussed above for the Project Component impacts, the construction would be short term, but the associated noise impacts on sensitive uses are still considered significant.

Consistency with Land Use Policies and Goals

Water Delivery Project Component

The use of recycled water for pond desalination is consistent with the water use policies and goals of several plans such as the CALFED Water Use Efficiency Program Plan described above and the water recycling legislation described in Chapter 4, "Water Quality." The future use of recycled water for agricultural irrigation following completion of the desalination process is another way in which the Water Delivery Option responds to those plans.

In summary, installation of the pipelines proposed for the Water Delivery Option would be consistent with various plans and policies related to efficient water use and management and, with the exception of construction noise along the Napa and CAC Pipelines (see Chapter 12, "Noise"), would not conflict with existing land uses or related plans and policies. Therefore, this impact is considered less than significant. No mitigation is required.

Water Delivery Program Component

Similar to the above, the potential future pipelines' provision of recycled water for pond desalination and agricultural irrigation would be compatible with, if not complementary to, various plan goals, objectives, and policies regarding efficient water management.

Within the Petaluma Watershed Enhancement Plan, Goal C is to "support the viability of agriculture in the community." A related objective is to "provide technical information to interested agricultural operators about the potential benefits and detriments of using reclaimed wastewater."

The "Public Facilities and Services" section of the Novato General Plan includes the objective to "manage the water supply through coordination with providers and water conservation," and proposes several programs to achieve the objective.

The provision of recycled water from treatment plants in the north bay region, including the Novato SD WWTP, for use in pond desalination and as agricultural irrigation water is consistent with this objective.

In summary, implementation of the potential future pipelines proposed as the Program Component of the Water Delivery Option would be consistent with various plans and policies related to efficient water use and management and, with the exception of construction noise in proximity to sensitive receptors (see Chapter 12, "Noise"), would not conflict with existing land uses or related plans and policies. Therefore, this impact is considered less than significant. No mitigation is required.

13.2.8 Habitat Restoration Option 1: Mixture of Tidal Marsh and Managed Ponds

Habitat Restoration Option 1 would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses. Adjacent land uses could be adversely affected as a result of levee failures. This impact is described in Chapter 3, "Hydrology."

13.2.9 Habitat Restoration Option 2: Tidal Marsh Emphasis

Habitat Restoration Option 2 would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses. Adjacent land uses could be adversely affected as a result of levee failures. This impact is described in Chapter 3, "Hydrology."

13.2.10 Habitat Restoration Option 3: Pond Emphasis

Habitat Restoration Option 3 would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses. Adjacent land uses could be adversely affected as a result of levee failures. This impact is described in Chapter 3, "Hydrology."

13.2.11 Habitat Restoration Option 4: Accelerated Restoration

Habitat Restoration Option 4 would be compatible with regional and local land use plans and would not conflict with or adversely affect surrounding land uses. Adjacent land uses could be adversely affected as a result of levee failures. This impact is described in Chapter 3, "Hydrology."