

Recreation, Public Access, Visual Resources, and Public Health

15.1 Environmental Setting

15.1.1 Introduction and Sources of Information

This chapter provides the environmental and regulatory background necessary to analyze recreation, public access, and visual resources effects of the project. It also evaluates public health and safety issues for this project, focusing on public nuisances associated with mosquitoes and diseases transmitted to humans by mosquitoes. This chapter includes regulatory, regional, and project settings to provide a context for analyzing the effects of the project. Sources of information used in this chapter include applicable Napa, Solano, and Sonoma County General Plans, the Novato General Plan, the *City of American Canyon General Plan EIR*, the Bay Plan, the Bay Trail Plan (Association of Bay Area Governments 2001), *Stanly Ranch Specific Plan Draft EIR* (Brady/LSA, August 1998), *Los Carneros Recycled Water Irrigation Pipeline Initial Study/Negative Declaration* (Napa Sanitation District, January 11, 1995), and literature on mosquito ecology and control methods.

15.1.2 Regulatory Setting

15.1.1.1 Recreation Policies of the Napa, Solano, and Sonoma County General Plans and Novato General Plan

The Napa, Solano, and Sonoma County General Plans and the Novato General Plan all have policies that pertain to the establishment, enhancement, and maintenance of recreational opportunities on county lands. Included below are excerpts of these policies.

The Napa County General Plan policies that relate to the project area include:

Return salt extraction ponds to marshlands or other non-urban uses for recreation, fisheries and wildlife habitat at the termination of salt extraction activity.

Encourage wildlife habitat improvements for hunting or nonconsumptive wildlife uses such as photography and maintaining food chains and checks and balances of natural habitat.

Provide recreational and open space opportunities... by maximizing scenic and wildlife habitats by retaining natural vegetation, installing supplementary landscaping, acquiring additional land for open space purposes and by shaping the structures to have a more attractive form and greater usefulness for open space activities.

Promote development of local State Parks for recreation.

In Solano County, general plan goals associated with recreation include:

Preserve and protect the diverse park, open space and recreational resources of the County for the use and enhancement of the lives of present and future generations.

Develop and maintain recreational facilities to meet the varied recreational needs of the county.

The Solano County General Plan also includes a recreation policy specifically related to the Napa River Unit that states: "Within the Napa Marsh provisions should be made for public recreation and access to the marsh for such uses as fishing, hunting, picnicking, hiking and nature and wildlife study."

The Open Space Element of the Sonoma County General Plan was written in order to protect open space as a limited and valuable resource. The following goal addresses the establishment of those resources:

Goal OS-7: Establish a countywide park and trail system which meets future recreational needs of the county's residents while protecting agricultural uses. The emphasis of the trail system should be near urban areas and on public lands.

The Environment Chapter of the Novato General Plan states as one of its objectives, "Provide an attractive and comprehensive system of parks and trails throughout the city to meet the recreational needs of the entire community." Additionally, the general plan proposes to develop a financial plan for the improvement and maintenance of an urban trails system.

~~The McAteer-Petris Act of 1965 established BCDC as the state agency responsible for increasing public access to the shores and waterfront of the bay as described in Chapter 13, "Land Use and Planning." The act also mandated the creation of the Bay Plan. The Bay Plan encourages public access through marinas, waterfront parks, and beaches, except where public safety is jeopardized or public access conflicts with significant uses.~~

15.1.2.1 The Bay Trail Plan

The Bay Trail Plan was adopted by ABAG in 1989, in support of the Bay Plan's goal of increasing public access to the bay and its shorelines. Once completed, the Bay Trail will be a 400-mile continuous recreation corridor around the bay, linking nine counties and 47 cities (see Chapter 13, "Land Use and Planning").

15.1.2.2 Visual Resources Elements

The Environment Chapter of the Novato General Plan states as one of its objectives, "Preserve visual values on hillsides, ridgelines, and other scenic resources." Additionally, the general plan aims to encourage protection of visual access to the San Pablo Bay shoreline and the Petaluma River.

The Open Space Element of the Sonoma County General Plan has established many goals and objectives in order to preserve their natural and scenic resources. These goals and objectives include:

Goal OS-1: Preserve the visual identities of communities by maintaining open space areas between cities and communities.

Goal OS-3: Identify and preserve roadside landscapes which have a high visual quality as they contribute to the living environment of local residents and to the county's tourism economy.

Objective OS-3.2: Provide guidelines so future land uses, development and roadway construction are compatible with the preservation of scenic values along designated scenic highway corridors.

The Open Space Element of the Napa County General Plan states as one of its goals that "Land use patterns should include visual consideration. The landscape can easily become a hodge-podge of roof tops, shining mobile homes, power lines and poles. Therefore, the appropriate density and cluster subdivision design form should be carefully planned."

The Solano General Plan Highway 37 from Solano-Sonoma County line to I-80 at Vallejo as a scenic thoroughfare.

15.1.2.3 Mosquito Abatement Districts

The project area is in the jurisdiction of the Napa County Mosquito Abatement District (NCMAD), Marin-Sonoma Mosquito Vector Control District (MSMVCD), and the Solano County Mosquito Abatement District (SCMAD). Mosquito abatement districts (MADs) and vector control districts (VADs) are governmental organizations formed at the local level that are responsible for controlling specific disease vectors within their jurisdiction. MADs/VCDs

receive most of their revenue from property taxes and are primarily responsible for controlling mosquitoes as pest species and as disease vectors. In the project area, mosquito abatement efforts are primarily focused on controlling mosquitoes that can transmit malaria and several types of encephalitis or cause a substantial nuisance in surrounding communities. California law requires that if a problem source of mosquito production exists as a result of human-made conditions, the party responsible for those conditions is liable for the cost of abatement. The law is enforced at the discretion of the responsible MAD/VCD (Cal. Health and Safety Code Section 2200 *et seq.*).

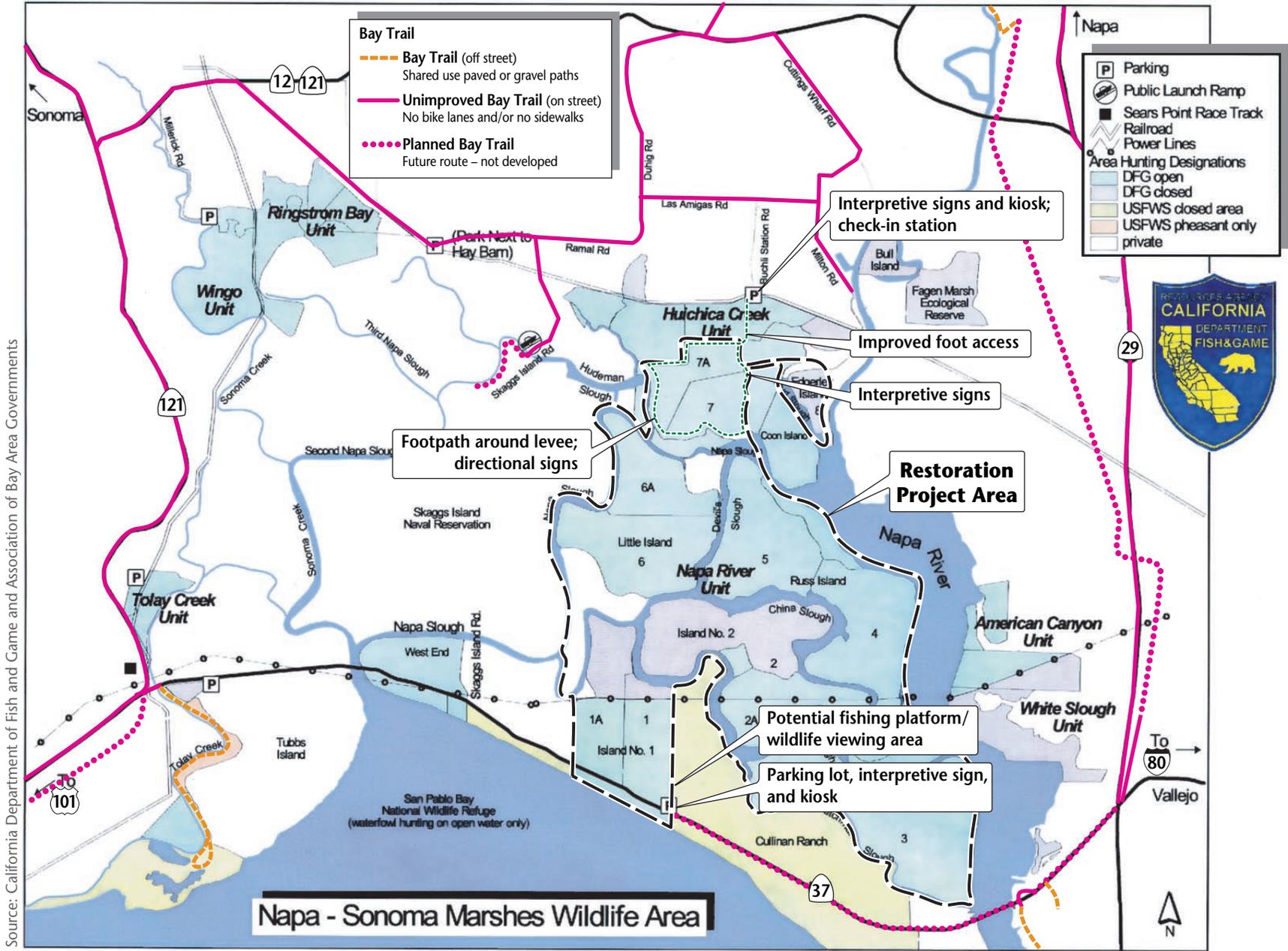
The decision to control mosquitoes as a nuisance to human populations is at the discretion of each local MAD/VCD. Factors influencing this decision may include the number of service calls received from a given locality, the proximity of mosquito sources to population centers, the availability of funds for abatement, the density of mosquito larvae present in a mosquito production source, and the number of adult mosquitoes captured per night in light traps (Jones & Stokes Associates 1995). Once a recurring mosquito production source has been identified, abatement schedules are often adopted and maintained for that source (Jones & Stokes Associates 1995).

15.1.3 Regional Setting

About 23% of the land in 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) is used for open space and recreation (San Francisco Bay Conservation and Development Commission 1997). Larger pockets of this land use type can be found in Napa and Solano Counties south and east of Skaggs Island Road; in Napa County south of Napa Slough; in Marin County north of SR 37 and north of Atherton Avenue; and in Marin County east of U.S. 101 and south of Ignacio Boulevard.

15.1.3.1 Recreation and Public Access

The project site is part of the 7-unit NSMWA complex. The NSMWA is an area of baylands, tidal sloughs, and wetland habitat located primarily between the Napa River and Sonoma Creek. More than 13,000 acres are currently managed by DFG. Approximately 10,000 acres of this property is composed of the former evaporative salt ponds, levees, and accreted tidal lands that DFG purchased from Cargill Salt in 1994. DFG manages the site for wildlife and wildlife-compatible uses including recreation. The region surrounding the project area is accessed by multiple users, including bicyclists, hikers using the Bay Trail, fishermen, and duck hunters (Figure 15-1).



Source: California Department of Fish and Game and Association of Bay Area Governments

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Figure 15-1
Recreation and Proposed Recreation Features

15.1.3.2 Visual Resources

The Napa River Salt Marsh Restoration Project is set within the north San Pablo Bay region. The region is surrounded on the west, north, and east by the California Coastal Ranges and on the south by San Pablo Bay. Visual resources adjacent to San Pablo Bay vary from rural to urban. Grazed and farmed baylands, vineyards, marsh and other open space, and rural residences and farm support structures crisscross rural areas. Urban area visual resources include industrial and residential developments and associated infrastructure. Also, numerous creeks, sloughs, and rivers drain into San Pablo Bay, adding a distinctive element to the region's visual character.

15.1.3.3 Public Health

Compared with the historical levels of mosquito-borne diseases in humans, levels of mosquito-borne diseases in California are low. These diseases, including encephalitis and malaria, however, are still present or could be readily reintroduced. (Bohart and Washino 1978, Sacramento-Yolo County Mosquito Abatement and Vector Control District 1990.)

All species of mosquitoes require standing water to complete their growth cycle; therefore, any body of standing water represents a potential mosquito breeding site. Areas that pond surface water and are flushed by daily tides are not stagnant for periods sufficient for mosquito larvae to mature; therefore, such areas are not mosquito production sources, and are not of concern to MADs/VCDs (Maffei pers. comm.).

Water quality affects the productivity of a potential mosquito-breeding site. Typically, greater numbers of mosquitoes are produced in water bodies with poor circulation, higher temperatures, and higher organic content (and therefore with poor water quality) than in water bodies having good circulation, lower temperatures, and lower organic content (Collins and Resh 1989). Irrigation and flooding practices may also influence the level of mosquito production associated with a water body. Typically, greater numbers of mosquitoes are produced in water bodies with water levels that slowly increase or recede than in water bodies with water levels that are stable or that rapidly fluctuate (Jones & Stokes Associates 1995). Additionally, the types of vegetation growing in standing ponds can have major effects on mosquito production. For instance, mosquitoes will not reproduce in areas with an abundance of California cord grass, but they will reproduce in areas growing saltgrass and pickleweed (Maffei pers. comm.).

Mosquitoes are adapted to breed during periods of temporary flooding and can complete their life cycles before water evaporates and predator populations become well established. Poor drainage conditions that result in ponding water and water management practices associated with the creation of seasonal wetlands for waterfowl use result in the types of flooding that can produce problem numbers of mosquitoes (Jones & Stokes Associates 1995).

Permanent bodies of open water that have good water quality (good circulation, low temperatures, and low organic content) typically sustain stable nutrient content and support rich floral and faunal species diversity, including mosquito predators and pathogens. Wave action across larger bodies of water physically retards mosquito production by inhibiting egg-laying and larval survival (Jones & Stokes Associates 1995).

15.1.4 Project Setting

15.1.4.1 Recreation and Public Access

Napa River Unit

DFG has managed the salt ponds since 1994. The project area for the salinity reduction and habitat restoration options is composed of the Napa River Unit, and access to the northern project area requires travel through a portion of the Huichica Creek Unit of the NSMWA. Both these areas are largely open to the public, although there is limited access because of a lack of trails on-site. DFG provides two public parking lots, one on SR 37, ~~and one north of the salt ponds at the end of Buchli Station Road, and one at the end of Milton Road.~~ Access to the salt ponds is best accomplished by boat. Nearby boat launch facilities are provided on Cuttings Wharf Road and Skaggs Island Road (Figure 2-1).

Bird watching and hiking are allowed throughout the site except on the levees adjacent to Pond 2, and hunting and fishing are allowed everywhere except the northern portions of Ponds 1 and 1A, Pond 2, and Pond 8. DFG estimates from visitor log books that approximately 1,000 people use the site annually, including 600 hunters and 400 visitors engaged in other natural activities (Wyckoff pers. comm.).

There are two duck clubs in the area of the salt ponds. The Can Duck Club leases Pond 2 for hunting and fishing; there are 50 households that are members of the club. Hunting occurs mainly on the northern portion of Pond 2. There are approximately 16 duck blinds scattered on Pond 2. Approximately eight blinds are permanent and made of concrete. The rest of the blinds are wooden and need to be replaced every 5 years (Allen pers. comm.). The blinds are located a couple of hundred yards from the edge of the pond. The Can Duck Club has a clubhouse in the northwestern corner of Pond 2 and a caretaker's house in the northwestern portion of Pond 1. Their lease ~~has been is being~~ renegotiated with DFG and will expire in 2007~~6~~ (Wyckoff pers. comm., Allen pers. comm.). There is also a privately held duck club on the northeastern portion of the island on which Pond 6A is located. This parcel is privately owned. The property contains a simple structure for club member recreational use. Hunting and fishing occur throughout this property.

Separately from this project, DFG has prepared a draft recreation and public use plan for the NSMWA. This document will be incorporated into the NSMWA Management Plan. The recreation plan is expected to focus on improvement of public access and educational opportunities. The plan may include improving internal roads, constructing fishing platforms on restored ponds, improving footpaths, and repairing parking lots, interpretive signs, and display boards.

The Bay Plan identifies the Napa River Unit 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 east of the Napa River. One of the proposed Bay Trail alignments terminates at the Hudeman Slough boat launch off Skaggs Road in Sonoma County. Neither alignment transects the NSMWA.

Water Delivery Project and Program Component Areas

There are numerous parks and recreational facilities throughout Napa, Sonoma, and Marin Counties. Following are many of the parks in the Project and Program Component areas:

- Hollenberger Park, Rocky Memorial Dog Park, and Petaluma Marina, all south of Lakeville Road;
- Del Oro Park, Adobe Creek Golf and Country Club, and Miwok Park, all north of Lakeville Road;
- Huichica Creek Unit, Ringstrom Bay Unit, and Hudeman Slough, all south of Ramal Road;
- Wingo Unit, southwest of the Ringstrom Bay Unit with access from the Millerick Road exit off of SR 121;
- Deer Island Open Space Preserve, about 0.5 mile north of SR 37;
- Tolay Creek, just east of the intersection of SR 121 and SR 37;
- the Bay Trail, along SR 37; and
- Long Verde Open Space Preserve, west of U.S. 101.

15.1.4.2 Visual Resources

Napa River Unit

Visual resources in the project area are primarily rural with marsh, salt pond, and other undeveloped open space. The salinity reduction and habitat restoration alternatives would occur within salt ponds and be surrounded by the Skaggs Island Naval Reserve, the NSMWA, and associated creeks, sloughs, and the Napa River. The city of Vallejo lies to the southeast of the salt ponds.

Water Delivery Project and Program Component Areas

The areas of the Project and Program Components of the Water Delivery Option span primarily either pastureland or parallel rail lines. The Sonoma Pipeline would initially cross Schell Slough as it passes through grazed bayland. Once the Sonoma Pipeline begins paralleling the NWPRRA railroad, nearby landscapes include vineyard, marsh, and other open space. These landscapes would continue until the pipeline reaches the salt ponds. Other visual resources along this pipeline alignment include rural residences, farm support structures, and numerous creeks.

Segment 1 of the Napa Pipeline has been evaluated previously, and the effects on aesthetics were found to be less than significant. Segment 1, therefore, is not reevaluated under this resource category. Segment 2 of the Napa Pipeline would be constructed down Buchli Station Road. Surrounding landscapes include vineyard and open space as well as a scattering of homes. These landscapes continue until the pipeline reaches the salt ponds.

The CAC Pipeline would begin on Mezzetta Court, surrounded by warehouses in an industrial setting. As the pipeline alignment intersects Green Island Road, visual resources include scattered residences and vineyards. After the pipeline crosses the Napa River it would enter the salt ponds slated for restoration.

15.1.4.3 Public Health

Napa River Unit

From 1925, when NCMAD was established, until Cargill diked off the Napa River Unit for salt production, the project area was a problematic source of large mosquito populations. Each year, NCMAD used convict labor to place 50 to 100 ~~one hundred~~ 55-gallon drums of larvicidal oil around the marsh for treatment of shallow areas (Maffei pers. comm.).

Today, the ponds in the Napa River Unit are regularly patrolled by NCMAD, but there are few mosquito problems because of the high salinity levels of the ponds. When outbreaks do occur, they are usually in the northern reaches of the project area, on and around Edgerley Island. NCMAD treats problem areas with bacteria administered either by boat or by helicopter (Maffei pers. comm.).

Water Delivery Project and Program Component Areas

Mosquito abatement also occurs along the Water Delivery Option's Project and Program Component areas where suitable habitat exists in seasonal wetlands.

15.2 Environmental Impacts and Mitigation Measures

15.2.1 Methodology and Significance Criteria

15.2.1.1 Recreation and Public Access

The impacts of the project on recreation and public access were analyzed qualitatively, focusing on existing and proposed recreation and public access policies related to the project area, the types of changes expected to result, and the potential of the restoration changes to adversely affect current and proposed public access and recreational uses at the NSMWA.

Criteria based on the State CEQA Guidelines and professional judgment were used to determine the significance of recreation and public access impacts. The project would have a significant impact on recreation and public access if it would

- increase use of recreational facilities such that substantial physical deterioration of a recreational facility would occur or be accelerated;
- include recreational facilities or require the expansion of recreational facilities that might have an adverse physical effect on the environment;
- conflict with existing or planned recreational use and recreation policies; or
- conflict with existing or planned public access plans.

15.2.1.2 Visual Resources

The impacts of the project on visual resources were analyzed qualitatively. Criteria based on the State CEQA Guidelines and professional judgment were used to determine the significance of visual resources impacts. The proposed project would have a significant impact on visual resources if it would have a substantial adverse effect on a scenic vista.

15.2.1.3 Public Health

The impacts of the project on public health were analyzed qualitatively. Criteria based on professional judgment were used to determine the significance of public health impacts. In this analysis, an alternative would be considered to have a significant impact if habitat changes would necessitate increasing levels of mosquito abatement programs to maintain mosquito populations at preproject levels. Habitat changes that could result in a substantial decline of available

mosquito breeding habitat or greater efficiency of NCMAD's abatement program would be considered beneficial impacts.

15.2.2 No-Project Alternative

Implementation of the No-Project Alternative would result in degraded habitat conditions for wildlife as well as mosquitoes. 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 structures would deteriorate, ultimately reducing DFG's ability to manage water and salinity levels for wildlife. Habitat quality decline would result in reduced levels of resident and migrating wildlife, therefore resulting in decreasing recreational uses such as bird watching, hunting, and fishing. Thus, the No-Project Alternative conflicts with the Napa and Solano County recreation policies and the Bay Plan. Public access and mosquito abatement opportunities would remain unchanged, as existing access would be maintained and mosquito production would remain the same or possibly be reduced because of higher salinities. Views would also become degraded as a result of loss of habitat. There would be no impact on public access, mosquito abatement, or scenic vistas and therefore, this impact is considered less than significant.

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

15.2.3.1 Beneficial Impact R-1: Enhanced Recreational Opportunities

As described in Chapter 6, "Biological Resources—Wildlife," and Chapter 7, "Biological Resources—Aquatic Resources," a number of species would benefit from an increase in suitable habitat provided by the salinity reduction process. Overall, as habitat quality increases, the recreational potential of the project site would increase. The public is expected to be attracted to the site as species populations and composition increase. Specifically, recreational use of the site for bird watching, hunting, and fishing is expected to increase.

Pond 2 would not be affected by the salinity reduction process. Pond 2 would continue to be managed as a deepwater pond. Therefore, the Can Duck Club would benefit by this option as overall quality of the site improves because as the habitat quality increases, more waterfowl would be attracted to the site. However, the Can Duck Club lease will be terminated in 2007, and public hunting will be allowed. The private duck club near Pond 6A would also benefit by the improved habitat quality.

This option is in compliance with Napa County and Solano County recreation policies and the Bay Plan. The Bay Plan designates the project site as a wildlife area and managed wetlands, which is in accordance with the goals of the project.

This option would improve recreational potential. This impact is considered beneficial. No mitigation is required.

15.2.3.2 Impact R-2: Consistency with Existing or Proposed Public Access Plans

Proposed alignments of the Bay Trail are located along the northern and eastern periphery of the NSMWA. Therefore, implementation of this option would not conflict with the Bay Trail. Given the proximity of the Bay Trail, the NSMWA might serve as a destination for Bay Trail users. The Bay Plan designates the project site as a wildlife area and managed wetlands, which is in accordance with the goals of the project. This option would be in compliance with the proposed recreation and public use plan because this project would be integrated into it. This impact is considered less than significant. No mitigation is required.

15.2.3.3 Impact R-3: Accelerated Physical Deterioration of a Recreational Facility or Adverse Effects from Facility Expansion

Reduction of salinity in ponds would improve habitat quality for many species. As habitat improves and the visual quality of the site increases, recreational uses are expected to increase. DFG would upgrade existing recreation facilities as needed to maintain the recreational facilities of the NSMWA (Wyckoff pers. comm.). This impact is considered less than significant. No mitigation is required.

15.2.3.4 Impact R-4: Temporary Effect of Construction on Public Access

Public access would be limited during construction. The public would be restricted from accessing the levee road along Ponds 7 and 7A and from navigating portions of Napa Slough. Access to the project site where heavy equipment is being operated, specifically during the construction of water control structures at Ponds 3, 4, 5, and 6A and maintenance of levees on Ponds 1, 1A, 2, 6/6A, 7, 7A, and 8, also would be restricted. Access to water control structures and monitoring equipment would be restricted as well.

Restricted access would be limited to specific areas surrounding the construction activities and would last for several months. A small portion of the NSMWA

would require restricted access. The public would have access to the majority of the site and NSMWA during construction activities. Once the activities are completed, previous public access would resume. This impact is considered less than significant. No mitigation is required.

15.2.3.5 Impact R-5: Substantial Adverse Effect on a Scenic Vista

Construction activity, such as the operation of heavy equipment and material storage, would temporarily change the visual character of the area; however, these effects would be temporary and the project is not located in a designated scenic area. It is anticipated that areas disturbed by construction activities would revegetate naturally. Therefore, construction would not cause a permanent effect on the aesthetic quality of the area. This impact is considered less than significant. No mitigation is required.

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

Impacts under Salinity Reduction Option 1B are nearly the same as those under Salinity Reduction Option 1A for Beneficial Impact R-1 and Impacts R-2, R-3 and R-5. Impact R-4 is lessened because there would be less construction; it remains less than significant. As described in Impact R-6, Salinity Reduction Option 1B would increase mosquito production.

15.2.4.1 Impact R-6: Increased Mosquito Production

While one of the goals of this salinity reduction option and the habitat restoration options is to achieve full tidal exchange in selected ponds, preliminary modeling efforts show that creation of some nontidal, stagnant areas may occur. Increased tidal muting would result in an increase in mosquito production.

However, mosquito reproduction is prevented in ponds by California cord grass growth, and the project area contains one of the Bay Area's best remaining stands of this species, on Coon Island. Because areas of new sedimentation are generally colonized by the species of plants that already inhabit the area, California cord grass is expected to colonize the project's newly created shallow-water ponds. This was the case when Pond 2A was restored to tidal action; as the sediments built up in the pond, California cord grass began to reestablish itself in the pond, and there have been no mosquito problems in that pond.

However, because of the possibility that California cord grass would not colonize some areas, it could take longer for some ponds to become restored, and these ponds could become a problem source of mosquitoes. In that event, NCMAD

would need to increase abatement activities. This impact is considered significant. Implementation of Mitigation Measure R-1 would reduce this impact to a less-than-significant level.

Mitigation Measure R-1: Coordinate Project Activities with the Napa County Mosquito Abatement District

The project sponsors will coordinate with NCMAD during the design, implementation, and operations phases of the project. Specifically, they will

- consult with NCMAD during the project design phase to incorporate design elements to reduce the mosquito production potential of the project;
- permit NCMAD to have access to the project area to monitor or control mosquito populations;
- consult with NCMAD regularly to identify mosquito management problems, mosquito monitoring and abatement procedures, and opportunities to adjust water management practices in nontidal wetlands to reduce mosquito production during problem periods; and
- consult with NCMAD to identify opportunities for DFG to share costs, obtain the necessary permits from the Corps, BCDC, the San Francisco Bay RWQCB, and USFWS, and otherwise participate in implementing mosquito abatement programs, if it is necessary for NCMAD to increase mosquito monitoring and control programs beyond preproject levels.

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

Salinity Reduction Option 1C is nearly the same as Salinity Reduction Option 1B except that more levees would be breached. The impact conclusions and mitigation are the same.

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

Impacts under Salinity Reduction Option 2 are nearly the same as those under Salinity Reduction Option 1A for Impacts R-2, R-4, and R-5. Impact R-3 is slightly different and is described below.

15.2.6.1 Impact R-3: Accelerated Physical Deterioration of a Recreational Facility or Adverse Effects from Facility Expansion

Ponds 1, 1A, and 2 would be temporarily affected by increased levels of salinity. Increased salinity levels could adversely affect wildlife and fish populations and thus recreational activities. However, in the long term, salinity levels of Ponds 1, 1A, and 2 would begin to decrease as salinity in the upper ponds begins to decrease in less than 10 years. This option would degrade recreational opportunities in the short term by degrading habitat quality for a large number of species, then would enhance habitat and opportunities in the long term. Because of the numerous other hunting, fishing, and birdwatching opportunities within a short distance of the project area and the long-term habitat values provided by the project, this impact is considered less than significant. No mitigation is required.

15.2.7 Water Delivery Option

15.2.7.1 Impact R-5: Substantial Adverse Effect on a Scenic Vista

Water Delivery Project Component (Sonoma Pipeline)

Activity associated with construction of the Sonoma Pipeline, such as the operation of heavy equipment and material storage, would change the visual character of the area; however, these effects would be temporary. ~~It is anticipated that~~ The areas disturbed by construction activities would be returned to preproject conditions or better at the end of the proposed construction activities (i.e., at the completion of construction activities, previously vegetated areas would be reseeded); therefore, construction would not cause a permanent effect on the aesthetic quality of the area. This impact is considered less than significant. No mitigation is required.

Water Delivery Project Component (Napa Pipeline)

Construction activity along the Napa Pipeline alignment, such as the operation of heavy equipment and material storage, would change the visual character of the area. Similar to impacts of the Sonoma Pipeline, these impacts would be temporary. The Napa alignment does, however, border comparatively more occupied areas. While there would be residents who would be able to view the construction activity, such activity would not cause a permanent effect on the aesthetic quality of the area. The pipeline would be placed below ground and the surface restored after construction is completed (i.e., previously vegetated areas would be reseeded and previously paved areas would be repaved). This impact is considered less than significant. No mitigation is required.

Project Component (CAC Pipeline)

Similar to the Napa Pipeline alignment, the CAC Pipeline alignment borders areas where residents would be able to view the construction activity. The construction activity, including operation of heavy equipment and material storage, would change the visual character of the area. These impacts, however, would be temporary. Such construction activities would not cause a permanent effect on the aesthetic quality of the area. The pipeline would be placed belowground and the surface restored after construction is completed (i.e., previously vegetated areas would be reseeded and previously paved areas would be repaved). This impact is considered less than significant. No mitigation is required.

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. It is anticipated, however, that construction-related visual resources impacts of the Program Component would be comparable to those described above for the Project Component. Based on preliminary alignment configurations, construction corridors would border sections of residential, commercial, agricultural, and industrial land uses. As described above, views may be temporarily affected by the presence of heavy machinery or on-site storage of soil, pipeline, or other related material. ~~It is anticipated that~~ These views would be restored to preproject conditions upon completion of construction. The permanent piece of the project, the pipeline, would be underground and out of view, therefore not causing a lasting visual resource impact. This impact is considered less than significant. No mitigation is required.

15.2.7.2 Impact R-7: Short-Term Conflicts with Existing or Proposed Recreational Use and Recreation Policies

Water Delivery Project Component (Sonoma Pipeline)

The Sonoma Pipeline alignment would occur along a railroad ROW. South of the proposed pipeline alignment, beyond the railroad ROW, is the Huichica Creek Unit, a wildlife preserve that can be accessed only at Buchli Station Road at the east end of the alignment. The pipeline would be placed beneath Buchli Station Road where a parking lot is located. Access may be limited for a period of time until the construction crews complete the pipeline in the area. Buchli Station Road in the project area is a road used specifically for access to the salt marshes and is lightly traveled, with access limited to, or through, DFG personnel. The Sonoma Pipeline alignment also would cross south of a parking lot that serves as an access point to the Ringstrom Bay Unit. Access may be

limited temporarily while construction crews are in the immediate area. This impact is considered significant. Implementation of Mitigation Measure R-2 would reduce this impact to a less-than-significant level.

Mitigation Measure R-2: Prepare a Public Access Plan

Before beginning construction, the contractor will develop, in consultation with the appropriate representative(s) of DFG, a plan indicating how public access to the Napa River Unit will be maintained during construction. If needed, flaggers will be stationed near the construction activity area to direct and assist members of the public around the activity areas while maintaining access to the Napa River Unit.

Project Component (Napa Pipeline)

Similar to the Sonoma Pipeline, the Napa Pipeline alignment would be placed beneath Buchli Station Road. This road is used for access to DFG's Huichica Creek Unit of the NSMWA. Access may be limited for a period of time until the construction crews complete the pipeline in the area. This impact is considered significant. Implementation of Mitigation Measure R-2, "Prepare a Public Access Plan," described above under the Sonoma Pipeline would reduce this impact to a less-than-significant level.

Water Delivery Project Component (CAC Pipeline)

The CAC Pipeline alignment would extend down Green Island Road, which is bordered by residential, commercial, and industrial land uses. Mezzetta Road is bordered by industrial land uses. There are no recreational facilities in the immediate area. The nearest community park is approximately 0.5 mile south of Green Island Road and would not be affected by project construction. There would be no impact. No mitigation is required.

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. Based on preliminary alignment configurations for the Program Component, construction corridors would have the potential to affect access to recreational facilities. There are many facilities near the proposed alignments, as outlined above, such as Deer Island Open Space Preserve. During construction along SR 37, access to Deer Island Lane, an entranceway to the preserve, may be limited. Additional recreational facilities, such as wineries located along Lakeville Road and Sears Point Raceway, could also potentially be affected by limited access as a result of construction. These facilities, while not publicly owned, provide recreational uses for the public. This impact is considered a significant impact. Implementation of Mitigation Measure R-2, "Prepare a Public Access Plan," would reduce this impact to a less-than-significant level. This measure is described under "Water Delivery Project Component (Sonoma Pipeline)" above.

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

Impacts under Habitat Restoration Option 1 are nearly the same as those under Salinity Reduction Option 1A for Impacts R-1, R-2, R-3, and R-4 and Salinity Reduction Option 1B for Impact R-6. The effects on existing recreation and the effects of temporary construction on public access differ slightly from those discussed under Salinity Reduction Option 1A. Beneficial Impact R-8, an impact on visual resources described below, is unique to the habitat restoration options.

15.2.8.1 Beneficial Impact R-8: Enhancement of Existing Visual Character

Visual resources would be beneficially affected by the restoration of habitat in the Napa River Unit. Views from the scenic roadway SR 37 and from I-80 near American Canyon would be enhanced with the improvement of habitat quality, and the habitat would be more diverse and visually appealing. More wildlife would be visible, and the project would not create any nighttime glare or impede the quality of the scenic vista. This impact is considered beneficial. No mitigation is required.

15.2.9 Habitat Restoration Option 2: Tidal Marsh Emphasis

Impacts under Habitat Restoration Option 2 are nearly the same as those under Salinity Reduction Option 1A for Impacts R-2, R-3, and R-4; Salinity Reduction Option 1B for Impact R-6; and Habitat Restoration Option 1 for Beneficial Impact R-8. Impact R-9 is unique to this option and is described below.

15.2.9.1 Impact R-9: Conflict with Existing or Proposed Recreational Uses, or Recreation Plans and Policies

As described in Chapter 6, “Biological Resources—Wildlife,” and Chapter 7, “Biological Resources—Aquatic Resources,” restoration would improve wildlife habitat. As wildlife populations increase, recreation opportunities related to wildlife would increase, such as bird watching, hunting, and fishing. Species dependent on tidal marsh habitat would benefit from this option.

Management of Pond 2 as a deepwater pond would continue in the short term. In the long term, however, the eastern half of Pond 2 would evolve to tidal marsh. Duck hunting activities would likely be reduced or eliminated in this half of Pond

2. Even if hunting is possible, wooden duck blinds located on this portion of the pond would be affected. These duck blinds could be subject to instability based on tidal influence. While Pond 2 may decrease habitat used by waterfowl, the restoration of Ponds 7, 7A, and 8 would provide potential waterfowl habitat. Ponds 6 and 6A would also become evolving tidal marsh. The net effect on waterfowl is uncertain; however, DFG would continue to manage for multiple uses, including hunting, and the project sponsors would monitor waterfowl use of the project area. As proposed, Habitat Restoration Option 2 does not conflict with existing or proposed recreational uses or recreational plans and policies. This impact is considered less than significant. No mitigation is required.

15.2.10 Habitat Restoration Option 3: Pond Emphasis

Impacts under Habitat Restoration Option 3 are nearly the same as those under Salinity Reduction Option 1A for Impacts R-2, R-3, and R-4; Salinity Reduction Option 1B for Impact R-6; and Habitat Restoration Option 1 for Beneficial Impact R-8.

15.2.11 Habitat Restoration Option 4: Accelerated Restoration

Habitat Restoration Option 4 is nearly the same as Habitat Restoration Option 1, except that Habitat Restoration Option 4 includes design features that would accelerate the restoration process. Impacts under Habitat Restoration Option 4 are nearly the same as those under Salinity Reduction Option 1A for Impacts R-2, R-3, and R-4; Salinity Reduction Option 1B for Impact R-6; and Habitat Restoration Option 1 for Beneficial Impact R-8.