4.7 Land Use

This section presents an analysis of potential land use impacts that would result from implementation of the Los Vaqueros Reservoir Expansion Project. The section includes a description of existing conditions, the associated regulatory framework (including applicable land use policies), significance criteria, and environmental impact analysis.

4.7.1 Affected Environment

Regulatory Setting

Federal

Federal Aviation Administration

The Federal Aviation Administration (FAA) is the branch of the U.S. Department of Transportation with regulatory responsibility for civil aviation. It is responsible for establishing policies and regulations to ensure the safety of the traveling public. The FAA oversees publicly owned airports that are open to the public and airports that receive federal funding.

FAA Advisory Circular 150/5200-33B addresses hazardous wildlife attractants on or near airports (FAA, 2007). This Advisory Circular is intended to provide guidance on siting certain land uses that have the potential to attract potentially hazardous wildlife to a public-use airport or its vicinity. The FAA Advisory Circular recommends against “land use practices that attract or sustain populations of hazardous wildlife within the vicinity of airports or cause movement of hazardous wildlife onto, into, or across the approach or departure airspace, aircraft movement area, loading ramps, or aircraft parking area of airports.” The Advisory Circular recommends a separation distance of 5,000 feet between potential hazardous wildlife attractants and aircraft movement areas at facilities that support piston-powered aircraft, and a 10,000-foot distance between potential hazardous wildlife attractants and airports that support turbine-powered aircraft. The separation distance recommendation extends to 5 statute miles for approach-departure areas. For projects that are outside the 5,000 or 10,000-foot criteria but within 5 statute miles of the airport’s air operations area, the FAA may review development plans, proposed land-use changes, operational changes, or wetland mitigation plans to determine whether such changes in land use would create potential wildlife hazards to aircraft operations.

FAA is also responsible for enforcing the Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, which provides guidance for the height of objects that may affect normal aviation operations. Tall structures, construction cranes, trees, or high terrain on or near airports may constitute hazards to aircraft. Through the FAA regulatory review process, implementing agencies or project proponents submit design plans for proposed projects in the vicinity of airports for FAA to evaluate whether the project or its construction has the potential to interfere with normal aviation operations and create safety hazards for air travelers and those on the ground.
State Lands Commission

The State Lands Commission has jurisdiction over 4.5 million acres of land held in trust for Californians. The State Lands Commission’s jurisdiction includes a 3-mile-wide section of tidal and submerged land next to the coast and offshore islands, including bays, estuaries, and lagoons. It also includes the waters and underlying beds of more than 120 rivers, lakes, streams, and sloughs. The State holds these lands for the public trust purposes of water-related commerce, navigation, fisheries, recreation, and open space. The State Lands Commission may grant dredging permits and issue land use leases for construction and operation of facilities within its jurisdiction. It does not have a comprehensive use plan for these lands but manages them according to state laws and regulations.

Of the areas where facilities could be sited under the proposed project, the commission’s jurisdiction includes Old River, at the location of the existing Old River Intake and Pump Station and proposed new Delta Intake and Pump Station. Contra Costa Water District (CCWD) currently has a lease for the existing Old River Intake Facility, and a new lease would be required for a new Delta Intake and Pump Station. In addition, construction and operation of these facilities may require obtaining a General Permit from the State Lands Commission.

Land Use and Resource Management Plan for the Delta

The Delta Protection Act of 1992 established the Delta Protection Commission, a state entity created to plan for and guide the conservation and enhancement of the natural resources of the Delta while also sustaining agriculture and meeting increased recreational demand. The Delta Protection Act defines a Primary Zone, which is the principal jurisdiction of the Delta Protection Commission. The act requires the Delta Protection Commission to prepare and adopt a management plan for the Delta, which must meet specific goals.

In 1995, the Delta Protection Commission adopted the Land Use and Resource Management Plan for the Delta. Local general plans within the Primary Zone must be consistent with the management plan, and subsequent project approvals must be consistent with those general plans (Delta Protection Commission, 1995). No existing or proposed Los Vaqueros Reservoir Expansion facilities are within the Primary Zone of the Delta.

The Secondary Zone is the area outside the Primary Zone and within the “Legal Delta”; the Secondary Zone is not within the planning area of the Delta Protection Commission, but the Delta Protection Commission may comment on development projects within the Secondary Zone in the event that a project in the Secondary Zone could affect lands within the Primary Zone. Lands within the Secondary Zone are subject to the land use authority of local government. The Land Use section of the Land Use and Resource Management Plan for the Delta includes the following policies and land use recommendations related to development and activities within the Secondary Zone of the Delta:

- Local government policies regarding mitigation of adverse environmental impacts under the California Environmental Quality Act may allow mitigation beyond county boundaries,
if acceptable to reviewing fish and wildlife agencies, for example in approved mitigation banks. Mitigation in the Primary Zone for loss of agricultural lands in the Secondary Zone may be appropriate if the mitigation program supports continued farming in the Primary Zone.

**R-5.** To the extent possible, any development in the Secondary Zone should include an appropriate buffer zone to prevent impacts of such development on the lands in the Primary Zone. Local governments should consider needs of agriculture in determining such a buffer.

The Utilities and Infrastructure section of the *Land Use and Resource Management Plan for the Delta* includes the following policy related to development and activities within the Secondary Zone of the Delta:

**P-1.** Impacts associated with construction of transmission lines and utilities can be mitigated by locating new construction in existing utility or transportation corridors, or along property lines, and by minimizing construction impacts. Before new transmission lines are constructed, the utility should determine whether an existing line has available capacity. To minimize impacts on agricultural practices, utility lines shall follow edges of fields. Pipelines in utility corridors or existing rights-of-way shall be buried to avoid adverse impacts to terrestrial wildlife. Pipelines crossing agricultural areas shall be buried deep enough to avoid conflicts with normal agricultural or construction activities. Utilities shall be designed and constructed to minimize any detrimental effect on levee integrity or maintenance (DWR, 1995).

Proposed project facilities within the Secondary Zone of the Delta include Delta Intake Facilities (both the existing Old River Intake and Pump Station and the new Delta Intake and Pump Station); most of the Delta-Transfer Pipeline; most of the Western Power Supply facilities including a potential Western Substation under Power Option 1 (Western Only); and the portion of the Transfer-Bethany Pipeline closest to the California Aqueduct (Eastside Option).

**Local**

As a special district that provides public utility services, CCWD is typically exempt (under Government Code Section 53091 et seq.) from local zoning and building ordinances. In addition, Sections 53091 and 53096 of the code exempt the location or construction of facilities for the production, generation, storage, treatment, or transmission of water from regulation under local zoning ordinances and (according to case law) general plans. There may be other local plans and regulations with which the proposed action and alternatives would need to be in compliance. Under other Government Code sections (Sections 65401 and 65402), CCWD is required to report to the local planning jurisdiction (i.e., city or county) any land acquisition or disposal, or the construction of any public building or structure, if a locally adopted general plan or part thereof is applicable to the proposed activity. The affected city or county has a period to review, comment, and make a determination of whether a proposed activity is consistent with its general plan; however, CCWD’s Board of Directors can overrule this determination by a four-fifths vote.

Throughout this Environmental Impact Statement/Environmental Impact Report (EIS/EIR), local planning documents and relevant policies are discussed to provide additional information to the public, other agencies, and decision-makers, although these plans and policies may not be directly applicable to CCWD and the proposed project. **Figure 4.7-1** shows the communities in the vicinity of the Los Vaqueros Expansion Project.
Figure 4.7-1
Communities in the Vicinity of the Los Vaqueros Expansion Project

SOURCE: USGS, 1993 (base map); Contra Costa County, 2005; and ESA, 2007

Los Vaqueros Reservoir Expansion Project EIS/EIR . 201110
Contra Costa County General Plan

The Contra Costa County General Plan identifies goals, policies, and implementation measures related to the future development of unincorporated areas of the county. The General Plan provides overall policy direction as well as providing adopted land use policies specific to the East County Area and to the Southeast County Area (a part of the East County Area). The East County geographic area covers the eastern quarter of the county, which includes all proposed project components, while the Southeast County area covers the Los Vaqueros Watershed and also east and south to the county line (Contra Costa County, 2005a). Although the East County Area covers the northern portion of the project area, East County Area policies address land development near Oakley and in the Primary Zone of the Delta, and do not include topics relevant to the proposed project; therefore, policies for the East County Area are not discussed further in this EIS/EIR.

Adopted Southeast County Area policies in the General Plan address protection of natural and cultural resources that lie within the planning area for CCWD (Policy 3-70) and Los Vaqueros Reservoir (Policy 3-73). The full text of these policies is provided in Appendix E-2 of this EIS/EIR. Land use categories in the project area within Contra Costa County include Watershed, Agricultural Lands, Agricultural Core, Delta Recreation, Parks and Recreation, and Public/Semi-Public. These six categories are described below. Additional Southeast County Area policies include the preservation of agricultural and watershed areas for public uses, while allowing other uses in the area such as wind energy farms, mineral extraction, and reservoirs (Policy 3-68). Policy 3-69 indicates that pipelines and transmission lines are considered generally consistent with planned agricultural areas, subject to specific project review and county land use policies.

All anticipated project facilities would be outside of the county’s Urban Limit Line (ULL). The ULL, which includes the unincorporated towns of Byron and Discovery Bay, is an established boundary beyond which no urban land uses can be established. The ULL ensures that non-urban agricultural, open space and other areas are preserved. Figure 4.7-2 shows both the Contra Costa County General Plan and Alameda County “East County Area Plan (ECAP): A Portion of the Alameda County General Plan” land use designations for the project area (see subsection on ECAP below). ECAP serves as the general plan policy document for the area of Alameda County where a portion of the Transfer-Bethany Pipeline would be located.

Watershed. The Watershed designation primarily covers land owned by the two major water suppliers in Contra Costa County: the East Bay Municipal Utility District and CCWD. CCWD lands surrounding Los Vaqueros Reservoir are designated in the general plan as Watershed (see Figure 4.7-2). The purpose of the Watershed designation is to protect public water supplies. Uses within Watershed areas include public water supplies stored in reservoirs, such as the Los Vaqueros Reservoir. To safeguard such reservoirs, uses in Watershed areas are limited to livestock grazing; intensive agriculture that does not rely on pesticides or other chemical fertilizers; passive, low-intensity recreational uses such as hiking and biking; and small-scale commercial uses that support picnicking, boating, and fishing activities on the adjacent reservoirs (Contra Costa County, 2005a).
Los Vaqueros Reservoir Expansion Project EIS/EIR, 2011

Figure 4.7-2
General Plan Land Uses

SOURCE: USGS, 1993 (base map); Alameda County, 2002; and ESA, 2008
Proposed project facilities in the Watershed designation include the Los Vaqueros Reservoir Expansion/Dam Modifications with its Appurtenant Facilities (i.e., spillway, inlet-outlet works, and hypolimnetic oxygenation System), reservoir inundation areas, and borrow areas. Most of the Transfer-LV Pipeline, the westernmost electrical facilities (including a potential PG&E substation under Power Supply Option 2 [Western & PG&E]), and all CCWD recreational facilities (Marina Complex, Interpretive Center, hiking trails, access, and other facilities) are also in watershed-designated areas. Temporary construction facilities in the watershed designated area include staging areas and a stockpile area.

**Agricultural Lands.** The Agricultural Lands designation covers most of the privately owned rural lands in the county that are not composed of prime soils or located in or near the Delta. The purpose of the Agricultural Lands designation is to preserve and protect lands capable of and generally used for the production of food, fiber, and plant materials. This land use designation is not intended to exclude or limit other types of agricultural, open space, or non-urban uses. Additionally, allowable uses identified for lands under the Agricultural Core, Delta Recreation and Resources, Watershed, Parks and Recreation, and Open Space designations are allowed within Agricultural Lands. This includes water supply reservoirs and supporting pipelines and transmission lines (subject to specific project review) which are also allowed under the Watershed designation. The maximum allowable density in this category is one dwelling unit per 5 acres. Within Contra Costa County, a large portion of the area east of the Los Vaqueros administrative watershed boundary is designated as Agricultural Land. Much of this land is hilly and used for grazing livestock or for dry-grain farming.

Proposed Conveyance Facilities within the Agricultural Lands designated area include portions of the Delta-Transfer Pipeline; all of the Transfer Facility Expansion area; part of the Transfer-LV Pipeline; and the large majority of the Transfer-Bethany Pipeline to the Alameda County border. Proposed electrical supply facilities in the Agricultural Lands designated area include transmission lines and a potential Western Substation under Power Option 1 (Western Only) as well as some of the transmission lines under Power Option 2 (Western & PG&E).

**Agricultural Core.** The Agricultural Core designation applies to agricultural lands that are composed primarily of prime (Class I or II) soils, as identified by the Land Use Capability Classifications of the Natural Resources Conservation Service. Prime soils are considered to be the very best soils for farming a wide variety of crops. Lands designated as Agricultural Core lie to the east of the city of Brentwood, west of the town of Discovery Bay, and north of the town of Byron. Much of the land in this designation is being actively cultivated with intensive row crops.

The purpose of the Agricultural Core designation is to preserve and protect the county’s farmlands that are the most capable of, and that are generally used for, the production of food, fiber, and plant materials. The Agricultural Core designation helps maintain economically viable, commercial agricultural units by requiring a higher minimum parcel size than the Agricultural Lands designation. Minor subdivisions and “ranchette” housing development are specifically discouraged.
The uses that are allowed in the Agricultural Core designation are generally the same as those allowed in the Agricultural Lands designation. The County General Plan discourages the placement of public roadways or new utility corridors that would adversely affect the viability of Agricultural Core lands, if economically feasible alternatives exist (Contra Costa County, 2005a).

Proposed project facilities within the Agricultural Core designation include a portion of the Delta-Transfer Pipeline and power transmission lines which will follow the same alignment as the pipeline. Both the Delta-Transfer Pipeline and the powerlines will be in an existing utility easement along State Route 4 (SR 4) or other existing roadway, and would not necessitate a new utility corridor.

**Delta Recreation and Resources.** The Delta Recreation and Resources land use designation encompasses the islands and adjacent lowlands of the San Joaquin–Sacramento Delta. In the vicinity of the proposed project, Delta Recreation and Resources lands are east and south of the town of Discovery Bay, extending south to Clifton Court Forebay. Delta Recreation and Resources lands are also east and south of Clifton Court Forebay. Much of the land designated as Delta Recreation and Resources is currently in agricultural production.

The Delta Recreation and Resources designation was created to balance the recreational opportunities in the area with the need to allow only low-intensity uses that will not subject residents or visitors to the flood dangers associated with the Delta. Agriculture and wildlife habitat are considered the most appropriate uses in the area; limited recreation uses that do not conflict with the predominant agricultural and habitat uses are also allowed.

Uses that may be allowed through the issuance of a land use permit include: marinas, shooting ranges, duck and other hunting clubs, campgrounds, and other outdoor recreation complexes. Conditional uses allowed on Delta Recreation and Resources lands are limited to uses that do not rely on urban levels of service or infrastructure (i.e., need a public water or sewer system) and that will not draw large numbers of people to flood-prone areas (Contra Costa County, 2005a).

Proposed project facilities within the Delta Recreation and Resources designation include the new Delta Intake and Pump Station, the eastern portion of the Delta-Transfer Pipeline, and a small portion of the transmission line under Power Option 1 (Western only).

**Parks and Recreation.** The Parks and Recreation designation includes publicly owned city, county, CCWD, and regional park facilities. Public and privately owned golf courses are also designated as Parks and Recreation.

Allowable uses in the Parks and Recreation land use designation are passive and active recreation-oriented activities and associated commercial uses such as snack bars and restaurants. This General Plan designation does not allow new privately owned residences or commercial uses or the subdivision of land (Contra Costa County, 2005a).

Less than 1 acre of a temporary construction easement for the Transfer-LV Pipeline would extend into Parks and Recreation designated land next to Walnut Boulevard.
Public/Semi-Public. The Public and Semi-Public land use designation includes properties owned by public governmental agencies (i.e., CCWD), public transportation corridors, and privately owned transportation. Allowable land uses include transportation and utility corridors, such as railroads, PG&E lines, and pipelines. This General Plan category allows a wide variety of public and private uses. Private residences, private commercial uses, and the subdivision of land are not considered compatible with this designation (Contra Costa County, 2005).

Proposed project facilities within the Public/Semi-Public land use designation include the existing Old River Intake and Pump Station, a small portion of the Delta-Transfer Pipeline, and possibly a portion of the Transfer-Bethany Pipeline under its Eastside Option, near the California Aqueduct. The Byron Airport, a county-owned general aviation airport, also occurs under this designation.

Alameda East County Area Plan – A Portion of the Alameda County General Plan

The ECAP was adopted in 1994 and most recently updated in 2002 as a portion of Alameda County’s General Plan. The purpose of the ECAP is to present a clear statement of Alameda County’s intent concerning future development and resource conservation within East County. East County (formerly called the Livermore-Amador Valley Planning Unit) encompasses 418 square miles of eastern Alameda County and includes the cities of Dublin, Livermore, Pleasanton, and a portion of Hayward as well as surrounding unincorporated areas. The planning area extends from the Pleasanton/Dublin ridgeline on the west to the San Joaquin County line on the east, and from the Contra Costa County line on the north to the Santa Clara County line on the south.

ECAP’s primary goal is to “clearly delineate areas suitable for urban development and open space areas for long-term protection of natural resources, agriculture, and public safety.” It implements its stated purpose through emphasis on use of land outside of urban growth boundaries for non-urban purposes (Alameda County, 2002). Other goals pertain to the protection of regionally significant open space (Open Space Goal), the maximization of long-term productivity of East County’s agricultural resources (Agriculture Goal), the protection of watershed lands from the direct and indirect effects of development (Watershed Goal), and the protection of biological and scenic resources (Biological Resources and Scenic Viewsheds Goals) (Alameda County, 2002). These goals and policies are listed in Appendix E-1 of this EIS/EIR.

The geographic area of the ECAP includes the southernmost portion of the two Transfer-Bethany Pipeline alignment options (Westside Option and Eastside Option). Both Transfer-Bethany Pipeline Options cross ECAP land areas designated Large Parcel Agriculture, Major Parks, and Wind Resource Area, all defined below. The Los Vaqueros Reservoir Expansion Project is outside of the ECAP Urban Growth Boundary.

Large Parcel Agriculture. This land use designation permits agricultural uses, agricultural processing facilities, limited agricultural support service uses, secondary residential units, visitor-serving commercial facilities, recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, wind farms, and related facilities, utility corridors, and similar uses compatible with agriculture (Alameda County, 2002). Portions of both potential Transfer–Bethany Pipeline alignments (Westside Option and Eastside Option) are within lands designated as Large Parcel Agriculture.
**Major Parks.** The Major Parks land use designation provides for existing and planned public parks, open space, and recreational uses including community, subregional, and regional facilities (Alameda County, 2002). The existing Bethany Reservoir and portions of both the Westside and Eastside Options for the Transfer-Bethany Pipeline are within the Major Parks designation area.

**Wind Resource Area.** The Wind Resource Area overlays much of the Large Parcel Agriculture and the Major Parks land use designations. Policy 173 of the ECAP discourages the development of uses and structures within areas designated as a Wind Resource Area that are not compatible with wind-energy operations. Currently, in addition to wind energy facilities, agriculture is the primary use in this area (Alameda County, 2002). The existing Bethany Reservoir and portions of both the Westside and Eastside Options for the Transfer-Bethany Pipeline are within the Wind Resource Area.

**Contra Costa County Airport Land Use Compatibility Plan**

The Contra Costa County Airport Land Use Compatibility Plan (ALUCP) serves as a planning tool to promote compatibility between airports in Contra Costa County and the surrounding land uses. The Contra Costa County Airport Land Use Commission adopted an ALUCP in December 2000. The Commission uses the ALUCP to review airport and adjacent land use development proposals. Other local agencies use compatibility criteria included in the ALUCP to prepare or amend their land use plans and ordinances (ALUCP, 2000). According to the State Aviation Act, General Plans must be made consistent with the ALUCP within 18 months of its adoption.

The Contra Costa County ALUCP presents land use policies that pertain only to the Airport Influence Area (AIA) associated with two airports: Buchanan Field Airport (in western Contra Costa County) and Byron Airport. The AIA associated with each airport includes the area that could be affected by aircraft noise, safety, overflight impacts, or potential hazards to aircraft. The AIA for each airport extends about 2 to 3 miles from the airport runways. Byron Airport is about 1 mile east of the Transfer-Bethany Pipeline alignment along Vasco Road, and 3 miles south of the Delta-Transfer Pipeline along SR 4. In addition, about 1 mile east of the airport, a 69 kilovolt (kV) electrical power line is proposed for construction within an existing transmission corridor under Power Option 1 (Western Only). **Figure 4.7-3** shows these pipelines and the transmission line in the vicinity of Byron Airport and within the ALUCP compatibility zones.

ALUCP policies identify potential limitations associated with land uses, building designs, structure heights, and population densities and intensities for areas near the Byron Airport, and typically require the Airport Land Use Commission to review proposed objects within the AIA. Height limitations, which are relevant to the proposed project power line poles, range from 35 feet for areas closest to the runway (Zone B1) to 70 feet (Zone B2) to 100 feet (Zones C1, C2, and D). Additional limitations are set with regard to noise exposure (addressed in Section 4.11) and Hazards to Flight (Policy 6.9.3) such as water bodies or landscape features to attract birds and electrical hazards. The Compatibility Criteria for Zones B1, B2, C1, C2, D, and “All Zones” is included in Appendix E of this EIS/EIR (ALUCP, 2000).
The ALUCP includes countywide policies, which apply to the AIA associated with both airports, and airport-specific policies that apply only to the AIA for Byron Airport. The applicable countywide and airport-specific policies are summarized below:

**Countywide Policies**

4.3.1. *Basis for Height Limits* — To protect the airspace necessary for the operation of aircraft approaching, departing, or otherwise flying in the vicinity of airports, limits must be set on the height of objects on the land below. The basic criteria for limiting the height of structures, trees, and other objects near airports are set by federal regulations: Part 77, Subpart C, of the Federal Aviation Regulations (FAR); the United States Standard for Terminal Instrument Procedures (TERPS); and applicable airport design standards.

(a) Unless specific exceptions have been evaluated and determined not to adversely affect air navigation, these criteria as applied to Buchanan Field Airport and Byron Airport shall be used as the basis for setting limits on the heights of objects in the vicinity of those airports.

(b) Airspace plans depicting the critical areas for airspace protection around Buchanan Field and Byron Airport are depicted in Chapters 3 and 4, respectively.

4.3.2. *Height Limit Exceptions* — In all parts of the AIA for both Buchanan Field and Byron Airport, proposed structures may be allowed to exceed the criteria stated in the height limit policies for the respective airport, subject to review and approval by the ALUC on a case-by-case basis.

(a) A detailed airspace analysis, including a Federal Aviation Administration aeronautical study, shall be required. The analysis shall assess the potential affect of the proposed structure on instrument approach procedures, airport utility, and overall aviation safety. Consideration shall also be given to the potential effects on new or enhanced instrument approach procedures which may be developed in the future as indicated on the adopted airport layout plan.

(b) The FAA and/or the Contra Costa County Airport Land Use Commission may require marking and lighting of any objects for which a height limit exception is granted. Any such marking and lighting shall be done in a manner consistent with applicable FAA standards.

4.3.4. *FAA Notification* — Proponents of a project which may exceed a Part 77 surface must notify the FAA as required by FAR Part 77, Subpart B, and by the State Aeronautics Act, Sections 21658 and 21659. (Notification to the FAA under FAR Part 77, Subpart B, is required even for certain proposed construction that does not exceed the height limits allowed by Subpart C of the regulations.)

(a) Local jurisdictions shall inform project proponents of the requirements for notification to the Federal Aviation Administration.

(b) The requirement for notification to the FAA shall not necessarily trigger an airport compatibility review of an individual project by the Airport Land Use Commission unless required in accordance with the Buchanan Field Airport or Byron Airport airspace protection and height limit policies set forth in Chapters 3 and 4.

(c) Any project submitted to the ALUC for airport land use compatibility review for reason of height-limit issues shall include a copy of FAR Part 77 notification to the Federal Aviation Administration and the results of the FAA’s analysis.
4.3.6. **Other Flight Hazards** — Land uses which may cause visual, electronic, or bird strike hazards to aircraft in flight shall not be permitted within any airport’s influence area. Specific characteristics to be avoided include:

(a) Glare or distracting lights which could be mistaken for airport lights;
(b) Sources of dust, steam, or smoke which may impair pilot visibility;
(c) Sources of electrical interference with aircraft communications or navigation; and
(d) Any use, especially landfills and certain agricultural uses, which may attract an increased number of birds. (Refer to FAA Advisory Circular No. 150/5300-33B, *Hazardous Wildlife Attractants On or Near Airports*, and Order No. 5200.5A, *Waste Disposal Sites On or Near Airports* for specific guidelines.)

**Policies Specific to Byron Airport**

6.3 **Compatibility Zone ‘B1’ Criteria**

6.3.4. **Height Limitations** — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone B1 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing.

(a) Generally, there is no concern with regard to any object up to 35 feet tall.
(b) ALUC review is required for any proposed object taller than 35 feet.

6.4 **Compatibility Zone ‘B2’ Criteria**

6.4.4. **Height Limitations** — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone B2 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing.

(a) Generally, there is no concern with regard to any object up to 70 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
(b) ALUC review is required for any proposed object taller than 70 feet.

6.5. **Compatibility Zone ‘C1’ Criteria**

6.5.4. **Height Limitations** — Unless a specific exemption is granted (see Countywide Policy 4.3.2.), the height of objects within Compatibility Zone C1 shall be limited in accordance with the Byron Airport Airspace Protection Surfaces drawing.

(a) Generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet taller than other nearby objects.
(b) ALUC review is required for any proposed object taller than 100 feet.

6.7. **Compatibility Zone ‘D’ Criteria**

6.7.4. **Height Limitations** — See criteria for Compatibility Zone C1.

6.9. **Compatibility Criteria — All Zones**

6.9.3. **Hazards to Flight** — No land use which would result in an increased attraction of birds or would create a visual or electronic hazard to flight shall be permitted anywhere within the Byron Airport influence area. (See Countywide Policy 4.3.6.)
Reclamation District 800
The Reclamation District Law (Water Code Section 50000 et seq.) provides a means for local entities to form reclamation districts to finance the reclamation of land that has been made unusable by overflow or flooding. Reclamation districts assess fees from members of their district to finance services and facilities related to land reclamation, such as levees and irrigation and drainage facilities. Construction activities associated with the proposed new Delta Intake and Pump Station would occur on levees next to Old River and within Byron Tract. Byron Tract is under the jurisdiction of Reclamation District 800. Because the new intake would require levee work, project construction could be subject to review and approval of an encroachment permit and maintenance easement by Reclamation District 800.

Existing Land Uses
The eastern portions of Contra Costa and Alameda Counties primarily consists of lands used for agriculture, grazing, and recreation. Most of the upland areas are used for grazing rather than crops. Irrigated agricultural production is limited to the lands north and east of Los Vaqueros Reservoir and toward the Delta. Urban areas in eastern Contra Costa and Alameda Counties are limited to the cities of Brentwood, Oakley, and Livermore, plus the unincorporated communities of Byron and the town of Discovery Bay. Only Brentwood, Byron, and Discovery Bay are in the immediate project area.

The nearest incorporated city is Brentwood, with its city limits about 4 miles north of Los Vaqueros Reservoir. The unincorporated community of Byron is about 5 miles northeast of the reservoir. The Byron Airport is south of Byron. The unincorporated town of Discovery Bay is about 1 mile northeast of Byron. In Alameda County, the nearest urban area is Livermore, about 7 miles south of Los Vaqueros Reservoir. Nearby communities are identified in Figure 4.7-1. Rural residential properties are scattered throughout agricultural portions of the project area, and some residences are near portions of the proposed pipeline alignments.

The Los Vaqueros Watershed, depicted on Figure 4.7-2, is owned and administered by the CCWD and is accessible to the public. Large areas of publicly held land lie within the project vicinity. Next to the reservoir watershed are Brushy Peak Regional Preserve (2,014 acres), Vasco Caves Regional Preserve (1,426 acres), Cowell Ranch Open Space (3,687 acres), Round Valley Regional Preserve (1,895 acres), and Morgan Territory Regional Preserve (4,708 acres). Other nearby public lands include the Bethany Reservoir State Recreational Area (802 acres), Clifton Court Forebay (36 acres), and Mount Diablo State Park (18,839 acres) (see Figure 4.15-1). These lands (except for Clifton Court Forebay) are administered by the East Bay Regional Park District or the California State Parks systems. Clifton Court Forebay is owned and operated by the Department of Water Resources and generally has limited public access.

The Transfer-Bethany Pipeline (Eastside Option) would pass through about 0.3 mile of the Bethany Reservoir State Recreation Area but the public does not have access to the area where the project pipeline/tunnel construction would occur (see Section 4.15, Recreation, for further discussion of project effects on recreational areas and opportunities). No other proposed conveyance, power, or project facilities pass through these open space areas, preserves, or public lands.
Sensitive Land Uses

Some sensitive land uses, including the town of Discovery Bay residential community and Bethany Reservoir State Recreation Area, are near (i.e., within a half mile of), or within proposed project construction areas. No construction would occur within the cities of Brentwood or Livermore, or the unincorporated towns of Byron or Discovery Bay. No schools, hospitals, rest homes, or similar sensitive public or private land uses are in proximity to anticipated construction. The following list summarizes the location and number of residences near each proposed project area or facility site.

- **Los Vaqueros Watershed** – This area includes the reservoir expansion area, in-watershed facilities construction sites, borrow material and staging sites, and recreational facility sites. One residence off Los Vaqueros Road is about 2 miles south of the reservoir. There are also 12 residences on the ridge west of the watershed near Morgan Territory Road, about 1.6 miles from the reservoir and 3 miles from the reservoir dam site. In addition, several residences are about 2.5 miles northeast of the expanded dam site, off Silver Hills Drive near the north entrance to the watershed.

- **Delta Intake and Pump Station** – The sensitive land use closest to the existing Old River Intake and Pump Station is a house about 3,000 feet to the northwest along SR 4. The residence closest to the proposed new Delta Intake and Pump Station is a single farmhouse on the east side of Old River. This facility could be between 500 and 1,000 feet from this residence, depending on the location selected for it.

- **Delta-Transfer Pipeline** – Construction would occur along the south side of SR 4, as close as 50 feet from the town of Discovery Bay where as many as 120 residences are along the north side of SR 4 along the pipeline alignment. About 16 rural home sites lie within 50 feet of the 6.5-mile pipeline route as it passes along SR 4, Bixler Road, Kellogg Creek Road, and Hoffman Lane.

- **Transfer Facility Expansion** – The residence nearest to the Transfer Facility is along Walnut Avenue, about 1,450 feet west of the anticipated construction site.

- **Transfer-LV Pipeline** – About 5 rural residences along Camino Diablo and Walnut Avenue lie within 50 feet of the Transfer-LV Pipeline alignment.

- **Transfer-Bethany Pipeline** – An estimated 7 rural homesteads near Vasco Road or Armstrong Road lie as close as 50 feet to the Transfer-Bethany Pipeline alignment. The Bethany Reservoir State Recreation Area, with a bikeway along the California State Aqueduct, is along the pipeline alignment (Eastside Option) near the southern terminus of the pipeline. The project construction area at Bethany Reservoir for the tie-in is not accessible to the public and is over 300 feet from a public access area.

- **Power Option 1** – There would be no physical construction activity on the transmission line from Western’s existing Tracy substation to the new substation in the project area. The existing Western transmission line would feed the new substation. The nearest rural residences are about 1,275 feet away from the new substation and upgraded transmission line to be extended from the new substation east to the new Delta Intake Pump Station. The new 21kV transmission line that would extend west to the Transfer Facility Expansion would be constructed along a portion of SR 4, in the same corridor as the Delta-Transfer Pipeline. An estimated 16 rural home sites lie within 50 feet of the proposed transmission lines.
• **Power Option 2** – Like Power Option 1, Power Option 2 would make use of Western’s existing transmission line that extends northwest from its existing Tracy substation; no facility changes or new construction would occur along this existing transmission line. The existing Western transmission line that extends east to service the Old River Pump Station would be upgraded but this option does not include a new Western substation. About 4 rural home sites are 1,275 feet or more from the Western transmission line proposed for upgrade. A new overhead transmission line would be extended from PG&E’s existing facilities in Brentwood, in the same corridor as the proposed Transfer-LV Pipeline. About 5 rural residences along Camino Diablo Road and Walnut Avenue lie within 50 feet of the joint transition line and pipeline alignment. The new PG&E substation required under this option would be on CCWD Los Vaqueros Watershed property. The residence nearest to this proposed substation lies within 500 feet of this property and is off Silver Hills Drive.

• **Recreation Facilities** – The recreation facilities that would be replaced and expanded within the Los Vaqueros Watershed would be near and around the reservoir. The homes closest to the reservoir include 12 residences on the ridge west of the watershed near Morgan Territory Road, about 1.6 miles from the reservoir and 3 miles from the Marina Complex site. A single residence off Los Vaqueros Road to the south is located about 2 miles from the reservoir and 4.8 miles from the proposed Marina Complex. In addition, several residences are about 2.5 miles northeast of the expanded dam site, off Silver Hills Drive near the north entrance to the watershed.

Although these sensitive land uses would not experience long-term impacts, a number of temporary construction impacts would affect residents and visitors to these areas. Potential construction impacts to sensitive users resulting from the proposed project are addressed in their respective sections: Agriculture (Section 4.8), Transportation and Circulation (Section 4.9), Air Quality (Section 4.10), Noise (Section 4.11), Visual/Aesthetic Resources (Section 4.14), and Recreation (Section 4.15).

### 4.7.2 Environmental Consequences

**Methodology**

For purposes of this environmental analysis, the EIS/EIR evaluates the potential for the project and alternatives to conflict with the Contra Costa County or Alameda County General Plan Land Use policies. The standard for determining whether a project component would conflict with a general plan policy use is based on the *General Plan Guidelines*, published by the Office of Planning and Research: “An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment” (OPR, 2003).

**Significance Criteria**

The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. These thresholds also encompass the factors taken into account under the National Environmental Policy Act (NEPA) to determine the significance of an action in terms of its context and the intensity of its effects. A significant land use effect determination was applied to an alternative that would do any of the following:
4.7 Land Use

- Physically divide an established community
- Conflict with any applicable land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating a significant environmental effect
- Conflict with any applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP)

Discussions of consistency with land use and zoning designations are provided below for the proposed alternatives. As previously explained, CCWD is not subject to local general plan and zoning regulations. However, discussions of consistency with the land use designations of the general plans are provided to give context and to fully inform the public and the decision makers.

The potential for the project alternatives to conflict with applicable HCPs or NCCPs is addressed in Section 4.6, Biological Resources in the regulatory setting for local agencies and under Impact 4.6.17. The potential to conflict with HCPs and NCCPs is not discussed further in this section.

**Impact Summary**

**Table 4.7-1** provides a summary of the impact analysis for issues related to land use based on actions outlined in Chapter 3.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.7.1: The proposed project and alternatives would not physically divide an existing community.</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
</tr>
<tr>
<td>4.7.2: Facility siting and operation under the proposed project and alternatives would not conflict with any applicable land use plans.</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>4.7.3: Construction activities within designated Airport Land Use Compatibility Zones near the Byron Airport could cause potential temporary height impacts by conflicting with FAR Part 77 surfaces during construction.</td>
<td>LSM</td>
<td>LSM</td>
<td>LSM</td>
<td>LS</td>
</tr>
<tr>
<td>4.7.4: Construction activities within the AIA for Byron Airport could cause potential temporary flight hazards through the creation of glare or distracting lights; the generation of dust or smoke, which could impair pilot visibility; or could attract an increased number of birds.</td>
<td>LSM</td>
<td>LSM</td>
<td>LSM</td>
<td>LSM</td>
</tr>
<tr>
<td>4.7.5: The proposed project and alternatives would not contribute to cumulative land use impacts.</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
<td>NI</td>
</tr>
</tbody>
</table>

**NOTES:**
- SU = Significant and Unavoidable
- LSM = Less-than-Significant Impact with Mitigation
- LS = Less-than-Significant Impact
- NI = No Impact
- AIA = Airport Influence Area
- FAR = Federal Aviation Regulation
- FAR = Federal Aviation Regulation
Impact Analysis

No Project/No Action Alternative

Under the No Project/No Action Alternative, no new facilities would be constructed and no existing facilities would be altered, expanded, or demolished. Therefore, no impacts related to land use would occur from implementing this alternative.

Impact 4.7.1: The proposed project and alternatives would not physically divide an existing community. (No Impact)

Alternative 1

The project area extends throughout southeastern Contra Costa County and northeastern Alameda County. As previously indicated, the city of Brentwood (in Contra Costa County) is about 4 miles north of the project area, and the city of Livermore (in Alameda County) is 7 miles south of the project area. Two established communities are in the project area — the towns of Byron and Discovery Bay. Numerous rural residential homes are scattered throughout the project area; however, for purposes of this Impact 4.7.1 assessment, they are not considered to be a community that would be subject to division.

Reservoir Expansion and Recreational Facilities. Alternative 1 involves a 275-thousand acre-foot (TAF) Reservoir Expansion/Dam Modification project with borrow areas, PG&E substation (under Power Option 2), and recreation facilities constructed within the CCWD Los Vaqueros Watershed property. Because facilities on existing CCWD watershed property would not affect existing local communities, they are not discussed further in this impact discussion. However, Alternative 1 would also involve construction of facilities in areas outside of the watershed, which are considered below.

Delta Intake and Pump Station. The new Delta Intake and Pump Station is in an agricultural area next to Old River, away from existing communities and other sensitive land uses. Therefore, construction of this facility would not divide an existing community.

Conveyance Facilities. Under Alternative 1, construction of three water conveyance pipelines and expansion of an existing Transfer Facility would occur. The Delta-Transfer Pipeline would be along SR 4, within an existing transportation corridor that passes south of the town of Discovery Bay. The Transfer Facility Expansion would occur on CCWD land next to the existing Transfer Facility, in an area surrounded by agricultural land and next to a quarry operation. Expansion of the Transfer Facility would not divide an existing community.

The Transfer-LV Pipeline alignment passes in close proximity to numerous individual residences, but not through an existing community. The Transfer-Bethany Pipeline would pass south along Vasco Road, avoiding the town of Byron, which is along the Byron Highway, to the east. Because all conveyance facilities would be outside of existing communities in largely rural, agricultural areas, and also because underground pipelines are easily traversable by roads, construction of
project conveyance facilities would not result in the physical division of any established community.

**Power Supply.** To accommodate a new Delta Intake and Pump Station as well as the expansion of the Transfer Facility, additional overhead electrical powerlines and a substation would be required. Two options for electrical facilities currently under consideration include Power Option 1 (Western Only), and Power Option 2 (Western & PG&E). Construction of Power Option 1 includes a new power line from a new Western substation site to the new Delta Intake facilities, with a new Western substation at the eastern terminus of Camino Diablo Road. Power Option 2 would entail a new PG&E substation within the CCWD Los Vaqueros Watershed property in an area to the north of the staging area, plus a new distribution line connecting the new PG&E substation to the Expanded Transfer Facility.

Most of the proposed power facilities (with the exception of a new Western substation) would occur within an existing transmission line right-of-way or on watershed land. The alignment of Power Option 2 would be along SR 4 in an area west of the town of Discovery Bay. Because the new power facilities would be outside of existing communities in largely rural, agricultural areas, and also because overhead powerlines are easily traversable by roads, implementation of either option for electrical facilities would not result in the physical division of any established community.

**Summary.** All project construction under Alternative 1 would be in areas that avoid the two established communities in the project area — the towns of Byron and Discovery Bay. Moreover, the Conveyance and Power Supply Facilities are easily traversable. Alternative 1 would not physically divide an existing community.

**Alternative 2**

The facilities included in Alternative 2 would be the same as those under Alternative 1. Therefore, this alternative would not physically divide an existing community.

**Alternative 3**

Construction of Alternative 3 would include the same components as discussed for Alternative 1 with three substantive differences:

- Expansion of the Old River Intake and Pump Station would occur within the facility’s existing site area.
- Alternative 3 would not include a new Delta Intake and Pump Station.
- Alternative 3 would not include the Transfer-Bethany Pipeline.

Expansion of the Old River Intake and Pump Station would not affect any existing communities or other sensitive land uses and therefore would not divide an existing community. While there would be no construction of the new Delta Intake and Pump Station or Transfer-Bethany Pipeline under Alternative 3, this would not reduce the level of impact as compared to Alternative 1 because no communities or sensitive land uses would be affected by these facilities. As with Alternative 1,
Alternative 3 would not physically divide an existing community or affect sensitive land uses, and no impacts would occur.

**Alternative 4**

**Alternative 4** would involve a 160-TAF Reservoir Expansion with a borrow area and recreational facilities to be constructed within the CCWD Los Vaqueros Watershed property line. Under this alternative, the capacity of the existing Transfer Station would be expanded; however, the footprint of this facility would not be expanded, as would occur for other alternatives. Alternative 4 does not include construction of any Delta intake, conveyance or power supply facilities and, consequently, would not impact any existing communities. As with Alternative 1, this alternative would not physically divide an existing community and no impact would occur.

**Mitigation:** None required.

**Impact 4.7.2:** Facility siting and operation under the proposed project and alternatives would not conflict with any existing land use plans. (Less than Significant)

**Alternative 1**

**Land Use and Resource Management Plan for the Delta**

No existing or proposed Los Vaqueros Reservoir Expansion project facilities are within the Primary Zone of the Delta. However, under Alternative 1, proposed project facilities in the Secondary Zone of the Delta would include the new Delta Intake Facilities; most of the Delta-Transfer Pipeline; most of the Western Power Supply facilities, including a potential Western substation, under Power Option 1 (Western Only); and the portion of the Transfer-Bethany Pipeline closest to the California Aqueduct under the Eastside Option.

As previously indicated under Regulatory Setting, the Secondary Zone is not within the planning area of the Delta Protection Commission, but the Commission may comment on development projects within the Secondary Zone in the event that a project in the Secondary Zone could affect lands within the Primary Zone. Policy recommendations related to development and activities within the Secondary Zone are provided in the Land Use and Utilities and Infrastructure sections of the Management Plan. These include recommendations to minimize impacts associated with construction of transmission lines and utilities by locating new construction in existing utility or transportation corridors, or along property lines, and by minimizing construction impacts. Plan policy recommendations for minimizing the effects of project construction in this area have either already been incorporated into project siting and design considerations, or are addressed by mitigation measures identified in the EIS/EIR to reduce significant construction effects. Proposed facilities would be within existing utility corridors and/or roadways, and/or along property lines, to minimize further land fragmentation. Also, activities have been identified to address construction effects such as erosion and stormwater runoff. As a result, the project would be consistent with policies of the Land Use and Resource Management Plan for the Delta.
Contra Costa County General Plan

Los Vaqueros Reservoir Expansion/Dam Modifications and Recreation Facilities. The Contra Costa County General Plan designates CCWD’s Los Vaqueros Watershed property as Watershed. According to the County General Plan, CCWD lands in the Watershed category include properties acquired for Los Vaqueros Reservoir in the southeastern portion of the county. The Expanded Los Vaqueros Reservoir is consistent with the Watershed designation because it is supporting protection of water supply and the existing reservoir, which is the purpose of the designation according to the County General Plan. Passive, low-intensity recreational uses such as hiking and biking; and small-scale commercial uses that support picnicking, boating, and fishing activities at the Los Vaqueros Reservoir are also recognized as consistent with Watershed designated lands.

Delta Intake and Pump Station. The new Delta Intake and Pump Station would be on land designated as Delta Recreation and Resources in the Contra Costa County General Plan. The Delta Recreation and Resources designation was created to balance the recreational opportunities in the area with the need to allow only low-intensity uses that will not subject residents or visitors to the flood dangers associated with the Delta. The new Delta Intake and Pump Station would be consistent with the Delta Recreation designation because it would not draw in a large number of workers, residents, or visitors to a flood-prone area. CCWD does not have any employees working out of its intake facilities, and does not anticipate that it would have any permanent employees working out of its intakes in the future. Also, as discussed in Section 4.5, Local Hydrology, Drainage, and Groundwater under Impact 4.5.5, the new Delta Intake and Pump Station would be located in the 500-year flood zone as defined by the Federal Emergency Management Agency (FEMA). The area is protected from the 100-year flood hazards by the existing levee along Old River. The proposed project includes improvements to the levee in the area of the new Delta Intake and Pump Station that would enhance the flood protection for this facility. An earthen setback levee (or ring levee around the site) would be installed for protection during construction and would remain as a permanent structure to provide secondary containment of Old River in the event of a flood in the area. This facility would be protected from flood flows but would not impede or redirect flood flows.

Conveyance Facilities. Under Alternative 1, project pipelines and the Transfer Facility Expansion would occur on land use areas designated as follows:

- The Delta-Transfer Pipeline would pass through lands designated as Delta Recreation, Public/Semi-Public, Agricultural Lands, and Agricultural Core.
- The Transfer Facility Expansion Area would be on lands designated as Agricultural Lands in the Contra Costa County General Plan.
- Transfer-LV Pipeline would occur on lands designated as Watershed, Agricultural Lands, and Parks and Recreation in the Contra Costa County General Plan.
- The Transfer-Bethany Pipeline would pass through lands designated as Agricultural Lands and Public/Semi-Public in the Contra Costa County General Plan.
The descriptions of each of these land use designations can be found in the Regulatory Setting section of this chapter. The Watershed, Parks and Recreation, and Public/Semi-Public designations specify that public utilities are an included use. Also, county policies indicate that allowable uses identified for lands under the Agricultural Core, Delta Recreation and Resources, Watershed, Parks and Recreation, and Open Space designations are allowed within Agricultural Lands. This includes water supply reservoirs, pipelines, and transmission lines. Furthermore, construction of underground water pipelines and a transfer facility would be consistent with the Contra Costa General Plan in the following respects:

- Because installation of water pipelines is instrumental to implementing a water supply reservoir, which is a designated use;
- Because the facilities would be publicly owned and operated (by CCWD);
- Because pipelines through agricultural and recreational areas would not preclude continued farming or recreation on the overlying land; and

Because policies for the Southeast County Area (3-69) indicate that, subject to specific project review, pipelines and transmission lines are generally consistent with planned agricultural areas.

**Power Supply.** To accommodate a new Delta Intake and Pump Station as well as the expansion of the Transfer Facility, additional overhead electrical powerlines and a substation would be required. The two options for electrical facilities currently under consideration include Power Option 1 (Western Only), and Power Option 2 (Western & PG&E). Construction of Power Option 1 includes additional powerlines from the proposed site of the Western substation to the new Delta Intake and Pump Station. Under Power Option 1, a new Western substation would be sited at the eastern terminus of Camino Diablo Road. Power Option 2 would entail a new PG&E substation within the CCWD Watershed property in an area to the north of the staging area, plus a new distribution line connecting the new PG&E substation to the Expanded Transfer Facility. Most of the proposed power facilities (with the exception of a new Western substation) would occur within existing utility easements or on Watershed designated land.

Power supply overhead lines would pass through lands designated Delta Recreation, Public/Semi-Public, Agricultural Lands, Agricultural Core, and Watershed. The Western Substation would be on land designated Delta Recreation and the PG&E substation would be on land designated Watershed. For the same reasons that underground pipelines would be consistent with these Contra Costa General Plan land use designations, power supply facilities would also be consistent with the Plan. Specifically, construction of overhead powerlines and a potential Western substation (under Power Option 1) would be consistent with the Contra Costa General Plan in the following respects:

- Because installation of transmission lines is instrumental to implementing a water supply reservoir, which is a designated use;
- Because the facilities would be publicly owned and operated (by Western and PG&E);
• Because utilities passing through agricultural and recreational areas would not preclude continued farming or recreation on the overlying land; and

• Because policies for the Southeast County Area (3-69) indicate that, subject to specific project review, pipelines and transmission lines are generally consistent with planned agricultural areas.

Alameda East County Area Plan – A Portion of the Alameda County General Plan

The portion of the Transfer-Bethany Pipeline (both Westside and Eastside Options) in Alameda County is in areas designated by the Alameda ECAP as Large Parcel Agriculture and the area around Bethany Reservoir is designated as Major Parks. This area of Alameda County is also a designated Wind Resource Area overlay. The descriptions of each of these land use designations can be found in the preceding Regulatory Setting section. The pipeline would be consistent with the Large Parcel Agriculture designation because installation of an underground pipeline would not create parcels smaller than required under this designation or preclude continued agricultural use (primarily grazing) on the overlying land. The pipeline would be consistent with the Major Parks Designation because it is a public water pipeline to be connected with state water facilities within the reservoir area and would not interfere with recreational uses at the Bethany Reservoir State Recreation Area. Furthermore, the proposed pipeline would be consistent with the Wind Resource Overlay because installation of an underground pipeline would not interfere with existing or future wind turbine operations.

Contra Costa County Airport Land Use Compatibility Plan

Under Alternative 1, the Delta-Transfer Pipeline would be on the edge of ALUCP Compatibility Zone D. The Transfer-Bethany Pipeline would pass through several ALUCP compatibility zones in the vicinity of Byron Airport (Compatibility Zones B2, C1, C2, and D).

With respect to project consistency with ALUCP policies during long-term project operations, these pipelines would be buried, underground facilities. Because these pipelines would be underground, with only limited aboveground support structures (i.e., blow-off and air valves that stand about 2 feet above ground and are spaced about every 1,000 to 2,000 feet along the pipeline), they would be consistent with the ALUCP. Additionally, people would not be permanently placed at this location for this potential pipeline.

The only major aboveground facility with the potential to be constructed near the Byron Airport would be the 69 kV electrical power transmission line, about 1.5 miles east of the runway. The transmission lines for Power Option 1 (Western Only) would pass through Compatibility Zones B1, B2, C1, and D, and a potential Western Substation would be within Compatibility Zone D. Because the potential new powerlines (anticipated to be 50 feet high) would be within an existing transmission line corridor, they would not create any new hazards to aviation or conflict with ALUCP policies. The proposed substation would be less than 50 feet tall.

Summary. Alternative 1 would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating a significant environmental effect.
Alternative 2
The land use plans and locations of facilities under Alternative 2 would be the same as described for Alternative 1. Impacts related to project compatibility with land use plans under Alternative 2 would be the same as described for Alternative 1. Facility siting and operation would be consistent with land use plans and policies.

Alternative 3
Alternative 3 would implement similar facilities as compared to Alternative 1, except that under Alternative 3, the new Delta Intake and Pump Station and the Transfer-Bethany Pipeline would not be constructed. However, it would expand the existing Old River Intake and Pump Station within that structure’s existing footprint.

Land Use and Resource Management Plan for the Delta
The existing Old River Intake and Pump Station is within the Secondary Zone of the Delta. Under Alternative 3, Old River Intake and Pump Station Expansion would be consistent with the Land Use and Resource Management Plan for the Delta because the Management Plan policy recommendations for minimizing the effects of project construction in the Secondary Zone are already addressed by both the site location and by mitigation measures identified in the EIS/EIR to reduce significant construction effects. Expansion of this existing facility would occur within the existing property for this facility. The site is on and next to Old River, and expansion of the facility would not increase the overall area of the facility site or result on land fragmentation. Mitigation measures have been identified to address construction effects such as erosion and stormwater runoff. As a result, the project would be consistent with policies of the Land Use and Resource Management Plan for the Delta.

Contra Costa County General Plan
The existing intake facility is already on land designated in the Contra Costa County General Plan as Public/Semi-Public. The descriptions of this land use designation can be found in the preceding Regulatory Setting section. The proposed project includes on-site modifications to the Old River Intake and Pump Station that would be consistent with the Public/Semi-Public designation because the modified facility would continue to be owned and operated by a public entity, CCWD. Therefore, Alternative 3 (like Alternative 1) would be consistent with the land use designations in the Contra Costa County General Plan.

Alameda East County Area Plan – A Portion of the Alameda County General Plan
Under Alternative 3, no project facilities are in Alameda County.

Contra Costa County Airport Land Use Compatibility Plan
Under Alternative 3, the Delta-Transfer Pipeline would be on the edge of ALUCP Compatibility Zone D, the 69 kV electrical power transmission line alignment proposed under Power Option 1 (Western Only) would be about 1.5 miles east of the runway and would pass through Compatibility Zones 1, B2, C1, and D, and the proposed Western substation would be within Compatibility
Zone D. As discussed for Alternative 1, in the long term, facility siting and operation of the buried pipeline and additional power facilities in these zones around the airport would be consistent with the ALUCP policies.

In summary, facility siting and operation under Alternative 3 would be consistent with land use plans and policies.

**Alternative 4**

Alternative 4 would include a reduced reservoir expansion to 160 TAF; however, there would be no modifications to the Old River Intake and Pump Station, no construction of a new Delta Intake and Pump Station, and no new Conveyance or Power Supply facilities would be constructed. Modifications to Recreation Facilities would occur on lands within the CCWD Los Vaqueros Watershed property line.

**Delta Management Plan**

For Alternative 4, no changes are proposed to project facilities in the Secondary Zone of the Delta.

**Contra Costa County General Plan**

As discussed under Alternative 1, the Contra Costa County General Plan designates CCWD’s Los Vaqueros Watershed property as Watershed. The Expanded Los Vaqueros Reservoir is consistent with the Watershed designation because it supports protection of water supply, which is the purpose of the designation according to the County General Plan. The only project activity under Alternative 4 that would occur beyond the CCWD Los Vaqueros Watershed property line would be at the existing CCWD Transfer Facility and would involve only an on-site pump capacity upgrade which would not change its existing land use. This would be consistent with the area’s General Plan designation of Agricultural, which allows water supply pipelines.

**Alameda East County Area Plan – A Portion of the Alameda County General Plan**

For Alternative 4, no project facilities are in Alameda County.

**Contra Costa County Airport Land Use Compatibility Plan**

For Alternative 4, no proposed project facilities are within the Byron ALUCP area.

In summary, because all Alternative 4 construction would occur on property owned by CCWD and no land use changes would occur at the Transfer Facility, Alternative 4 would be consistent with all land use plans and policies.

**Mitigation:** None required.
Impact 4.7.3: Construction activities within designated Airport Land Use Compatibility Zones near the Byron Airport could cause potential temporary height impacts by conflicting with FAR Part 77 surfaces during construction. (Less than Significant with Mitigation for Alternatives 1, 2, and 3; Less than Significant for Alternative 4)

**Alternative 1**

Under Alternative 1, the Delta-Transfer Pipeline would be on the edge of ALUCP Compatibility Zone D. The Transfer-Bethany Pipeline would pass through several ALUCP compatibility zones in the vicinity of Byron Airport (Compatibility Zones B2, C1, C2, and D). The 69 kV electrical power transmission line would be constructed about 1.5 miles east of the runway. The transmission lines for Power Option 1 (Western Only) would pass through Compatibility Zones B1, B2, C1, and D, and a potential Western substation would be within Compatibility Zone D. As previously stated, new powerlines (anticipated to be up to 50 feet high) would be within an existing transmission line corridor and would not create any new hazards to aviation or conflict with ALUCP policies after construction.

As identified in ALUCP policies 6.3.4, 6.4.4, 6.5.4, 6.6.4, and 6.7.4, specific height restrictions are in place for Areas B1 (35 feet), B2 (70 feet), and C1, C2, and D (100 feet). However, it is important to note that these measurements refer to the difference between the height of the proposed object and the height of the runway end. Changes in topography could lead to variations in the allowable height of proposed objects based on the location.

Project construction will involve the use of cranes, drills, or other large construction equipment as tall as the lines that are being upgraded that have the potential to intrude into protected airspace (i.e., 35 feet or above). In addition, the location of these objects during equipment staging while they are not in use must be considered with respect to height restrictions and ALUCP policies. For example, the location of cranes and other equipment may require the use of lighting or other marking during nighttime hours, especially during the construction of the transmission line.

In summary, Alternative 1 would result in impacts related to construction within protected airspace associated with Byron Airport. This would be a significant impact.

**Alternative 2**

The facilities under Alternative 2 would be the same as described for Alternative 1. Impacts related to construction within protected airspace associated with Byron Airport under Alternative 2 would be the same as described for Alternative 1. Alternative 2 would have significant impacts related to construction within protected airspace associated with Byron Airport.

**Alternative 3**

Alternative 3 would implement similar facilities as under Alternative 1, except that Alternative 3 would not construct the new Delta Intake and Pump Station or the Transfer-Bethany Pipeline but would expand the existing Old River Intake and Pump Station within that structure’s existing footprint. Pipeline, power supply, and other construction would occur in or near Byron Airport.
Land Use Compatibility Zones. Alternative 3 would have significant impacts related to construction within protected airspace associated with Byron Airport.

**Alternative 4**

Alternative 4 would include a reduced reservoir expansion to 160 TAF; there would be no construction within the Byron Airport Land Use Compatibility Zones. Alternative 4 would have a less-than-significant impact related to construction within protected airspace associated with Byron Airport.

**Mitigation Measure**

**Measure 4.7.3:** Pursuant to ALUCP policy 4.3.4, CCWD shall notify the FAA, as required by FAR Part 77, Subpart B, of its proposed project to determine whether the proposed construction equipment and the location of construction activities and staging areas have the potential to intrude into protected airspace associated with Byron Airport. To facilitate FAA coordination, CCWD shall consult with County Airport staff. If necessary, CCWD will ensure that appropriate notes or modifications are made on all applicable design plans and specifications to ensure that construction activities would not conflict with the airport height limitations.

**Impact Significance after Mitigation:** Less than Significant.

**Impact 4.7.4:** Construction activities within the AIA for Byron Airport could cause potential temporary flight hazards through the creation of glare or distracting lights; the generation of dust or smoke, which could impair pilot visibility; or could attract an increased number of birds. (Less than Significant with Mitigation)

**Alternative 1**

Alternative 1 has the potential to create glare or distracting lights in the vicinity of Byron Airport through the illumination of staging and equipment storage areas or work areas next to roadways, such as Vasco Road, Walnut Boulevard, and Bixler Road. ALUCP county policies prohibit land uses that would create potential hazards to flight.

Alternative 1 would include the expansion of the Los Vaqueros Reservoir, which will include excavation, soil stockpiles, sediment and erosion control, and re-vegetation measures. Similar construction activities will be associated with other project components within Alternatives 1 through 3 (i.e., excavation of tunnel portals, pipeline transfer facilities, pump station construction, etc.) ALUCP countywide policy 4.3.6 cites these opportunities as specific characteristics that should be avoided within the AIA, and airport-specific policy 6.9.3 prohibits land uses that would result in an increased attraction of birds or would create a visual or electronic hazard to flights. FAA Advisory Circular 150/5200-33A, “Hazardous Wildlife Attractants on and near Airports” also warns against the creation of open water and other wildlife attractions within 5 statute miles of airports that support piston-powered aircraft.
Soil excavation and the creation of soil stockpiles can result in the generation of dust that could obscure pilot views during construction. The stabilization of excavated areas and soil stockpiles through the use of standard sediment and erosion control seed mixtures can also reduce the generation of dust, but such mixtures frequently include grains and other constituents that can serve as food sources for birds and other potentially hazardous wildlife. In addition, the creation of temporary sediment and erosion control ponds or other temporary open water facilities can attract avian wildlife by providing areas for nesting and loafing.

In summary, Alternative 1 would result in construction activities within the AIA for Byron Airport that could cause temporary flight hazards. This would be a significant impact.

**Alternative 2**
The facilities under Alternative 2 would be the same as described for Alternative 1. Impacts related to construction activities that could cause temporary flight hazards for Byron Airport under Alternative 2 would be the same as described for Alternative 1. Alternative 2 would have significant impacts.

**Alternative 3**
Alternative 3 would implement facilities similar to those of Alternative 1, except that Alternative 3 would not construct the new Delta Intake and Pump Station or the Transfer-Bethany Pipeline but would expand the existing Old River Intake and Pump Station within that structure’s existing footprint. Alternative 3 pipeline, power supply, and other construction would occur in or near Byron Airport Land Use Compatibility Zones. Alternative 3 would have significant impacts related to construction activities that could cause temporary flight hazards for Byron Airport.

**Alternative 4**
Alternative 4 would include a reduced Reservoir Expansion to 160 TAF; although there would be no construction within the Byron Airport Land Use Compatibility Zones, Alternative 4 construction lighting, soil excavation, and activities that would attract avian wildlife (such as the revegetation seed mix for the 160 TAF borrow area), could result in flight-related hazards. Alternative 4 would have significant impacts related to construction activities that could cause temporary flight hazards for Byron Airport.

**Mitigation Measures**

**Measure 4.7.4a:** During project design, CCWD shall consult with Contra Costa County Airport staff regarding the location of illuminated equipment staging, storage, and construction areas, and the need to provide a potential Notice to Airmen (NOTAM) during construction activities. CCWD shall instruct its engineer to make appropriate notations on construction drawings and specifications to indicate that illuminated work areas shall incorporate the use of downward facing lights with amber lumens to prevent confusion to pilots.

**Measure 4.7.4b:** During project design, CCWD shall instruct its engineer to prohibit the use of temporary sediment ponds that could create open water to attract potentially hazardous
wildlife. To ensure that an appropriate seed mixture is used during construction, CCWD shall instruct its engineer to make appropriate notations on construction drawings and specifications to indicate that all seed mixtures used for revegetation or for sediment and erosion control purposes should not contain rice, barely, millet, rye, or other potential food sources for avian wildlife.

**Measure 4.10.1:** During construction, CCWD will require the construction contractor to implement the Bay Area Air Quality Management District’s (BAAQMD’s) basic and enhanced dust control procedures (see Section 4.10, Air Quality).

**Impact Significance after Mitigation:** Less than Significant.

---

**Impact 4.7.5:** The proposed project and alternatives would not contribute to cumulative land use impacts. (No Impact)

Impacts involving land use plans or policies would not combine to result in cumulative impacts. The determination of significance for impacts related to these issues is whether a project would conflict with any applicable land use plan or policy adopted for the purpose of reducing or avoiding environmental impacts. Such a conflict is site specific and would be addressed on a project-by-project basis. As described above, implementing the proposed alternatives would not conflict with any land use plan, including any airport land use plan and policies, adopted for the purpose of avoiding or mitigating a significant environmental effect. Similarly, construction siting, or operation of any of the proposed project facilities under any of the project alternatives would not physically divide a community. Thus, the project would not contribute to any significant cumulative land use impacts.

**Mitigation:** None required.