

## 5.6 Land Use

This section provides an inventory of existing and designated land uses, including agricultural uses, in the vicinity of the Mariposa Energy Project (MEP). For this analysis, the affected environment study area is defined as those areas within 1 mile of the project site and within 0.25 miles of linear facilities extending outside of the 1-mile buffer. Section 5.6.1 describes the environment that could be affected, including existing agricultural uses. Section 5.6.2 presents an environmental analysis of project development. Section 5.6.3 discusses potential cumulative effects. Section 5.6.4 discusses mitigation measures. Section 5.6.5 presents the laws, ordinances, regulations, and standards (LORS) applicable to land use and agriculture. Section 5.6.6 lists the state and local agencies involved in permitting the project, and provides agency contacts. Section 5.6.7 provides the references used to develop this section.

### 5.6.1 Affected Environment

#### 5.6.1.1 Existing Land Uses within the Study Area

The proposed 10-acre project site is located in unincorporated eastern Alameda County, California, within the 158-acre Lee Property, southeast of the intersection of Bruns Road and Kelso Road (APN 099B-7050-001-10). The area is zoned for large parcel agriculture. The 5-acre MEP construction laydown and worker parking area is adjacent to and southeast of the proposed power plant site. An additional laydown area (1 acre) for the water supply pipeline will be located at the Byron Bethany Irrigation District (BBID) headquarters, approximately 1.3 miles north of the project site. A 0.6-acre laydown area for transmission line construction will be located along the transmission line route adjacent to Pacific Gas and Electric Company's (PG&E) 230-kilovolt (kV) Kelso Substation. The proposed project site is located directly south of the existing 6.5-megawatt (MW) Byron Power Cogen Plant, which occupies 2 acres in the middle portion of the Lee Property. A detailed description of MEP and project description-related figures are included in Section 2.0. Figure 5.6-1 shows the project components and the affected study area.

Site access is via an approximately 1,100-foot-long road that extends from a main entrance along Bruns Road. This road also provides access to the Byron Power Cogen Plant, which is the closest structure to the project site. The Lee Property contains remnants of prior wind turbine development (e.g., felled transmission poles) and other minor debris. Wind energy installations are still active in the general area, as the Altamont Pass Wind Resource Area starts approximately 1 mile southwest of the project area.

Uses in the study area include grazing, power generation, power transmission, natural gas compression, water management facilities, and a State Recreation Area. Grazing occurs on a majority of the land within a 1-mile radius of the project site. The Kelso Substation and Bethany Compressor Station are located directly north of the project site, along Kelso Road. Further east on Kelso Road is the Western Area Power Administration Tracy Substation. The California Department of Water Resources Delta Pumping Plant is located northwest of the project site, near the end of Kelso Road and midway along the California Aqueduct between Clifton Court Forebay and Bethany Reservoir. The Delta-Mendota Canal is located east of the project site, and the Tracy Pumping Plant, managed by the U.S. Bureau of

Reclamation, is located northeast of the project site, along Kelso Road. The Bethany Reservoir State Recreation Area is approximately 0.7 miles southwest of the MEP site. Mountain House School, an elementary school, is located outside the study area approximately 1.3 miles east of the project site, along Mountain House Road. These land uses are shown on Figure 5.6-1.

The project site and most of the surrounding land is designated Large Parcel Agriculture. The Farmland Mapping and Monitoring Program of the California Department of Conservation shows that the entire parcel that includes the project site, as well as most of the land in the nearby vicinity, is designated as non-prime Grazing Land (CDC, 2005). The Delta Pumping Plant and Kelso Substation are designated as Urban and Built-Up Land, and land to the east of the project site, adjacent to and beyond the Delta-Mendota Canal, is designated as Prime Farmland and Farmland of Statewide Importance.

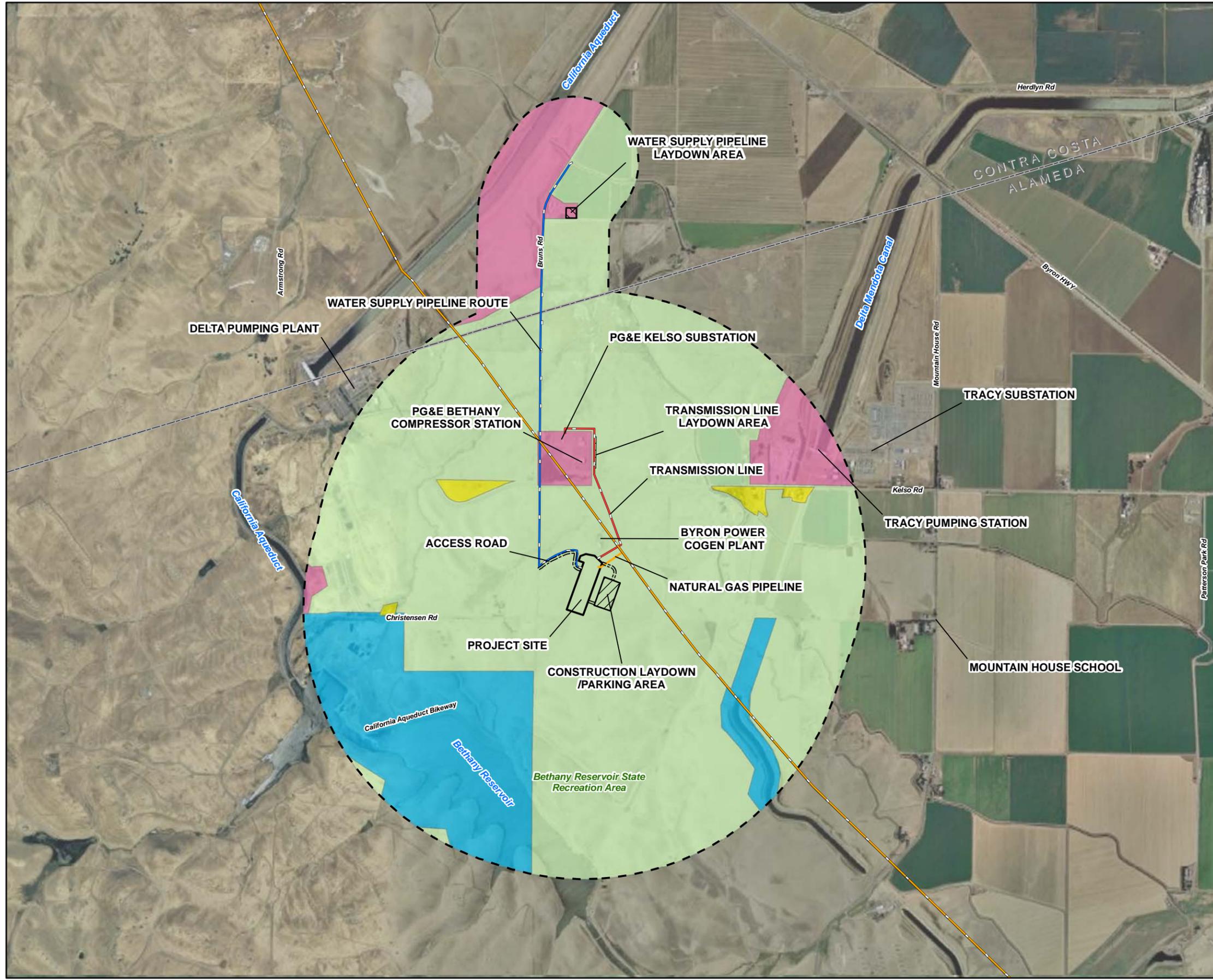
Figure 5.6-1 shows existing land uses within 1 mile of the project site. Figure 5.6-2 shows the General Plan Designations within 1 mile of the project site and within 0.25 miles of the pipeline corridor, which extends into Contra Costa County. Figure 5.6-3 shows the zoning designations within 1 mile of the project site and 0.25 miles of the pipeline corridor. Figure 5.6-4 shows the farmland located within 1 mile of the project site and 0.25 miles of the pipeline corridor.

### **5.6.1.2 Current Land Use Plans for the Study Area**

Under California law, the local General Plan sits atop the local planning hierarchy, and all other local regulations (such as specific plans, zoning, subdivision approvals) are subservient to, and must be consistent with, the General Plan. A General Plan is composed of different mandatory and permissive elements addressing various County planning issues, such as land use, housing, transportation, and open space. Every individual parcel in the county is assigned a particular land use designation. That land use designation establishes limitations on the allowable uses at the parcel and standards for development, such as density, lot coverage, and minimum lot size.

The Alameda County General Plan includes various Area Plans covering the unincorporated County. The East County Area Plan (ECAP), discussed in greater detail below, covers 418 square miles in the eastern portion of Alameda County, including the project site. Because the ECAP is a General Plan-level document, it is the primary planning document applicable to the project site.

The ECAP was adopted in 1994 and last amended in 2002. It identifies the need for public facilities and services in the eastern portions of Alameda County, and provides the basis for county zoning and approvals, as well as other regulatory actions (Alameda County, 2002). In the November 2000 election, Measure D was passed by Alameda County voters, amending the ECAP to specify the location and definition of land uses in east Alameda County. Project conformity with the current land use plan, including policies and regulations, is addressed in greater detail in Section 5.6.2.



**LEGEND**

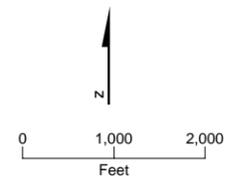
- ACCESS ROAD
- NATURAL GAS PIPELINE ROUTE
- EXISTING NATURAL GAS PIPELINES
- TRANSMISSION LINE ROUTE
- WATER SUPPLY PIPELINE ROUTE
- CONSTRUCTION LAYDOWN/PARKING AREA
- TRANSMISSION LINE LAYDOWN AREA
- WATER SUPPLY PIPELINE LAYDOWN AREA
- PROJECT SITE
- BUFFER

**EXISTING LAND USE**

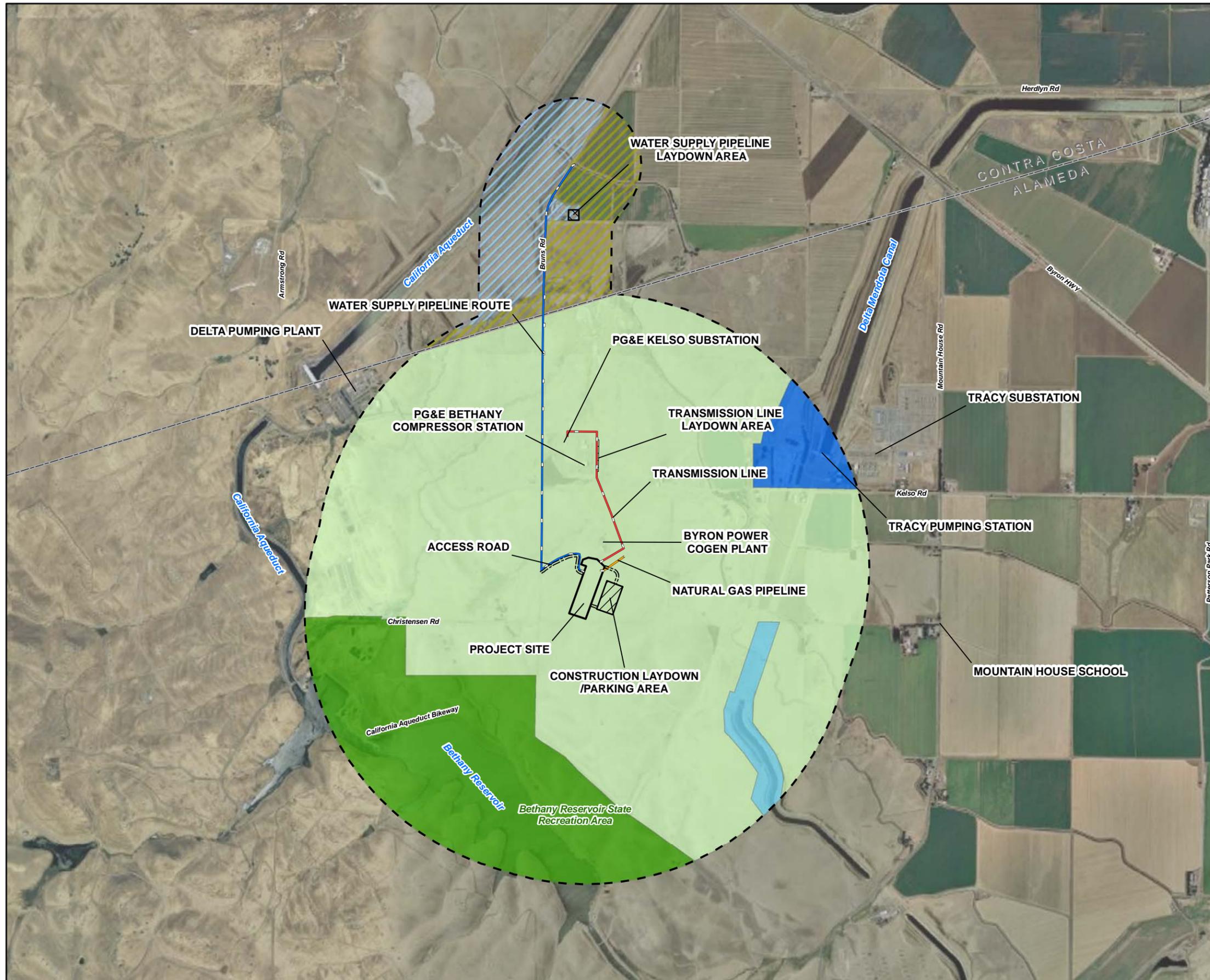
- AGRICULTURAL
- PUBLIC/UTILITIES
- RESIDENCES
- WATER MANAGEMENT

Notes:  
 1. 1 mile around Project Site, 1/4 mile around Pipeline Corridor.

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.6-1**  
**EXISTING LAND USE**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA



**LEGEND**

- ACCESS ROAD
- NATURAL GAS PIPELINE ROUTE
- TRANSMISSION LINE ROUTE
- WATER SUPPLY PIPELINE ROUTE
- CONSTRUCTION LAYDOWN/PARKING AREA
- TRANSMISSION LINE LAYDOWN AREA
- WATER SUPPLY PIPELINE LAYDOWN AREA
- PROJECT SITE
- BUFFER

**EAST COUNTY AREA PLAN - ALAMEDA**

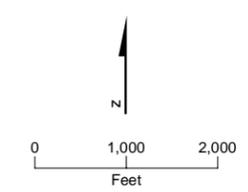
- LARGE PARCEL AGRICULTURE
- MAJOR PUBLIC
- PARKLANDS
- WATER MANAGEMENT

**CONTRA COSTA GENERAL PLAN**

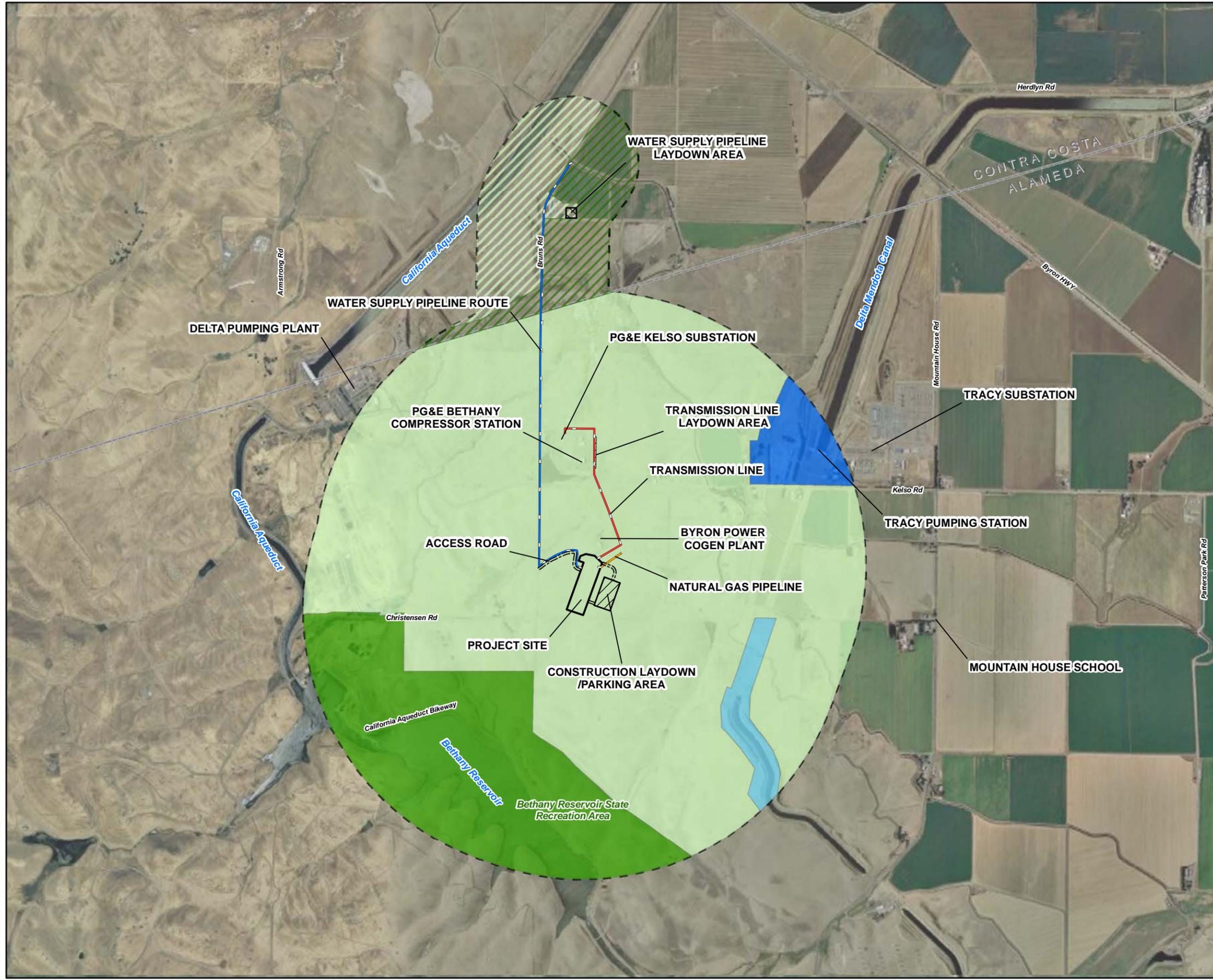
- AGRICULTURE LANDS
- PUBLIC / SEMI-PUBLIC

Notes:  
 1. 1 mile around Project Site, 1/4 mile around Pipeline Corridor.  
 2. Source: East County Area Plan - Land Use Diagram, Alameda County Agency, May 2002. Contra Costa General Plan Land Use Element, Contra Costa County Community Development, 2004.

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.6-2**  
**GENERAL PLAN DESIGNATIONS**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA



**LEGEND**

- ACCESS ROAD
- NATURAL GAS PIPELINE ROUTE
- TRANSMISSION LINE ROUTE
- WATER SUPPLY PIPELINE ROUTE
- CONSTRUCTION LAYDOWN/PARKING AREA
- TRANSMISSION LINE LAYDOWN AREA
- WATER SUPPLY PIPELINE LAYDOWN AREA
- PROJECT SITE
- BUFFER

**EAST COUNTY AREA PLAN - ALAMEDA**

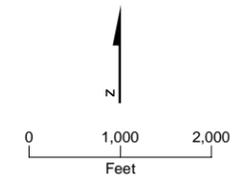
- LARGE PARCEL AGRICULTURE
- MAJOR PUBLIC
- PARKLANDS
- WATER MANAGEMENT

**CONTRA COSTA ZONING**

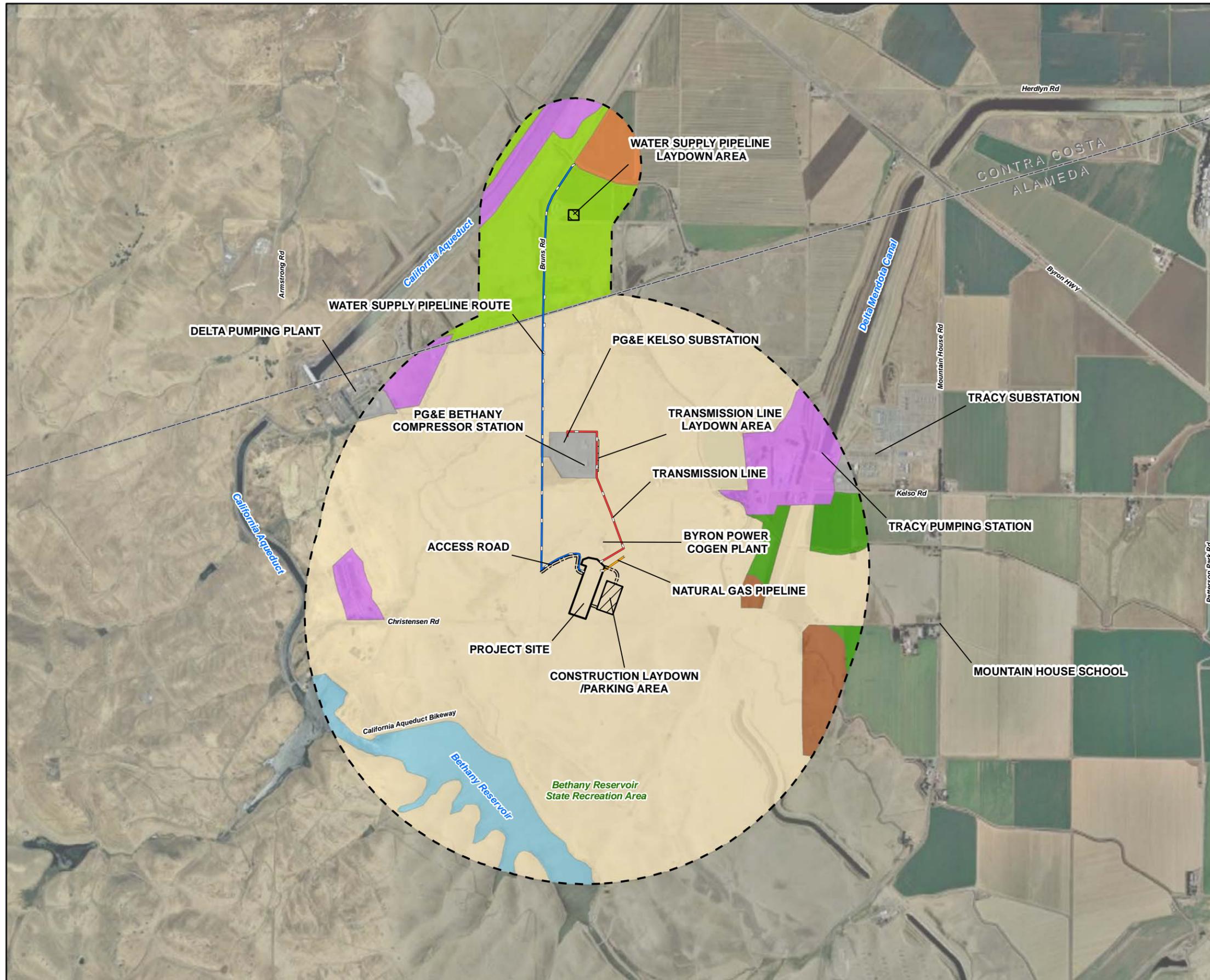
- AGRICULTURE PRESERVE
- HEAVY AGRICULTURE

Notes:  
 1. 1 mile around Project Site, 1/4 mile around Pipeline Corridor.  
 2. Source: East County Area Plan - Land Use Diagram, Alameda County Agency, May 2002. Contra Costa Zoning Map, Contra Costa County Community Development, 2007.

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.6-3**  
**ZONING DISTRICTS**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA



**LEGEND**

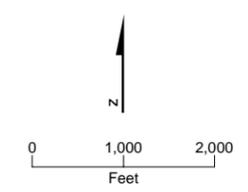
- ACCESS ROAD
- NATURAL GAS PIPELINE ROUTE
- TRANSMISSION LINE ROUTE
- WATER SUPPLY PIPELINE ROUTE
- CONSTRUCTION LAYDOWN/PARKING AREA
- TRANSMISSION LINE LAYDOWN AREA
- WATER SUPPLY PIPELINE LAYDOWN AREA
- PROJECT SITE
- BUFFER

**IMPORTANT FARMLAND**

- URBAN AND BUILT-UP LAND
- GRAZING LAND
- FARMLAND OF LOCAL IMPORTANCE
- PRIME FARMLAND
- FARMLAND OF STATEWIDE IMPORTANCE
- UNIQUE FARMLAND
- WATER
- OTHER LAND

Notes:  
 1. 1 mile around Project Site, 1/4 mile around Pipeline Corridor.  
 2. Source: California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), Alameda and Contra Costa Counties, 2006.

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.6-4**  
**IMPORTANT FARMLAND**  
 MARIPOSA ENERGY PROJECT  
 ALAMEDA COUNTY, CALIFORNIA

MEP will use water supplied by BBID via a new, 1.8-mile pipeline. Approximately 0.7 miles of this pipeline will be located in Contra Costa County. Because the development of the project's waterline will not result in substantial long-term changes to the environment, the discussion of applicable land use designations, zoning, and project consistency in the following sections shall be restricted to a review of the Alameda County plans and ordinances that have potential relevance to the land use issues associated with the MEP site. Similar information for Contra Costa County, when discussed in text or indicated in graphics, is provided for informational purposes.

### **5.6.1.3 General Plan Land Use Designations within the Study Area**

Pursuant to State Planning and Zoning Law, every California city and county must adopt a general plan that reflect the goals and policies that guide the physical development of land within their jurisdiction. (Gov. Code § 65300 et seq.) The project site is located in northeastern Alameda County, near the Contra Costa and San Joaquin county borders. For purposes of this Application for Certification (AFC), the project is analyzed primarily in terms of its conformity with land use designations and policies described in the ECAP for the project site and southern portion of the water supply pipeline route.

The pattern of land use in eastern Alameda County includes the three cities in the Tri-Valley area (Dublin, Pleasanton, and Livermore) and the surrounding hilly open space terrain. The historical land use patterns have resulted in a concentration of parks and water and resource management in the southwestern portion of the eastern Alameda County, while agricultural uses predominate in the eastern third of this area. In some areas, land uses are shared (e.g., grazing is permitted in some parks).

The Mountain House area, northeast of the Altamont Pass, is a separate area from the Tri-Valley because its geology, topography, and economic base are more similar to the Central Valley than the San Francisco Bay area.

Landmarks in the project vicinity include the Clifton Court Forebay, part of the California Aqueduct, approximately 2 miles to the northeast; Bethany Reservoir, approximately 1 mile southwest; and the Byron Airport, approximately 2.5 miles northwest. The site is located approximately 7 miles northwest of Tracy, 7 miles east of Livermore, 6 miles south of Byron, and approximately 2 miles from the San Joaquin County border and the Mountain House Community Service District, a 16,000-home, master-planned community along the western edge of San Joaquin County. Portions of this new community have been constructed and are occupied; other neighborhoods have not yet been constructed. Large infrastructure projects are prominent in the landscape near the project. In addition to the power generation and water management facilities previously described, four 500-kV transmission lines, nine 230-kV transmission lines and several lower voltage lines are located in the vicinity of the project.

The ECAP Land Use Diagram designates the project site as Large Parcel Agriculture. This Land Use Designation requires a minimum parcel size of 100 acres and allows public and quasi-public uses such as MEP. The project site is located on a 158-acre parcel. The ECAP's Open Space Diagram indicates that the project site is also located within its Wind Resource Area, which covers the northeastern section of the county, and which encourages

development of wind energy operations.<sup>1</sup> Below the ECAP in the County's land use hierarchy is its zoning code, which divides the county into various zoning districts. The project site is located within the Agricultural zoning district, and the County considers MEP to be a conditionally-permitted use within that zoning district. The passage of Measure D in 2002 did not alter Section 17 of the zoning code regarding public utility uses or the inclusion of public uses, quasi-public uses, and utility corridors as allowable uses in Large Parcel Agricultural.

Uses permitted on land designated as Large Parcel Agriculture include a variety of agricultural uses, commercial facilities, recreational uses, public and quasi-public uses, utility corridors and other uses. ECAP land use designations for parcels located within 1 mile of the project site include: Large Parcel Agriculture, Major Public, Parklands, and Water Management. Land use designations within 0.25 miles of the pipeline that extend into Contra Costa County include Agriculture Lands and Public/Semi-Public. These designations are shown on Figure 5.6-2. Allowable uses within each of these designations are listed in Table 5.6-1.

**TABLE 5.6-1**

General Plan Land Use Designations and Allowable Uses Within the MEP Study Area (1-mile Radius of the Project Site and 0.25-mile Radius of the Pipeline Corridor)

<b>Land Use Designation</b>	<b>Allowable Uses</b>
<b>Alameda County</b>	
Large Parcel Agriculture	Allows agriculture, agricultural processing facilities, agricultural support service uses, secondary residential units, visitor-serving facilities, commercial recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, wind farms, utility corridors, and similar uses compatible with agriculture. Maximum building intensity for non-residential buildings shall be a Floor Area Ratio (FAR) of .01. (See note below.)
Major Public	Allows government-owned regional and sub-regional facilities such as hospitals, jails, colleges, civic centers, and similar and compatible uses. Maximum FAR of .06.
Parklands	Allows existing and planned public parks, open space, and recreational uses including community, sub-regional, and regional facilities. Maximum FAR of .02.
Water Management	Allows sand and gravel quarries, reclaimed quarry lakes, watershed lands, arroyos, and similar and compatible uses. Allows one single family home per parcel, provided all other County standards are met. Maximum FAR of .01.

<sup>1</sup> ECAP Program 40 specifies that the "A-160" zoning district, which requires 160-acre minimum parcel size, covers the Wind Resource Area, except for lands east of the California Aqueduct, and lands to the south of Tesla Road that are within 1 mile of Tesla Road between the San Joaquin County boundary and the part of Alameda County included in the South Livermore Valley Plan. The project site is located east of the California Aqueduct, and is therefore not within the part of the Wind Resource Area covered by the A-160 zoning district. The project site's 158-acre size does not conflict with the Wind Resource Area.

**TABLE 5.6-1**

General Plan Land Use Designations and Allowable Uses Within the MEP Study Area (1-mile Radius of the Project Site and 0.25-mile Radius of the Pipeline Corridor)

Land Use Designation	Allowable Uses
<b>Contra Costa County</b> (northern 0.7-mile portion of the water pipeline)	
Agricultural Lands	Applies to lands capable of production of food, fiber and plant materials, other types of agricultural uses, open space, or non-urban uses such as landfills, and low-density residential. Special uses include agricultural processing facilities, commercial agricultural support services, small-scale visitor uses.
Public / Semi-Public	Includes properties owned by public governmental agencies, as well as privately owned transportation and utility corridors. Wide variety of public and private uses allowed in plan category, private residential and commercial uses are not compatible.

Source: Alameda County, 2009; Contra Costa County, 2008.

Note: FAR is generally defined as the gross floor area of all buildings on a lot divided by the lot area. For example, if the buildings on a 50,000 square-foot lot total 100,000 square feet of gross floor area, the FAR on that lot is 2.0.

#### 5.6.1.4 Zoning Districts within the Study Area

The zoning ordinance is a regulatory tool used to implement the General Plan, and must be consistent with the General Plan (Gov. Code § 65860). It defines zones that dictate permitted uses, as well as design requirements such as setbacks and height limits. City and County zoning ordinances are enforced by their respective planning and building departments.

The project site is currently zoned for agricultural uses (A District). The zoning ordinance defines the A District as having been established to promote implementation of general plan land use proposals for agricultural and other non-urban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary for the general welfare. Permitted uses include crop-raising, livestock keeping and grazing, and limited residences. Conditionally permitted uses include public utility buildings or uses, oil and gas drilling and removal, and privately-owned wind-electric generators. The County considers MEP to be a conditionally permitted use within the A District. All zoning districts and permitted uses within the project study area are listed in Table 5.6-2. Zoning within the project study area is shown on Figure 5.6-2.

**TABLE 5.6-2**

Zoning Districts and Allowable Activities Within the MEP Study Area (1-mile Radius of the Project Site and 0.25-mile Radius of Pipeline Corridor)

Zoning District	Allowable Uses
<b>Alameda County</b>	
Agricultural (A Districts)	<p>A. One one-family dwelling or one-family mobile home (with restrictions).</p> <p>B. Crop, vine or tree farm, truck garden, plant nursery, greenhouse apiary, aviary, hatchery, horticulture.</p> <p>C. Raising or keeping of poultry, fowl, rabbits, sheep or goats or similar animals.</p> <p>D. Grazing, breeding or training of horses or cattle.</p> <p>E. Winery or olive oil mill.</p> <p>F. Fish hatcheries and rearing ponds.</p> <p>G. Public or private riding or hiking trails.</p> <p>H. One secondary dwelling unit per building site on certain parcels, subject to requirements.</p> <p>I. Occupancy of agricultural caretaker dwelling(s) subject to a site development review.</p> <p>J. Boarding stables and riding academies subject to requirements.</p>
<b>Contra Costa County</b> (northern 0.7-mile portion of the water pipeline)	
Heavy Agriculture (A-3 District)	<p>(1) All types of agriculture, including general farming, wholesale horticulture and floriculture, wholesale nurseries and greenhouses, mushroom rooms, dairying, livestock production, fur farms, poultry raising, animal breeding, aviaries, apiaries, forestry, and similar agricultural uses.</p> <p>(2) Other agricultural uses, including the erection and maintenance of buildings for the storage of agricultural products and equipment; sheds; warehouses; granaries; dehydration plants; hullers; fruit and vegetable packing plants; and agricultural cold storage plants on parcels at least ten acres in size.</p> <p>(3) A grower stand or farm stand.</p> <p>(4) A detached single-family dwelling on each parcel and the accessory structures and uses normally auxiliary to it.</p> <p>(5) Foster home or family care home operated by a public agency, or by a private agency, subject to requirements.</p> <p>(6) A family day care home, subject to requirements.</p> <p>(7) Residential second units complying with the provisions of Chapter 82-24.</p>
Agriculture Preserve (A-4 District)	<p>(1) All types of commercial, agricultural production, including general farming, wholesale horticulture and floriculture, livestock production, aviaries, apiaries, forestry and similar agricultural uses, excepting those uses requiring a permit.</p> <p>(2) Those agricultural and compatible uses specifically agreed upon between the county and the landowner at the time of entering into the agreement and designated in writing within the agreement.</p> <p>(3) Residential second units complying with the provisions of Chapter 82-24, with requirements.</p> <p>(4) A grower stand or farm stand.</p>

### 5.6.1.5 Recent Discretionary Review by Public Agencies

The Alameda County Community Development Agency has jurisdiction over land use planning in unincorporated Alameda County, in which the proposed project site is located. In the general vicinity of the MEP site, there are five projects within Alameda County that are currently in development, meaning that applications have been submitted to the County and, in some cases, construction is underway. A sixth project in the vicinity of MEP is located along the western border of San Joaquin County. The following is a list of these projects, in order of proximity to the MEP site:<sup>2</sup>

- GreenVolts Solar Field – 2-MW utility-scale solar farm located on the southern side of Kelso Road, across from Tracy Pumping Station, approximately 1 mile east of the MEP site.
- East Altamont Energy Center – 1,100-MW power plant project proposed for location near the northeast intersection of Mountain House Road and Kelso Road, approximately 1.5 miles northeast of the MEP site; AFC has been approved by the California Energy Commission (CEC), construction has not been initiated and is pending, but CEC has required an update of the AFC prior to the start of construction.
- Mountain House Community Buildout – 16,000 home, master-planned community located in San Joaquin County, approximately 2.5 miles east of the MEP site; southern neighborhoods have been constructed and are partially occupied, but development of northern neighborhoods is currently on hold.
- Altamont Motorpark Sports Rezoning – Project that would allow expansion of uses and capacity of existing motor speedway, approximately 4 miles southeast of MEP; currently on hold.
- Jess Ranch Organics Processing Facility – Composting facility south of I-580 at Grant Line Road, approximately 4.5 miles south of the MEP site; project is not yet operational.
- Midway Power, LLC – 1,100-MW power plant project proposed for location on San Joaquin Border, 0.5 miles away from existing PG&E Tesla Substation, and approximately 5 miles away from the MEP site; project development rights have been acquired by PG&E, construction has not been initiated, and rate basing of the costs of the proposed project have not yet been approved by the California Public Utilities Commission. Depending on timing, the construction start date for the proposed project may have to be extended by the CEC.

### 5.6.1.6 Population and Growth Trends

According to the ECAP, growth in the eastern portion of Alameda County will be generally focused in the western portion of the county planning area, near the cities of Pleasanton, Hayward, Dublin, and Livermore. Within Alameda County, the nearest urbanized area to the project site is Livermore, approximately 7 miles to west. The Mountain House community, located within San Joaquin County, is approximately 2.5 miles to the east of the

<sup>2</sup> Confirmed in communication with planning staff at both Alameda and Contra Costa counties (Beatty-Weldon, 2009; Griffin, 2009; Jensen, 2009).

project site. As discussed previously, Mountain House is a growing community, expected to include 16,000 homes at final buildout.

## **5.6.2 Environmental Analysis**

### **5.6.2.1 Significance Criteria**

Significance criteria for impacts to land use were determined through review of applicable state and local regulations. Because of the CEC's Site Certification Process under the Warren-Alquist Act, a certified agency program under the California Environmental Quality Act (CEQA), the following criteria developed from the CEQA Guidelines and the CEQA Checklist were used to evaluate the potential environmental impacts of the project:

- Will the project physically divide an established community?
- Will the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Will the project conflict with any applicable habitat conservation plan or natural community conservation plan?
- Will the project convert prime farmland, unique farmland, or farmland of statewide importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?
- Will the project involve other changes in the existing environment which, given their location and nature, could result in conversion of Farmland to nonagricultural use?

Pursuant to section 25500 of the Warren-Alquist Act, the CEC certification process is in lieu of all state, regional, and local permits and requirements. The AFC process is CEQA-equivalent under the Warren-Alquist Act, so it fulfills the requirements of CEQA. CEQA is codified in the California Public Resources Code, Sections 21000-21178.1. Guidelines for implementation of CEQA are codified in the California Code of Regulations (CCR) Sections 15000-15387.

The CEC's authority to permit power plants supersedes all local ordinances including zoning or land use plans. The CEC normally, however, defers to the local land use jurisdictions regarding findings of consistency of the project with local laws. If a project is not in conformance with local laws, Public Resources Code Section 25525 allows the CEC to permit facilities not in compliance with local ordinances where it "determines that the facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity."

### **5.6.2.2 Potential Effects on Land Use During Project Construction and Operation**

#### **5.6.2.2.1 Divide an Established Community**

There will be no impact from MEP related to the potential division of an established community. The presence of MEP will not physically divide any community within Alameda County or the adjacent counties of San Joaquin or Contra Costa. MEP will place a

peaking power plant on 10 acres of a 158-acre parcel that is currently used for grazing and formerly developed with a wind energy project. The project will not involve the displacement of any existing development; nor will it result in new development that would physically divide an existing neighborhood.

#### **5.6.2.2.2 Conflict with an Applicable Land Use Plan, Policy, or Regulation**

The MEP site is situated on land designated as Large Parcel Agriculture by Alameda County. Permitted uses for Large Parcel Agriculture include agricultural uses, secondary residential units, visitor-serving facilities, commercial recreational uses, public and quasi-public uses, solid waste landfills and related waste management facilities, quarries, wind farms, utility corridors, and similar uses compatible with agriculture. The proposed project is conditionally permitted under the Alameda County Zoning Ordinance "A" Zoning District. Alameda County would have exclusive jurisdiction over the project site, but for the CEC's exclusive jurisdiction under the Warren-Alquist Act. The MEP site is adjacent to an existing thermal cogeneration facility that was permitted by the county under a Conditional Use Permit and comprises thermal power generation and a process for wastewater distillation.

The project is consistent with Alameda County policies for this area because it is a permitted use in the applicable land use designation, and because it will enhance agricultural production on the parcel via onsite mitigation. The project will be situated near, and compatible with, similar uses. The project will be consistent with ECAP policies related to sensitive lands, sensitive viewsheds, transportation, services, infrastructure, and environmental health. MEP will not conflict with operations at nearby Byron Airport (eastern Contra Costa County), and will be compatible with ECAP policies related to transportation demand management and water use minimization. The project's conformity with other specific ECAP policies is outlined in detail in Table 5.6-3.

ECAP Policy 13 states that:

The County shall not provide nor authorize public facilities or other infrastructure in excess of that needed for permissible development consistent with the Initiative [Measure D]. This policy shall not bar 1) new, expanded or replacement infrastructure necessary to create adequate service for the East County, 2) maintenance, repair or improvements of public facilities which do not increase capacity, and 3) infrastructure such as pipelines, canals, and power transmission lines which have no excessive growth-inducing effect on the East County area and have permit conditions to ensure that no service can be provided beyond that consistent with development allowed by the Initiative. "Infrastructure" shall include public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities.

Mariposa Energy commissioned an assessment of the electrical generation resource and capacity needs specifically for Eastern Alameda County, which is included in Appendix 5.6A. Based on the load resource balance, this study concludes that East Alameda County has little local generation, most of which is intermittent wind or solar, and therefore needs dispatchable generation support from facilities such as MEP to generate power in order to balance the load needs of Alameda County. MEP will help in meeting Alameda County's electrical energy needs by providing additional local dispatchable generation,

decreasing the amount of imported energy, and providing system/grid support at critical times, such as periods of decreasing renewable generation and peak load conditions.

#### **5.6.2.2.3 Conflict with an Applicable Habitat Conservation Plan**

Alameda County does not presently have any approved regional habitat conservation or natural community conservation plans. Therefore, the project will not conflict with the goals of such a plan. The northern extent of MEP's water supply pipeline lies within Contra Costa County, and therefore falls inside the planning area of the East Contra Costa County Habitat Conservation Plan (HCP). Conflicts with the HCP are not anticipated (see Section 5.2).

MEP does fall within the coverage area of the East Alameda County Conservation Strategy (EACCS), which is currently being finalized. Section 5.2 discusses the EACCS in greater detail.

Mariposa Energy will cooperate with local, state, and federal interests when developing habitat avoidance, minimization, and/or mitigation. Covered wildlife species are also state or federally protected species; therefore Mariposa Energy will consult with the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game to address potential effects.

#### **5.6.2.2.4 Convert Farmland to Nonagricultural Uses**

The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to nonagricultural use. The project site and adjacent parcels are designated as Large Parcel Agriculture in the ECAP, are currently non-irrigated grazing land, and are not identified as Important Farmland, Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance or Unique Farmland.

The 158-acre Lee Property is subject to a Williamson Act contract. Since the Williamson Act's adoption in 1965, the Legislature has expressly deemed electric facilities to be compatible uses per section 51238 of the Williamson Act. Even if MEP were not considered a compatible use under Section 51238 of the Williamson Act, it would meet the requirements of a compatible use under Section 51238.1 (a) of the Williamson Act. Upon completion of the project, 12 of the 158 acres on the parcel would be occupied by compatible, non-agricultural uses, meaning that 92 percent of the parcel would remain in agricultural production. Further, Mariposa Energy proposes to install facilities to supply year-round cattle watering capability on the site, along with re-seeding the 5-acre temporary construction laydown and parking area with grasses designed to improve food supply for the cattle. Because only 10 acres (less than 7 percent) of the parcel will be occupied by MEP, and because these measures will improve the grazing productivity of non-prime agricultural land, impacts associated with the conversion of farmland to nonagricultural uses will be less than significant.

#### **5.6.2.2.5 Cause Changes in the Environment Resulting in Conversion of Farmland**

The project will not convert farmland to non-agricultural use. The project will be constructed on 10 acres of land currently used as non-irrigated grazing land. Measures implemented by Mariposa Energy will increase agricultural productivity of the grazing adjacent to the site by providing a year-round water supply for the cattle and by reseeded the construction laydown and parking area with grasses that provide better feed for the cattle than native grasses. As a standalone facility, the project will not cause other changes

in the environment that could result in the conversion of additional farmland to nonagricultural use.

### 5.6.2.3 Compatibility with Existing and Designated Land Uses and Applicable Planning Policies

Table 5.6-3 lists applicable local plans and policies and describes the project's conformity with them.

**TABLE 5.6-3**  
Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<b>Alameda County East County Area Plan</b>	
<b><i>Urban and Rural Development</i></b>	
Policy 12 – The County shall work with cities and service districts to plan adequate infrastructure capacity to accommodate development consistent with the East County Area Plan.	The project does not require additional infrastructure beyond the linear components (water and gas pipelines, transmission tie-in) proposed and is therefore consistent with Policy 12.
Policy 13 – The County shall not provide nor authorize public facilities or other infrastructure in excess of that needed for permissible development consistent with the Initiative. This policy shall not bar 1) new, expanded or replacement infrastructure necessary to create adequate service for the East County, 2) maintenance, repair or improvements of public facilities which do not increase capacity, and 3) infrastructure such as pipelines, canals, and power transmission lines which have no excessive growth-inducing effect on the East County area and have permit conditions to ensure that no service can be provided beyond that consistent with development allowed by the Initiative. “Infrastructure” shall include public facilities, community facilities, and all structures and development necessary to the provision of public services and utilities.	Based on a load resource balance analysis (Appendix 5.6A), Eastern Alameda County has little local generation, most of which is intermittent wind or solar, and will need dispatchable generation support from facilities such as MEP to generate power in order to balance the load needs of Alameda County. MEP will help in meeting Alameda County's electrical energy needs by providing additional local dispatchable generation, decreasing the amount of imported energy and providing system/grid support at critical times, such as periods of decreasing renewable generation and peak load conditions. This, in turn would be consistent with the ECAP goal of achieving a balanced subregion in which a full complement of public facilities and amenities is featured. Since MEP does not provide any infrastructure for other industrial, commercial or residential growth, MEP would have no excessive growth-inducing effect in east County and is consistent with Policy 13. The only growth-inducing characteristic is the addition of cattle watering troughs to enhance the grazing potential of the balance of the 158-acre property.
<b><i>Industrial / Commercial / Office Uses and Economic Development</i></b>	
Policy 43 – The County shall require new unincorporated industrial, commercial, and office developments to pay their fair share of the costs for providing East County infrastructure, public facilities and services, open space, affordable housing, and child care.	MEP will pay its fare share of costs associate with the provision of East County infrastructure, as specified by the CEC.

TABLE 5.6-3

Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<b><i>Sensitive Lands and Regionally Significant Open Space</i></b>	
<p>Policy 52 – The County shall preserve open space areas for the protection of public health and safety, provision of recreational opportunities, production of natural resources (e.g., agriculture, windpower, and mineral extraction), protection of sensitive viewsheds, preservation of biological resources, and the physical separation between neighboring communities.</p>	<p>MEP will have no effect on recreational opportunities, since the site is used for cattle grazing. MEP has a less than significant impact on opportunities for agricultural development since the land is already being utilized for grazing and does not support other agricultural operations or mineral extraction, and preserves viewsheds, biological resources, and physical separation between the facility and neighboring communities. Therefore, MEP is consistent with Policy 52.</p>
<p>Policy 54 – The County shall approve only open space, park, recreational, agricultural, limited infrastructure, public facilities (e.g., limited infrastructure, hospitals, research facilities, landfill sites, jails, etc.) and other similar and compatible uses outside the urban growth boundary (UGB).</p>	<p>The project is consistent with the County's land use designation and is a conditionally-permitted use within the applicable zoning district. The project is also similar to and compatible with public facilities and limited infrastructure uses outside the UGB. Therefore, MEP is consistent with Policy 54.</p>
<p>Policy 56 – The County shall require all new developments to dedicate or acquire land and/or pay equivalent in-lieu fees which shall be committed to open space land acquisition and management and shall encourage the cities to impose similar open space requirements on development in incorporated areas.</p>	<p>MEP will require biological mitigation lands that will be prohibited from development and therefore the project will be consistent with this policy.</p>
<b><i>Agriculture</i></b>	
<p>Policy 73 – The County shall require buffers between those areas designated for agricultural use and new non-agricultural uses within agricultural areas or abutting parcels. The size, configuration and design of buffers shall be determined based on the characteristics of the project site and the intensity of the adjacent agricultural uses, and if applicable, the anticipated timing of future urbanization of adjacent agricultural land where such agricultural land is included in a phased growth plan. The buffer shall be located on the parcel for which a permit is sought and shall provide for the protection of the maximum amount of arable, pasture, and grazing land feasible.</p>	<p>The 10-acre project site will be located near the south portion of a 158-acre parcel, with a buffer along the southern edge of the parcel. Grazing is the main agricultural use on the parcel and in the adjacent parcels, including the parcel to the south. Measures made by Mariposa Energy to increase the agricultural output on the parcel by supplying year-round cattle watering capability and re-seeding the 5-acre temporary construction laydown and parking area will be consistent with the ECAP goal of maximizing long-term productivity of East County's agricultural resources. The project would be further set back from the northern, eastern, and western boundaries to provide larger buffers to adjacent agricultural uses in those areas. Therefore MEP is consistent with Policy 73.</p>
<p>Policy 74 – The County shall require that, where conflicts between a new use and existing use are anticipated, the burden of mitigating the conflicts be the responsibility of the new use.</p>	<p>No conflicts between the project and existing uses are anticipated. Therefore MEP is consistent with Policy 74.</p>

TABLE 5.6-3

## Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<p>Policy 76 – The County shall work with San Joaquin, Contra Costa, and Santa Clara Counties to ensure that any development adjacent to Alameda County agricultural land mitigates impacts on agricultural land including air quality, water quality and incompatibilities with agricultural uses. In particular, measures to mitigate growth-inducing impacts of development on agricultural land in Alameda County shall be addressed through cooperative efforts among the counties. The County shall ensure that land uses within Alameda County adjacent to San Joaquin, Contra Costa, and Santa Clara Counties are compatible with adjacent agricultural uses in these other counties.</p>	<p>The project does not cause growth-inducing impacts because the power generated will be used to meet existing demand and the number of employees is small (less than 10). MEP is consistent with this policy. Mariposa Energy has been in consultation with the County Supervisors of San Joaquin and Contra Costa counties.</p>
<p>Policy 85 – The County shall utilize provisions of the Williamson Act and other appropriate economic incentives to support agricultural uses.</p>	<p>The MEP site is located on land that is currently under a Williamson Act contract. Electric facility uses are expressly compatible with the Williamson Act, and the majority of the remaining parcel will remain in agricultural use. Mariposa Energy will also implement measures to increase the agricultural output on the parcel by supplying year-round cattle watering capability on the site, and re-seeding the 5-acre temporary construction laydown and parking area with grasses designed to improve food supply for the cattle.</p>
<p>Policy 86 - The County shall not approve cancellation of Williamson Act contracts within or outside the County Urban Growth Boundary except where findings can be made in accordance with state law, and the cancellation is consistent with the Initiative. In no case shall contracts outside the Urban Growth Boundary be canceled for purposes inconsistent with agricultural or public facility uses. Prior to canceling any contract inside the County Urban Growth Boundary, the Board of Supervisors shall specifically find that there is insufficient non-contract land available within the Boundary to satisfy state-mandated housing requirements. In making this finding, the County shall consider land that can be made available through reuse and rezoning of non-contract land.</p>	<p>The project does not require the cancellation of a Williamson Act contract. Since the Williamson Act's adoption in 1965, the Legislature has expressly deemed electric facilities to be compatible uses per section 51238 of the Williamson Act. Even if MEP were not considered a compatible use under Section 51238 of the Williamson Act, it would meet the requirements of a compatible use under Section 51238.1 (a) of the Williamson Act.</p>
<p>Policy 87 – The County shall encourage the establishment and permanent protection of existing and new cultivated agriculture through the use of homesite clustering, agricultural easements, density bonuses, or other means.</p>	<p>The project site does not contain any new or existing cultivated agriculture, but has a non-irrigated grazing use. The project would encourage the protection of the non-irrigated grazing agriculture use by maintaining the remaining 148 acres of the project parcel as non-irrigated grazing land. MEP is consistent with this policy.</p>

**TABLE 5.6-3**

## Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
Policy 93 – The County shall seek to stimulate agricultural investment and enhance the economic viability of existing or potential rural agricultural uses.	The project enhances the economic viability of existing agricultural uses by implementing measures to increase the agricultural output on the remaining parcel by supplying year-round cattle watering capability on the site, and re-seeding the 5-acre temporary construction laydown and parking area with grasses designed to improve food supply for the cattle. MEP enhances the economic viability of the parcel by providing the land owner an additional source of lease income and ensuring that the balance of the property retains its grazing use.
<b><i>Sensitive Viewsheds</i></b>	
Policy 115 –In all cases appropriate building materials, landscaping and screening shall be required to minimize the visual impact of development. Development shall blend with and be subordinate to the environment and character of the area where located, so as to be as unobtrusive as possible and not detract from the natural, open space or visual qualities of the area. To the maximum extent practicable, all exterior lightning must be located, designed and shielded so as to confine direct rays to the parcel where the lighting is located.	If required by the county, a landscaping plan will be included in the Development Plan. The development will blend with the existing visual character of the area and be subordinate to existing natural features and human alterations (see analysis in Section 5.13.2.4). Lighting will be directed onsite and shielded from public view (see Section 5.13.2.4.6). MEP is consistent with this policy.
Policy 116 – To the maximum extent possible, development shall be located and designed to conform with rather than change natural landforms. The alteration of natural topography, vegetation, and other characteristics, by grading, excavating, filling or other development activity shall be minimized. To the extent feasible, access roads shall be consolidated and located where they are least visible from public view points.	Grading required for the project will be consistent with natural landforms and will not substantially alter natural topography or vegetation beyond the construction of the facility on what is currently grazing land. The hills on either side of the project site will not be altered by grading. MEP is consistent with this policy.
<b><i>Airports</i></b>	
Policy 150 – The County shall recognize the Byron (East Contra Costa County) Airport as a regional resource, and shall work with Contra Costa County to ensure that land uses approved in Alameda County within the Byron Airport’s referral area are compatible with the airport’s operations.	Heights of structures are below levels that would affect the airport operations (stacks are approximately 150 feet below the Federal Aviation Administration (FAA) airspace protection surfaces). MEP is approximately 2.7 miles from the nearest runway and over 1 mile from visual and precision instrument flight paths (including the runway approach surface). MEP has been in consultation with the Contra Costa County Department of Airports and is in compliance with their land use policy of limiting any new structures to less than 100 feet above grade elevation (Contra Costa County, 2000). Additional information is provided in Section 5.12, Traffic and Transportation. Therefore, MEP is consistent with this policy.

TABLE 5.6-3

Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<b>Transportation Systems</b>	
Policy 180 – The County shall require that all new development in areas that are unincorporated as of the adoption of the East County Area Plan shall contribute their fair share towards the costs of transportation improvements shown on the Transportation Diagram, subject to confirmation in subsequent traffic studies, as a condition of project approval.	MEP will pay its fare share of costs associate with the provision of East County transportation improvements, as specified by the CEC. Additionally, MEP will document pre- and post-construction roadway conditions and will repair any damage caused by project construction traffic to pre-construction conditions. MEP is consistent with this policy.
<b>Transportation Demand Management</b>	
Policy 183 – The County shall seek to minimize traffic congestion levels throughout the East County street and highway system.	During construction, MEP is expected to generate approximately 81 vehicle trips per day on average and approximately 159 vehicle trips per day during the peak month. MEP will generate no more than 10 vehicle trips per day during operation. This increase would be acceptable according to the ECAP (see Section 5.12 for a detailed analysis), and would not result in East County traffic congestion, the reduction of which is an ECAP goal. MEP is consistent with this policy.
Policy 184 – The County shall seek to minimize the total number of Average Daily Traffic (ADT) trips throughout East County.	See Policy 183.
Policy 185 - The County shall seek to minimize peak hour trips by exploring new methods that would discourage peak hour commuting and single vehicle occupancy trips.	See Policy 183.
Policy 190 – The County shall require new non-residential developments in unincorporated areas to incorporate Transportation Demand Management (TDM) measures and shall require new residential developments to include site plan features that reduce traffic trips such as mixed use development and transit-oriented development projects.	See Policy 183.
<b>Infrastructure and Services</b>	
Policy 218 – The County shall allow development and expansion of public facilities (e.g., parks and recreational facilities; schools; child care facilities; police, fire, and emergency medical facilities; solid waste, water, storm drainage, flood control, subregional facilities; utilities, etc.) in appropriate locations inside and outside the Urban Growth Boundary consistent with the policies and Land Use Diagram of the East County Area Plan.	The Land Use Diagram of the ECAP identifies the parcel on which MEP will be located as Large Parcel Agriculture. MEP is compatible with this designation and will be sited near existing, similar land uses, outside of the Urban Growth Boundary. MEP is a conditionally permitted use in this area. The County has previously authorized a cogeneration / wastewater distillation facility on the site per Conditional Use Permit C-5653, which consists of a thermal electric generating facility and a wastewater distillation process. Alameda County would have jurisdiction over the project site, but for the CEC's exclusive jurisdiction under the Warren-Alquist Act. MEP is consistent with this policy.

**TABLE 5.6-3**

Project Conformity with Local Land Use Plans and Policies

<b>Goals/Policies/Programs</b>	<b>Project Conformity</b>
<b><i>Police, Fire, and Emergency Medical Services</i></b>	
Policy 241 – The County shall provide effective law enforcement, fire, and emergency medical services to unincorporated areas.	The project will have a less-than-significant impact on law enforcement, fire, and emergency medical services. MEP will pay development fees and taxes to the County, as would any other development. These fees go to pay for public services. See Section 5.10 for a detailed analysis. MEP is consistent with this policy.
Policy 243 - The County shall require new developments to pay their fair share of the costs for providing police, fire, and emergency medical services and facilities.	MEP will pay its fare share of costs for the provision of police, fire, and emergency medical services and facilities, as specified by the CEC.
Policy 244 – The County shall require that new developments are designed to maximize safety and security and minimize fire hazard risks to life and property.	The project will have a less-than-significant impact on law enforcement, fire, and emergency medical services. The project will have its own fire suppression procedures. See Section 5.10 for a detailed analysis. MEP is consistent with this policy.
<b><i>Water</i></b>	
Policy 257 - The County shall support more efficient use of water through such means as conservation and recycling, and shall encourage the development of water recycling facilities to help meet the growing needs of East County.	The project will minimize water use through the utilization of an air-cooled condenser (dry cooling) for the inlet air chiller condensers. This design significantly reduces the amount of fresh water required for operation and eliminates evaporative cooling or fogging of the turbine inlet air, as well as evaporative cooling towers water use. Expected water demand is 34.8 acre-feet per year (afy) with an estimated use of 187 afy at the maximum permitted operating scenario (see Section 5.15). Additionally, approximately 85 percent of the process wastewater will be treated and recycled onsite as process water. MEP is consistent with this policy.
Policy 259 - The County shall include water conservation measures as conditions of approval for subdivisions and other new development.	See Policy 257.
<b><i>Sewer</i></b>	
Policy 273 – The County shall support Zone 7’s policy which discourages commercial and industrial development using septic tanks.	The project will include an onsite septic tank to accommodate sanitary wastewater and general facility drainage, which will be stored for either discharge through an onsite leach field or removal for offsite treatment. However, there would be no commercial or industrial discharges to septic tanks (domestic wastewater). Further, MEP will have a total of 8 employees, with a maximum of 5 employees present on site at any one time. The domestic wastewater produced at the plant is equivalent to domestic wastewater produced in two households. The environmental effects of such low septic requirements were considered to be less substantial than the effects of construction of a 5.5 mile sewer line. Section 5.15 provides a detailed analysis.

**TABLE 5.6-3**

Project Conformity with Local Land Use Plans and Policies

<b>Goals/Policies/Programs</b>	<b>Project Conformity</b>
<p>Policy 275 – The County shall condition the approval of new development on verification that adequate wastewater treatment and export and/or reclamation capacity exists to serve the development.</p>	<p>MEP has been designed as a zero-liquid-discharge (ZLD) facility. The primary wastewater collection system will collect process wastewater and stormwater runoff from all of the plant equipment areas and route it to sumps and the onsite oil/water separator before treatment by the activated carbon filtration ZLD system and recycling the water within the plant process water system. The secondary wastewater collection system will collect sanitary wastewater from sinks, toilets, showers, and other sanitary facilities, and route it to an onsite septic tank for either discharge through an onsite leach field or removal for offsite treatment. Section 5.15 provides a detailed analysis. MEP is consistent with this policy.</p>
<b><i>Storm Drainage and Flood Control</i></b>	
<p>Policy 280 – The County shall regulate new development on a case-by-case basis to ensure that, when appropriate, project storm drainage facilities shall be designed so that peak rate flow of stormwater from new development will not exceed the rate of runoff from the site in its undeveloped state.</p>	<p>MEP will include an extended detention basin to ensure that the rate of runoff from the site does not exceed that of the undeveloped condition. Section 5.15 includes a detailed runoff analysis. MEP is consistent with this policy.</p>
<p>Policy 282 – The County shall encourage use of natural or nonstructural stormwater drainage systems to preserve and enhance the natural features of a site.</p>	<p>MEP will use grass-lined swales to route upstream stormwater around the facility. On site stormwater from non-process areas will be routed to an onsite grass-lined extended detention basin located on the north end of the site. Both of these features will release stormwater back to the natural drainage system downstream of the plant. Section 5.15 provides a detailed analysis of stormwater runoff.</p>

TABLE 5.6-3

Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<b>Utilities</b>	
<p>Policy 285 – The County shall facilitate the provision of adequate gas and electric service and facilities to serve existing and future needs while minimizing noise, electromagnetic, and visual impacts on existing and future residents.</p>	<p>The project supports this policy by providing electrical supply to the County from a location that is remote to residential, commercial, or industrial impacts. East Alameda County is served electrically by transmission lines that originate at the Tesla Substation, the Moraga and San Ramon substations in Contra Costa County and the Metcalf Substation in Santa Clara County. When available, wind energy supplies some of the East Alameda County load and the balance is imported through the previously described power line network. MEP will tie into a 230-kV line that delivers power to the Tesla Substation and, as such, is one of the closest, non-wind, resources to meet the East Alameda County loads. MEP will provide capacity to stabilize intermittent wind generation and during high electrical load events provides capacity to meet East Alameda County end user requirements. Impacts related to noise (see Section 5.7) and visual resources (see Section 5.13) are less than significant. The MEP site is situated between two small hills; this location was selected to minimize visual and noise impacts. Additionally, the site is situated near existing infrastructure both for land use consistency and to minimize the lengths of required interconnections.</p>
<p>Policy 287 - The County shall require new developments to locate utility lines underground, whenever feasible.</p>	<p>MEP will require only a 0.7-mile, 230-kV transmission line that will run from the site north to the Kelso Substation. It is economically infeasible to locate such short sections of high-voltage lines underground. Further, the immediate area is already heavily developed with overhead transmission lines, including two 500-kV circuits on the eastern boundary of the property and a single 230-kV line on the western boundary of the property. Additional overhead lines are consistent with the existing conditions. Also, within the proposed site there are two major natural gas pipelines and an oil pipeline; therefore, placing additional underground utilities in proximity to the existing lines is not recommended. MEP is consistent with this policy.</p>
<b>Environmental Health</b>	
<p>Policy 288 - The County shall endeavor to maintain acceptable noise levels throughout East County.</p>	<p>Project will meet the existing County noise levels. MEP will not exceed acceptable noise levels for residential areas, which are more restrictive than acceptable levels for areas with large parcel agricultural uses. This will minimize East County residents' and workers' exposure to excessive noise, consistent with the ECAP goal for Noise. See Section 5.7 for a complete analysis. MEP is consistent with this policy.</p>

**TABLE 5.6-3**

Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<p>Policy 290 - The County shall require noise studies as part of development review for projects located in areas exposed to high noise levels and in areas adjacent to existing residential or other sensitive land uses. Where noise studies show that noise levels in areas of existing housing will exceed "normally acceptable" standards (as defined by the California Office of Noise Control Land Use Compatibility Guidelines), major development projects shall contribute their prorated share to the cost of noise mitigation measures such as those described in Program 104.</p>	<p>A noise study was performed to identify areas of potential noise impacts. See Section 5.7 for a complete analysis. MEP is consistent with this policy. If MEP exceeds the normally acceptable standards, further mitigation measures will be implemented. Potential noise control measures are included in Section 5.7.</p>
<p>Policy 294 – The County shall require new development projects to include traffic and air pollutant reduction measures to help attain air quality standards. For non-residential projects, these measures could include Transportation Demand Management programs such as ridesharing and transit promotion; for residential projects, these measures could include site plan features to reduce traffic trip generation such as mixed used development and transit-oriented development.</p>	<p>The project includes extensive measures to reduce air pollution, as detailed in Section 5.1. Air pollution levels will not threaten public health and safety, economic development, or future growth, consistent with the ECAP goal for Air Quality. There will be 5 or fewer employees on site during normal operation and the project will have a less-than-significant impact on transportation facilities. See Section 5.12 for a detailed analysis. MEP is consistent with this policy.</p>
<p>Policy 295 – The County shall require major projects of commercial or industrial nature to include bicycle storage facilities for employees and customers, shower/locker areas, and other facilities identified in the East County Bicycle Plan (describe in Program 84) for employees that commute using bicycles</p>	<p>Because the project is located far from urban centers, it is not anticipated that any employees will choose to use bicycle transportation. However, adequate bicycle storage facilities would be available for any employee who chooses to use this mode of transportation. Project customers will not be present on site. MEP is consistent with this policy.</p>
<p>Policy 299 – The County shall require projects that generate high levels of air pollutants, such as manufacturing facilities, hazardous waste handling operations, and drive-through restaurants and banks, to incorporate air quality mitigations in their design.</p>	<p>The project includes extensive measures to reduce air pollution, as detailed in Section 5.1. MEP is consistent with this policy.</p>
<p>Policy 300 – The County shall review proposed projects for their potential to generate hazardous air pollutants.</p>	<p>The project includes extensive measures to reduce the generation of hazardous air pollutants, detailed in Sections 5.1 and 5.9. MEP is consistent with this policy.</p>
<p>Policy 301 – The County shall only approve new air pollution point sources such as manufacturing and extracting facilities when they are located away from residential areas and sensitive receptors [see definition in Table 1].</p>	<p>The project is located away from residential areas and other sensitive receptors. The closest residence is approximately 0.5 miles from the site; the closest sensitive receptor, Mountain House Elementary School, is located approximately 1.3 miles east of the project site. The project includes extensive measures to reduce air pollution, as detailed in Section 5.1. Complete air quality and public health impact assessments are included in Sections 5.1 and 5.9, respectively. MEP is consistent with this policy.</p>

**TABLE 5.6-3**

Project Conformity with Local Land Use Plans and Policies

<b>Goals/Policies/Programs</b>	<b>Project Conformity</b>
<p>Policy 306 – The County shall protect surface and groundwater resources by:</p> <ul style="list-style-type: none"> <li>• preserving areas with prime percolation capabilities and minimizing placement of potential sources of pollution in such areas;</li> <li>• minimizing sedimentation and erosion through control of grading, quarrying, cutting of trees, removal of vegetation, placement of roads and bridges, use of off-road vehicles, and animal-related disturbance of the soil;</li> <li>• not allowing the development of septic systems, automobile dismantlers, waste disposal facilities, industries utilizing toxic chemicals, and other potentially polluting substances in creekside, reservoir, or high groundwater table areas when polluting substances could come in contact with flood waters, permanently or seasonally high groundwaters, flowing stream or creek waters, or reservoir waters; and,</li> <li>• avoiding establishment of excessive concentrations of septic systems over large land areas.</li> </ul>	<p>The project will protect surface and groundwater resources. Impacts to surface water during construction will be controlled by a Stormwater Pollution Prevention Plan and associated Best Management Practices. The grading and drainage of the proposed plant was designed in accordance with the Alameda County Flood Control &amp; Water Conservation District C.3 Stormwater Technical Guidance. MEP would make no direct use of groundwater resources and would have no effect on groundwater quantity or quality. Specific analysis and project descriptions are provided in Section 5.15. MEP is consistent with this policy.</p>
<b><i>Soil and Slope Stability</i></b>	
<p>Policy 308 – The County shall not permit development within any area outside the Urban Growth Boundary exceeding 25 percent slopes to minimize hazards associated with slope instability.</p>	<p>The project site and laydown area is entirely within an area with 3 to 15 percent slope. This will minimize the risks of soil and slope instability hazards, and will therefore be consistent with the ECAP goal for Soil and Slope Stability. The water pipeline crosses an area west of the project site in which the slope is 15 to 30 percent. Section 5.11 provides a detailed soils analysis. Slope stability is addressed in Section 5.4, Geologic Hazards and Resources.</p>
<b><i>Seismic and Geologic Hazards</i></b>	
<p>Policy 310 – The County, prior to approving new development, shall evaluate the degree to which the development could result in loss of lives or property, both within the development and beyond its boundaries, in the event of a natural disaster.</p>	<p>There is potential for seismic groundshaking to affect the project site in the event of a large-magnitude earthquake occurring on fault segments located near the project. Specific information related to the potential of seismic events is provided in Section 5.4. MEP is consistent with this policy.</p>
<p>Policy 311 – The County shall ensure that new major public facilities, including emergency response facilities (e.g., hospitals and fire stations), and water storage, wastewater treatment and communications facilities, are sited in areas of low geologic risk.</p>	<p>The project is not located within an Alquist-Priolo Earthquake Fault Zone or within the trace of any known active fault. The probability of liquefaction, mass wasting, or subsidence occurring at the project site is low to non-existent. Further discussion is in Section 5.4. MEP is consistent with this policy.</p>

**TABLE 5.6-3**  
Project Conformity with Local Land Use Plans and Policies

Goals/Policies/Programs	Project Conformity
<p>Policy 315 - The County shall require that buildings be designed and constructed to withstand groundshaking forces or a minor earthquake without damage, of a moderate earthquake without structural damage, and of a major earthquake without collapse of the structure. The County shall require that critical facilities and structures (e.g., hospitals, emergency operations centers) be designed and constructed to remain standing and functional following an earthquake.</p>	<p>Seismic hazards and potential adverse foundation conditions will be minimized by conformance with the recommended seismic design criteria of the California Building Code seismic requirements. This will minimize the risks of seismic and geologic hazards, and would therefore be consistent with the ECAP goal for Seismic and Geologic Hazards. Further discussion is provided in Section 5.4. MEP is consistent with this policy.</p>
<b>Flood Hazards</b>	
<p>The County shall require new residential, public, commercial, and industrial development to have protection from a 100-year flood.</p>	<p>The Federal Emergency Management Agency has not published flood insurance rate maps for the area where the MEP site is located. No nearby areas, however, are designated as special flood hazard areas; therefore, it is unlikely that the project site is subject to flooding. The MEP site is not in an area subject to flooding from a tsunami or seiche (see Section 5.15). MEP is consistent with this policy.</p>

### 5.6.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code § 21083; CCR, title 14, §§ 15064(h), 15065(c), 15130, and 15355).

Applications for six proposed projects have been filed in the area surrounding the project, including both Alameda and San Joaquin Counties. These projects include power generation facilities, a residential development, a motorway rezoning, and a composting facility. The closest project is a 2 MW utility-scale solar farm, which is approximately 1 mile away from the project site.

As stated previously, MEP will not cause any adverse land use impacts; therefore, MEP will not cause any adverse cumulative land use impacts.

### 5.6.4 Mitigation Measures

No significant land use impacts are anticipated from implementation of the proposed project. Therefore, no additional mitigation measures are proposed, beyond the provisions for enhancing agricultural productivity of the parcel as discussed in Section 5.6.2.2.4. Project implementation will occur in compliance with all LORS applicable to the construction and operation of power plant facilities, including the ECAP. As proposed, project construction and operation is expected to comply with all Alameda County and CEC conditions of approval.

## 5.6.5 Laws, Ordinances, Regulations and Standards

This subsection lists and discusses the land use LORS that apply to the project. Consistent with CEC AFC requirements, all plans and polices applicable to the 1-mile area surrounding the MEP site are summarized below. MEP, including all project components (plant site, natural gas, water lines, and the transmission interconnections to the Kelso substation), is located in Alameda County, with the exception of a portion of the water line that extends into Contra Costa County. The portion of the project located within Alameda County is subject to all of the ECAP policies and objectives. Because the development of the project's waterline will not entail changes that will result in substantial long-term changes to the environment in Contra Costa County, only an encroachment permit will be required, as detailed in Table 5.6-6.

### 5.6.5.1 Federal LORS

MEP will be located within Byron Airport's influence area (2.7 miles away). Therefore, the following Federal Aviation Regulations apply to the project:

- 14 CFR 77.13(2)(i) requires an applicant to notify the FAA of the construction of structures within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet.
- 14 CFR 77.17 requires an applicant to submit a Notice of Proposed Construction or Alteration (FAA Form No. 7460-1) to the FAA for construction within 20,000 feet of the nearest runway of an airport with at least one runway longer than 3,200 feet.
- 14 CFR 77.21, 77.23, and 77.25 outlines the criteria used by the FAA to determine whether an obstruction would create an air navigation conflict.

MEP will comply with all notification requirements per 14 CFR 77.13(2)(i) and 14 CFR 77.17. The project site is not within civil airport imaginary surface, as defined in 14 CFR 77.25, and the tallest feature will be the 80-foot-tall stacks and up to 95-foot-tall transmission poles, which would not interfere with any designated flight path. MEP is approximately 2.7 miles from the nearest runway and over 1.0 mile from visual and precision instrument flight paths. Additional information is provided in Section 5.12, Traffic and Transportation.

### 5.6.5.2 State LORS

The AFC process is CEQA-equivalent under the Warren-Alquist Act and, therefore, fulfills the requirements of CEQA. CEQA is codified in the California Public Resources Code, Section 21000-21178.1. Guidelines for implementation of CEQA are codified in the CCR Sections 15000-15387.

The Williamson Act implements a state land use policy that serves to preserve open space and agricultural land. It discourages premature urbanization and relieves pressure on landowners to develop their property because property taxes are based on the greater value of the land for commercial or residential use. The Williamson Act is implemented through voluntary contracts with property owners that restrict land use for 10 years, with an automatic annual renewal. In return for the agreement to restrict the use of land for 10 years, the landowner receives preferential property tax rates based on the use of the land rather than its market (i.e., development) value. Alameda County administers the contracts

associated with land under Williamson Act with oversight by the California Department of Conservation, Office of Land Conservation. The project is proposed on land currently under a Williamson Act contract.

### 5.6.5.3 Local LORS

Land use provisions that are included in every California city and county General Plan (California State Planning Law, Government code §65302 et seq.) reflect the goals and policies that guide the physical development of land in their jurisdiction. The city and county zoning ordinances are enforced by their respective planning and building departments. The ECAP and Alameda County Code are administered by the Alameda County Community Development Agency.

**TABLE 5.6-4**  
Laws, Ordinances, Regulations, and Standards for Land Use

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
<b>Federal</b>			
Federal Aviation Regulations, Part 77, Sections 77.13 ff (2)(i), 77.17, 77.21, 77.23, 77.25.	The Federal Aviation Regulations require notice of any construction or alteration that is (a) more than 200 feet in height above ground level or (b) greater than certain planes extending outward and upward at specified radius and slopes from the nearest runway of certain airports.	Federal Aviation Administration	Section 5.6.5.1
<b>State</b>			
CEQA California Public Resources Code, Sections 21000-21178.1, including Guidelines for implementation of CEQA are codified in the CCR Sections 15000-15387.	Establishes policies and procedures for review of proposed power plants in California	California Energy Commission	Section 5.6.5.2
Warren-Alquist Act (Public Resources Code Section 25000 et seq.)	Legislation that created and gives statutory authority to the California Energy Commission.	California Energy Commission	Section 5.6.5.2
<b>Local</b>			
Alameda County East County Area Plan	Comprehensive, long-range plan to serve as the guide for the physical development of the eastern portion of Alameda County.	Alameda County Community Development Agency	Table 5.6-3
Alameda County Municipal Code – Title 17: Zoning Ordinance	Establishes zoning districts governing land use and the placement of buildings and district improvements.	Alameda County Community Development Agency	Table 5.6-3

## 5.6.6 Agencies and Agency Contacts

Table 5.6-5 provides contact information for the agencies responsible for land use issues.

**TABLE 5.6-5**  
Agency Contacts for Land Use

Issue	Agency	Contact
Williamson Act	State of California Department of Conservation	Brian R. Leahy, J.D. DOC - Land Resource Protection 801K Street, MS 18-01 Sacramento, CA 95814 (916) 324-0850
Land Use Plans and Permits	Alameda County Community Development Agency, Planning Department	Bruce Jensen, Senior Planner 224 W. Winton Ave., Suite 111 Hayward, CA 94544 510/670-6527
Building Permits	Alameda County Public Works Agency, Development Services	John Rogers 399 Elmhurst St. Hayward, CA 94544-1395 510/670-5429 X55429
Airspace Encroachment (Consultation only)	Alameda County Airport Land Use Commission	Steve Grossman, Chair 224 W. Winton Avenue, Suite 111 Hayward, CA 94544 (510) 670-6511
Contra Costa County Encroachment Permit	Contra Costa County, Permit Assistance Center	Bob Hendry Public Works Permitting Engineer 651 Pine Street 2nd Floor, North Wing Martinez, CA 94553 (916) 335-1375
Airspace Encroachment (Consultation only)	Contra Costa County Airport Land Use Commission	Patrick Roche, Principal Planner 651 Pine Street, 5 <sup>th</sup> Floor Martinez, CA 94553 (925) 335-1242

## 5.6.7 References

Beatty-Weldon, Jana, Planner/Alameda County Community Development Agency. 2009. Personal communication with CH2M HILL staff. March 27.

California Department of Conservation (CDC). 2005. Farmland Mapping and Monitoring Program Statistics web page at [http://www.consrv.ca.gov/dlrp/FMMP/fmmp\\_stats.htm](http://www.consrv.ca.gov/dlrp/FMMP/fmmp_stats.htm). July.

Alameda County. 2002 (updated from 1994). East County Area Plan – A Portion of the Alameda County General Plan.

Alameda County. 2009. Alameda County Municipal Code.

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Contra Costa County. 2000. Airport Land Use Compatibility Plan. December.  
<http://www.co.contra-costa.ca.us/depart/cd/current/ALUCPlan/CCC-ALUC-Plan-Part3.pdf>

Contra Costa County. 2008. Contra Costa County Municipal Code.

Griffin, Rick, Senior Planner/Contra Costa County. 2009. Personal communication with CH2M HILL staff. April 7.

Jensen, Bruce, Senior Planner/Alameda County Community Development Agency. 2009. Personal communication with CH2M HILL staff. March 20.