

## **20. Land Use**

### **20.1 Introduction**

This chapter analyzes potential land use and agricultural impacts of all alternatives in the Extended, Secondary, and Primary study areas. Descriptions and maps of these three study areas are provided in Chapter 1 Introduction.

Permits and authorizations for land use are presented in Chapter 4 Environmental Compliance and Permit Summary. The regulatory setting for land use is presented in Appendix 4A Environmental Compliance.

This chapter focuses primarily on the Primary Study Area because the alternatives would not cause land use impacts in the Extended and Secondary study areas (i.e., no changes in zoning, land use, or policies in adopted general plans). Potential land use impacts from constructing, operating and maintaining the alternatives are described and compared to applicable significance thresholds. Mitigation measures are proposed where feasible for potentially significant impacts.

### **20.2 Environmental Setting/Affected Environment**

#### **20.2.1 Extended Study Area**

The Extended Study Area includes the entire service areas of the State Water Project (SWP) and Central Valley Project (CVP). These two service areas are located within all or portions of the following 33 counties: Alameda, Butte, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Los Angeles, Madera, Merced, Napa, Orange, Placer, Plumas, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Ventura, and Yolo.

Land use in the CVP and SWP service areas varies considerably, depending on location, and includes agricultural, residential, commercial, industrial, and open space (which includes wildlife refuges).

The CVP, operated by Reclamation, stores and delivers water through the following facilities: 21 reservoirs; 11 power plants; 500 miles of major canals; and conduits, tunnels, and associated facilities (Reclamation, 2011). In the Central Valley, most municipal and industrial (M&I) service contract water use occurs near the cities of Redding and Sacramento and in some towns and cities in the San Joaquin Valley to meet the demand from those residential, commercial, and industrial land uses. Outside of the population centers of the San Francisco Bay Area and Sacramento and Stockton metropolitan areas, most of the CVP service area is rural, with irrigated agriculture representing the predominant land use (Reclamation, 2011).

The SWP is a water storage and delivery system that is operated and maintained by the California Department of Water Resources (DWR). The SWP stores and delivers water through the following facilities: 34 storage facilities, reservoirs, and lakes; 20 pumping plants; four pumping-generating plants; five hydroelectric power plants; and approximately 701 miles of open canals and pipelines (DWR, 2013). The SWP service area comprises almost 25 percent of California's land area and more than 66 percent of its population. SWP water is used for both agricultural purposes (750,000 acres of irrigated farmland – mainly southern San Joaquin Valley) and on lands developed for residential, commercial, and industrial purposes.

## 20.2.2 Secondary Study Area

The Secondary Study Area is defined as the area of potential operational effects, including SWP and CVP facilities that could experience water surface elevation fluctuations or stream flow changes. Those facilities are located within the following 18 counties: Alameda, Butte, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Humboldt, Placer, Sacramento, Santa Clara, Shasta, Solano, Sutter, Tehama, Trinity, Yolo, and Yuba.

Similar to the Extended Study Area, land use within the 18 counties of the Secondary Study Area varies greatly because of differences in population, economy, and environment; land uses include agricultural, residential, commercial, industrial, recreational, and undeveloped open space.

Urban development (i.e., residential, commercial, and industrial land uses) is concentrated around the State capitol of Sacramento, as well as in Sacramento County and in the counties of Solano, Contra Costa, Alameda, Santa Clara, San Mateo, San Francisco, Marin, and Sonoma, as well as in the Sacramento-San Joaquin Delta (Delta). Commercial and industrial land uses within Shasta, Tehama, Colusa, and Glenn counties are concentrated along transportation corridors. Land use in Del Norte, Humboldt, and Trinity counties is greatly influenced by the amount of public and Native American tribal lands, much of which is used for timber production and other natural resource-related uses (USFWS, et al., 1999).

The counties within the Secondary Study Area also have lands that are dedicated to operation of the CVP and SWP waterbodies, with recreation and open space land uses being the primary land uses surrounding the waterbodies.

Land uses within the Sacramento Valley counties that lie along the Sacramento River consist primarily of agriculture from Shasta County to Sacramento, with some recreation and open space. Several wildlife refuges also exist along the Sacramento River corridor.

The Delta is located at the confluence of the Sacramento and San Joaquin rivers and consists of channels and sloughs that flow into Suisun Bay, San Pablo Bay, and then San Francisco Bay before entering the Pacific Ocean. The Delta and bays are undergoing rapid urbanization associated with substantial population growth in the Bay Area and Central Valley regions. Other land uses in these areas include agricultural, rural residential, open space, and recreational.

The addition of two pumps into existing bays at the existing Red Bluff Pumping Plant (RBPP) – would occur in Tehama County, within the Secondary Study Area. The Tehama County General Plan is not addressed here, however, because the addition of two pumps would not change the existing land use of the RBPP.

## 20.2.3 Primary Study Area

### 20.2.3.1 Existing Plans and Policies

Glenn County and Colusa County general plans (Glenn County, 1993 and Colusa County, 2012) and County Zoning Codes (Glenn County, 2016 and Colusa County, 2014) were reviewed for all Sites Reservoir Project (Project) facilities. California Department of Conservation (DOC), Office of Land Conservation's Farmland Mapping and Monitoring Program (FMMP) data was obtained and reviewed, Williamson Act data was obtained from DOC (DOC, 2013, and 2016a) and reviewed, and the Wetlands Reserve Program (WRP) (pursuant to the Natural Resources Conservation Service) was reviewed. Definitions of applicable zoning and FMMP designations are provided in Appendix 4A Environmental

Compliance. Provided in Sections 20.2.3.3 is a summary of each Project facility grouping. The information provided includes the Project facility groupings plus the areas around the facility groupings that would be needed for Project construction activities, except for the Project Buffer. The Project Buffer would not have a construction disturbance area, but would result in a permanent loss of the existing use and is included in this discussion to characterize the Existing Setting in that area.

### **20.2.3.2 Existing Land Uses and Recent Agricultural Land Use Conversions in Glenn and Colusa Counties**

The Primary Study Area is located within Colusa and Glenn counties which are both primarily rural in nature. Land uses as described below are primarily agriculture and open space with development primarily located along the I-5 and State Road 45 (SR 45) corridors. Surrounding the developed communities are farms, ranches, and orchards (i.e., rural residential and agricultural land uses).

#### **Glenn County**

Glenn County is located in the western portion of the Sacramento Valley, north of Colusa County. Glenn County is approximately 849,000 acres in size, with approximately 68 percent in agriculture, 31 percent considered “other land”,<sup>1</sup> and less than 1 percent in urban (i.e., residential, commercial, and/or industrial) land uses in 2010 (DOC, 2016b).

In 2014, Glenn County recorded 347,032 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance) and an additional 227,118 acres of grazing land (DOC farmland definitions can be found in Appendix 4A Environmental Compliance). Between 2012 and 2014, Important Farmlands decreased by 556 acres, and grazing land increased by 341 acres in Glenn County (DOC, 2016b). Table 20-1 provides the 2012-2014 land use conversion totals for Glenn County.

#### **Colusa County**

Colusa County is located in the western portion of the Sacramento Valley. The county is approximately 740,000 acres in size, with approximately 76 percent in agriculture, 23 percent considered “other land,” and less than 1 percent in urban (i.e., residential commercial, and/or industrial land uses in 2010 (DOC, 2016c).

In 2014, Colusa County had 549,096 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance), and an additional 13,861 acres of grazing land. Between 2012 and 2014, Important Farmlands decreased by 5,749 acres and grazing land increased by 4,709 acres in Colusa County (DOC, 2016c). Table 20-2 provides the 2012-2014 land use conversion totals for Colusa County.

<sup>1</sup> Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines or borrow pits; and waterbodies smaller than 40 acres. Includes vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres.

**TABLE 20-1  
GLENN COUNTY  
2012–2014 Land Use Conversion**

**CALIFORNIA DEPARTMENT OF CONSERVATION**

**Division of Land Resource Protection Farmland Mapping and Monitoring Program**

<b>PART I County Summary and Change by Land Use Category</b>							<b>PART II Land Committed to Nonagricultural Use</b>	
Land Use Category	Total Acreage Inventoried		2012-14 Acreage Changes				Land Use Category	Total Acreage 2014
	2012	2014	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed		
Prime Farmland	157,878	157,781	1,744	1,647	3,391	-97	Prime Farmland	Data
Farmland of Statewide Importance	86,961	87,939	710	1,688	2,398	978	Farmland of Statewide Importance	Not Available
Unique Farmland	17,359	17,625	524	790	1,314	266	Unique Farmland	
Farmland of Local Importance	85,390	83,687	4,797	3,094	7,891	-1,703	Farmland of Local Importance	
Important Farmland Subtotal	347,588	347,032	7,775	7,219	14,994	-556	Important Farmland Subtotal	
Grazing Land	226,777	227,118	726	1,067	1,793	341	Grazing Land	
Agricultural Land Subtotal	574,365	574,150	8,501	8,286	16,787	-215	Agricultural Land Subtotal	
Urban and Built-up Land	6,434	6,450	138	154	292	16	Urban and Built-up Land	
Other Land	262,383	262,604	678	899	1,577	221	Other Land	
Water Area	5,950	5,928	27	5	32	-22	Water Area	
Total Area Inventoried	849,132	849,132	9,344	9,344	18,688	0	Total Acreage Reported	

## CALIFORNIA DEPARTMENT OF CONSERVATION

## Division of Land Resource Protection Farmland Mapping and Monitoring Program

<b>PART III</b>												
<b>Glenn County Land Use Conversion from 2012 to 2014</b>												
Land Use Category		Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance	Subtotal Important Farmland	Grazing Land	Total Agricultural Land	Urban and Built-up Land	Other Land	Water Area	Total Converted to Another Use
Prime Farmland <sup>a</sup>	to:	--	6	3	1,545	1,554	1	1,555	11	178	0	1,744
Farmland of Statewide Importance	to:	6	--	1	655	662	0	662	7	41	0	710
Unique Farmland	to:	3	1	--	176	180	280	460	21	43	0	524
Farmland of Local Importance <sup>b</sup>	to:	1,520	1,610	474	--	3,604	649	4,253	51	493	0	4,797
Important Farmland Subtotal		1,529	1,617	478	2,376	6,000	930	6,930	90	755	0	7,775
Grazing Land	to:	0	0	177	457	634	--	634	60	32	0	726
Agricultural Land Subtotal		1,529	1,617	655	2,833	6,634	930	7,564	150	787	0	8,501
Urban and Built-up Land <sup>c</sup>	to:	30	5	4	14	53	0	53	--	85	0	138
Other Land	to:	88	66	131	247	532	137	669	4	--	5	678
Water Area	to:	0	0	0	0	0	0	0	0	27	--	27
Total Acreage Converted	to:	1,647	1,688	790	3,094	7,219	1,067	8,286	154	899	5	9,344

<sup>a</sup>Conversion to Farmland of Local Importance is primarily due to land left idle or land used for dryland grain production for three or more update cycles.

<sup>b</sup>Conversion to irrigated farmland is primarily due to the addition of irrigated row crops and orchards, including nearly 2,000 acres of new orchards near Artois.

<sup>c</sup>Conversion from Urban and Built-up Land is due to a lack of sufficient infrastructure and the use of detailed digital imagery to delineate more distinct urban boundaries as well as a new orchard on former Urban and Built-up Land near Hamilton City.

Source: DOC, 2016b

**TABLE 20-2  
COLUSA COUNTY  
2012–2014 Land Use Conversion**

**CALIFORNIA DEPARTMENT OF CONSERVATION  
Division of Land Resource Protection Farmland Mapping and Monitoring Program**

<b>PART I County Summary and Change by Land Use Category</b>							<b>PART II Land Committed to Nonagricultural Use</b>	
Land Use Category	Total Acreage Inventoried		2012-14 Acreage Changes				Land Use Category	Total Acreage 2014
	2012	2014	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed		
Prime Farmland	196,828	196,404	1,465	1,041	2,506	-424	Prime Farmland	Data
Farmland of Statewide Importance	2,191	2,465	13	287	300	274	Farmland of Statewide Importance	Not Available
Unique Farmland	120,878	120,344	1,227	693	1,920	-534	Unique Farmland	
Farmland of Local Importance	234,948	229,883	11,601	6,536	18,137	-5,065	Farmland of Local Importance	
Important Farmland Subtotal	554,845	549,096	14,306	8,557	22,863	-5,749	Important Farmland Subtotal	
Grazing Land	9,152	13,861	5,152	9,861	15,013	4,709	Grazing Land	
Agricultural Land Subtotal	563,997	562,957	19,458	18,418	37,876	-1,040	Agricultural Land Subtotal	
Urban and Built-up Land	5,157	5,227	13	83	96	70	Urban and Built-up Land	
Other Land	169,320	170,290	437	1,407	1,844	970	Other Land	
Water Area	1,911	1,911	0	0	0	0	Water Area	
Total Area Inventoried	740,385	740,385	19,908	19,908	39,816	0	Total Acreage Reported	

## CALIFORNIA DEPARTMENT OF CONSERVATION

## Division of Land Resource Protection Farmland Mapping and Monitoring Program

<b>PART III</b>												
<b>Colusa County Land Use Conversion from 2012 to 2014</b>												
<b>Land Use Category</b>		<b>Prime Farmland</b>	<b>Farmland of Statewide Importance</b>	<b>Unique Farmland</b>	<b>Farmland of Local Importance</b>	<b>Subtotal Important Farmland</b>	<b>Grazing Land</b>	<b>Total Agricultural Land</b>	<b>Urban and Built-up Land</b>	<b>Other Land</b>	<b>Water Area</b>	<b>Total Converted to Another Use</b>
Prime Farmland <sup>a</sup>	to:	--	0	1	1,263	1,264	1	1,265	3	197	0	1,465
Farmland of Statewide Importance	to:	1	--	0	11	12	0	12	1	0	0	13
Unique Farmland	to:	1	0	--	179	180	129	309	35	883	0	1,227
Farmland of Local Importance <sup>b</sup>	to:	904	283	420	--	1,607	9,730	11,337	4	260	0	11,601
Important Farmland Subtotal		1,529	906	283	421	1,453	3,063	9,860	12,923	43	1,340	0
Grazing Land	to:	0	0	103	4,982	5,085	--	5,085	0	67	0	5,152
Agricultural Land Subtotal		906	283	524	6,435	8,148	9,860	18,008	43	1,407	0	19,458
Urban and Built-up Land <sup>c</sup>	to:	13	0	0	0	13	0	13	--	0	0	13
Other Land	to:	122	4	169	101	396	1	397	40	--	0	437
Water Area	to:	0	0	0	0	0	0	0	0	0	--	0
Total Acreage Converted	to:	1,041	287	693	6,536	8,557	9,861	18,418	83	1,407	0	19,908

<sup>a</sup>Conversion to Farmland of Local Importance is primarily due to land left idle for three or more update cycles.

<sup>b</sup>Conversions between Farmland of Local Importance and Grazing Land are due to incorporating 2014 zoning data into the assessment of land qualifying for Farmland of Local Importance.

<sup>c</sup>Conversion from Urban and Built-up Land is due to a lack of sufficient infrastructure and the use of detailed digital imagery to delineate more distinct urban boundaries as well as a new orchard on former Urban and Built-up Land near Hamilton City.

Source: DOC, 2016c

### **20.2.3.3 Primary Study Area Project Facility Locations**

#### **Sites Reservoir Inundation Area and Sites Reservoir Dams**

The proposed Sites Reservoir, the dams, and seven borrow areas within the inundation area would be located within Antelope Valley in unincorporated Glenn and Colusa counties. The Sites Reservoir Inundation Area for all alternatives would inundate the town of Sites in unincorporated Colusa County. The town of Sites was established in the late 1800s. It is a rural and sparsely populated area, with an estimated population of 17 to 20 people (Colusa County, 2013). Sites is considered a Populated Place<sup>2</sup> by the U.S. Geological Survey (USGS GNIS, 2012).

The portion of Sites Reservoir and dams, the borrow areas, and the construction disturbance areas within Glenn County would be located on lands that have a land use designation of Foothill Agriculture/Forestry by the General Plan and are zoned AP-160 and FA-160<sup>3</sup> (descriptions of each zoning code are available in Appendix 4A Environmental Compliance) (see Figures 20-1 and 20-2 for land uses within the Project construction areas and Project footprints). The portion of Sites Reservoir and dams, the borrow areas, and the construction disturbance areas within Colusa County would be located on lands that have a land use designation of Agriculture Upland and Rural Service Center and are zoned E-A, F-A, and R-S.<sup>4</sup> There are no WRP easements within the footprint of the reservoirs and dams for all alternatives.

Sites Reservoir and dams, the borrow areas, and the construction disturbance areas would be located on lands that have an FMMP designation of Farmland of Local Importance, Grazing Land, Local Potential Farmland, and Other Land in Glenn County, and on lands designated as Farmland of Local Importance, Grazing Land, and Other Land in Colusa County (see Figures 20-3 and 20-4 for Important Farmland designations within the Project construction areas and Project footprints).

Alternative A Reservoir and dams, borrow areas, and construction disturbance areas would be located on up to 90 parcels that have Williamson Act contracts. Of that total, eight contracts are with Glenn County and 82 contracts are with Colusa County.

Alternatives B, C, and D Reservoir and dams, borrow areas, and construction disturbance areas would be located on up to 101 parcels that have Williamson Act contracts. Of that total, nine contracts are with Glenn County and 92 contracts are with Colusa County. Glenn County contracts renew on March 1 each year. Colusa County contracts renew on January 1 each year.

#### **Recreation Areas and Associated Electrical Distribution Lines**

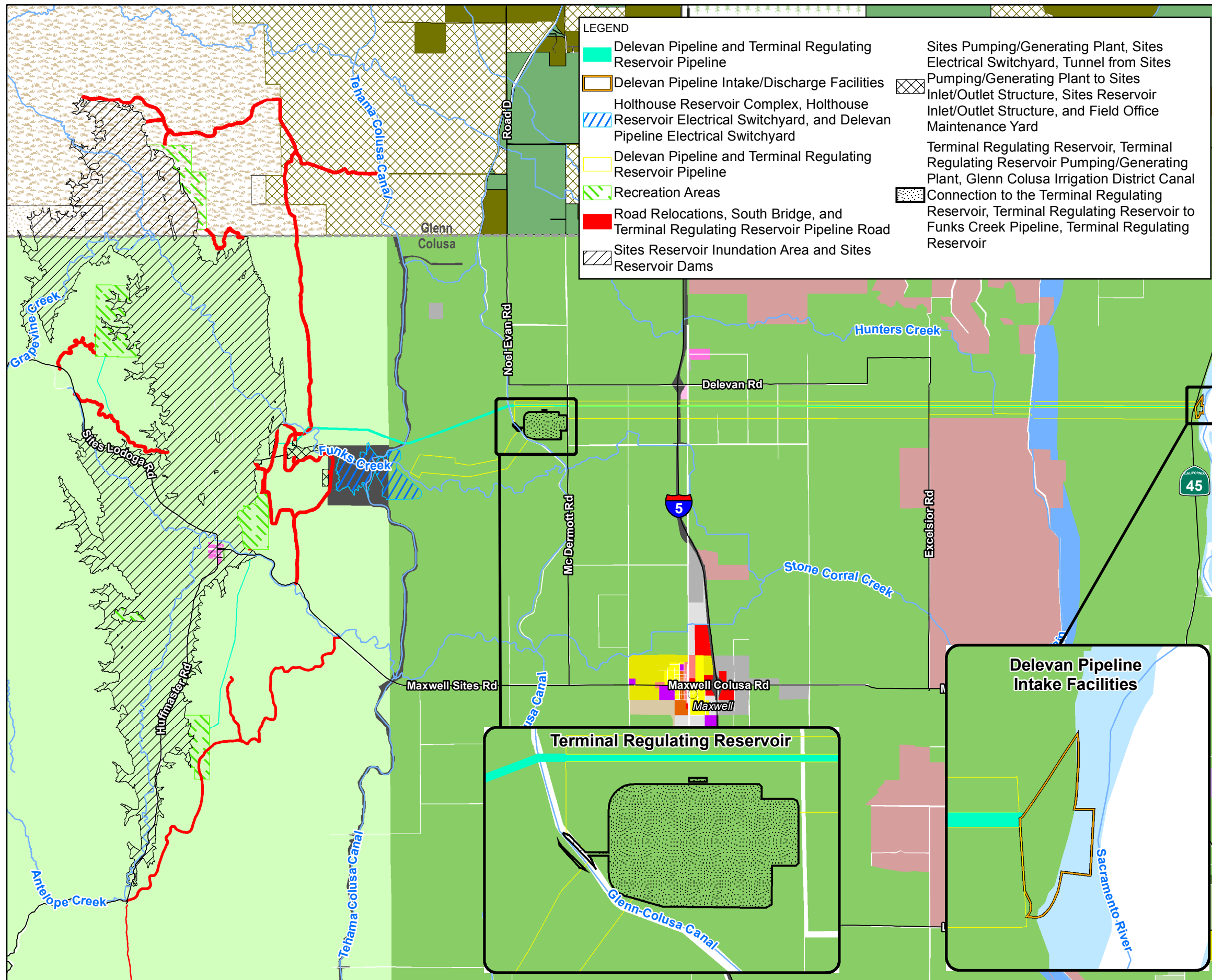
Up to five locations were determined to be potentially feasible recreation areas at Sites Reservoir to provide recreation opportunities: Stone Corral Recreation Area, Antelope Island Recreation Area, Peninsula Hills, Saddle Dam, and Lurline Headwaters Recreation Area.

<sup>2</sup> A Populated Place is defined as a place or area with clustered or scattered buildings and a permanent human population (city, settlement, town, or village). A Populated Place is usually not incorporated and by definition has no legal boundaries. However, a Populated Place may have a corresponding "civil" record, the legal boundaries of which may or may not coincide with the perceived populated place.

<sup>3</sup> AP = Agricultural Preserve (160 = 144-acre minimum)  
FA = Foothill Agriculture/Forestry (160 = 144-acre minimum)

<sup>4</sup> E-A = Agriculture General  
F-A = Agriculture Upland  
R-S = Rural Service Center





**LEGEND**

Delevan Pipeline and Terminal Regulating Reservoir Pipeline	Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard
Delevan Pipeline Intake/Discharge Facilities	Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir
Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	
Delevan Pipeline and Terminal Regulating Reservoir Pipeline	
Recreation Areas	
Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road	
Sites Reservoir Inundation Area and Sites Reservoir Dams	

**LEGEND**

**Zoning Designations (Glenn County)**

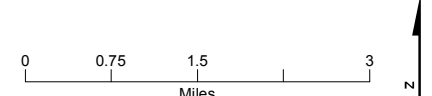
- RZ (Recreational Zone)
- FA (Foothill Agricultural/Forestry Zone, 144 acre minimum)
- AP-160 (Agricultural Preserve Zone, 144 acre minimum)
- FS (Farmland Security Zone, 72 acre minimum)
- AP-80 (Agricultural Preserve Zone, 72 acre minimum)
- AE-40 (Exclusive Agricultural Zone, 36 acre minimum)
- HVC (Highway Visitor and Commercial Zone)

**Zoning Designations (Colusa County)**

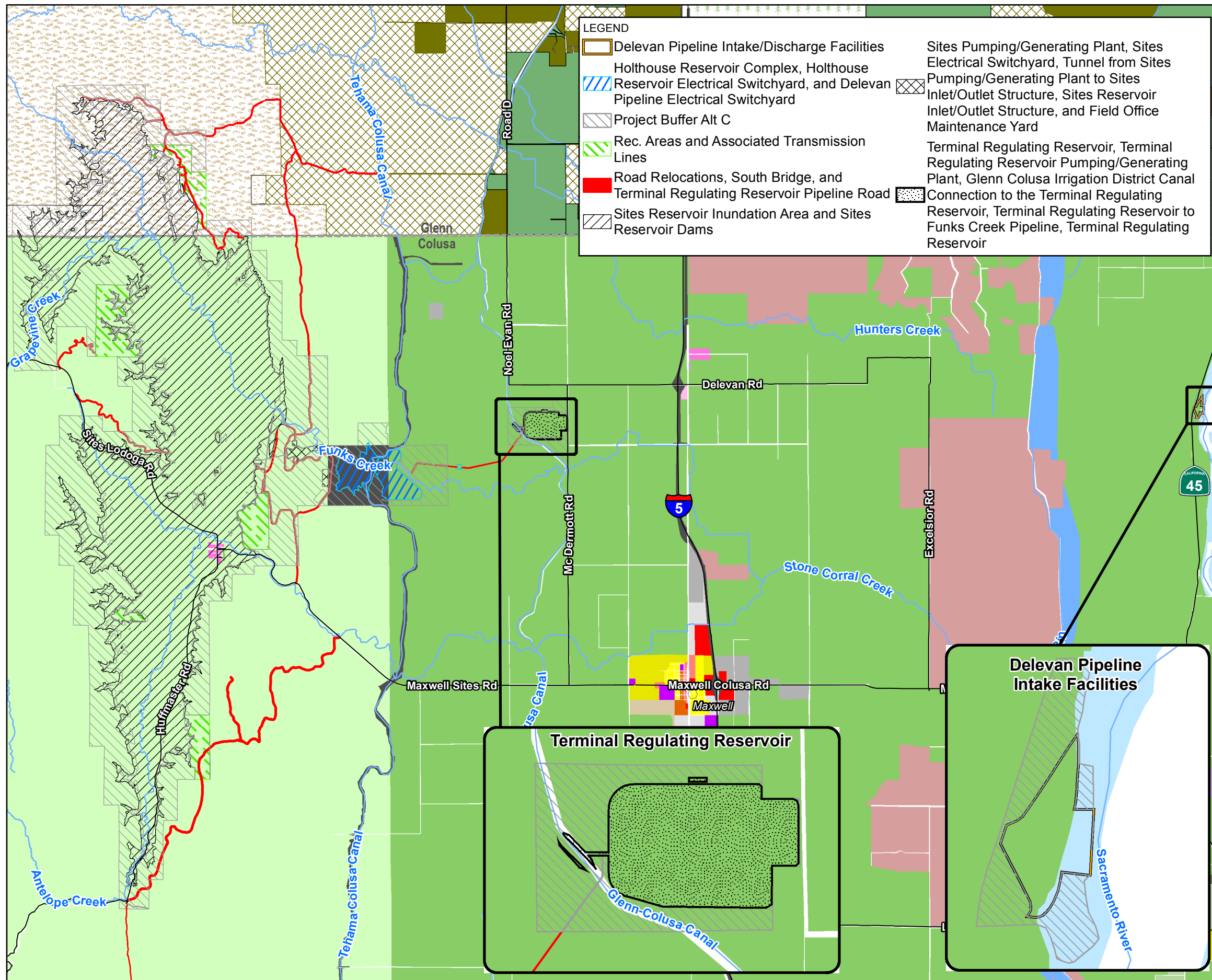
- F-A: Foothill Agriculture
- E-A: Exclusive Agriculture
- AT-10: Ag Transition <20ac
- AT-20: Ag Transition >20ac
- RR-2: Rural Residential, 2-acre min. lot
- RR-5: Rural Residential, 5-acre min. lot
- R-1-6: Residential Single-Family, 6,000-s.f. min. lot
- R-1-8: Residential Single-Family, 8,000-s.f. min. lot
- R-4: Apartment-Professional
- C-2: Community Commercial
- C-H: Highway Service Commercial
- MU: Mixed Use
- M-1: Light Industrial
- M-2: Heavy Industrial
- R-F: River Frontage
- F-M: Flood Management
- R-M: Resource Management
- G-R: General Recreation
- P-F: Public Facilities
- R-S: Rural Services
- T-L: Tribal Lands
- State, Federal, and Other Agency Land

Source: Colusa County. 2016 GIS Parcel and Zoning data. December. Glenn County. 2016. GIS Parcel and Zoning data. December.

Figure represents land use in the general vicinity of the project and does not represent any specific alternative.



**FIGURE 20-1**  
**Glenn and Colusa County Zoning Designations**  
**within Construction Footprint**  
**Sites Reservoir Project EIR/EIS**



**LEGEND**

Delevan Pipeline Intake/Discharge Facilities	Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard
Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard	Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir
Project Buffer Alt C	
Rec. Areas and Associated Transmission Lines	
Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road	
Sites Reservoir Inundation Area and Sites Reservoir Dams	

**LEGEND**

**Zoning Designations (Glenn County)**

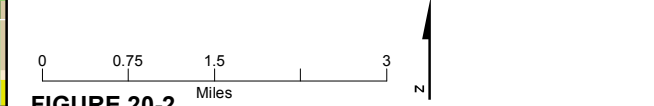
- RZ (Recreational Zone)
- FA (Foothill Agricultural/Forestry Zone, 144 acre minimum)
- AP-160 (Agricultural Preserve Zone, 144 acre minimum)
- FS (Farmland Security Zone, 72 acre minimum)
- AP-80 (Agricultural Preserve Zone, 72 acre minimum)
- AE-40 (Exclusive Agricultural Zone, 36 acre minimum)
- HVC (Highway Visitor and Commercial Zone)

**Zoning Designations (Colusa County)**

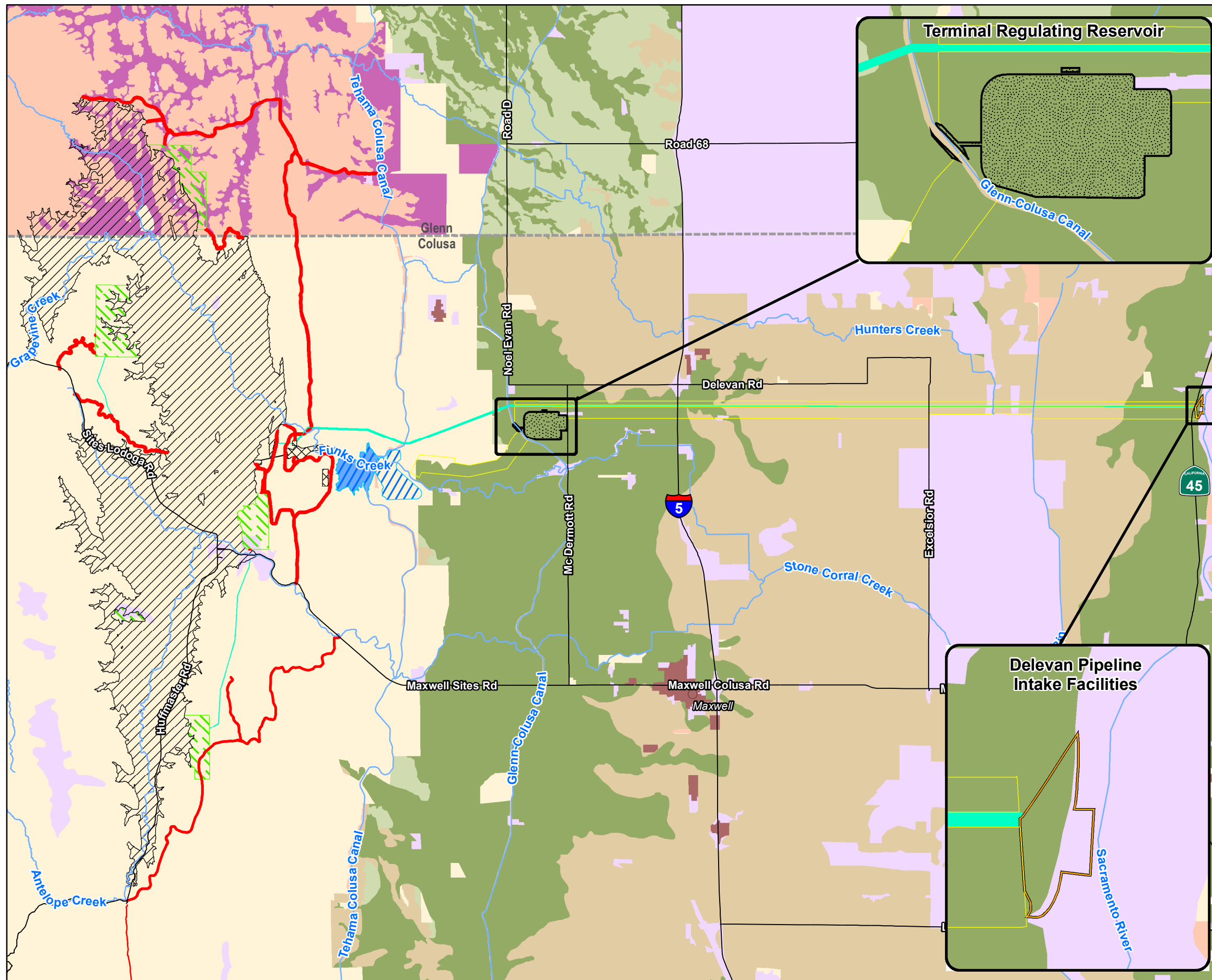
- F-A: Foothill Agriculture
- E-A: Exclusive Agriculture
- AT-10: Ag Transition <20ac
- AT-20: Ag Transition >20ac
- RR-2: Rural Residential, 2-acre min. lot
- RR-5: Rural Residential, 5-acre min. lot
- R-1-6: Residential Single-Family, 6,000-s.f. min. lot
- R-1-8: Residential Single-Family, 8,000-s.f. min. lot
- R-4: Apartment-Professional
- C-2: Community Commercial
- C-H: Highway Service Commercial
- MU: Mixed Use
- M-1: Light Industrial
- M-2: Heavy Industrial
- R-F: River Frontage
- F-M: Flood Management
- R-M: Resource Management
- G-R: General Recreation
- P-F: Public Facilities
- R-S: Rural Services
- T-L: Tribal Lands
- State, Federal, and Other Agency Land

Source: Colusa County, 2016 GIS Parcel and Zoning data. December. Glenn County, 2016. GIS Parcel and Zoning data. December.

Figure represents land use in the general vicinity of the project and does not represent any specific alternative.



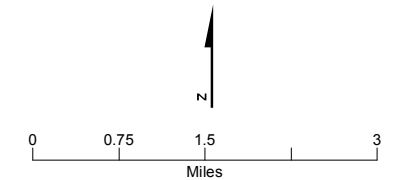
**FIGURE 20-2**  
**Glenn and Colusa County Zoning Designations within Permanent Footprint**  
**Sites Reservoir Project EIR/EIS**



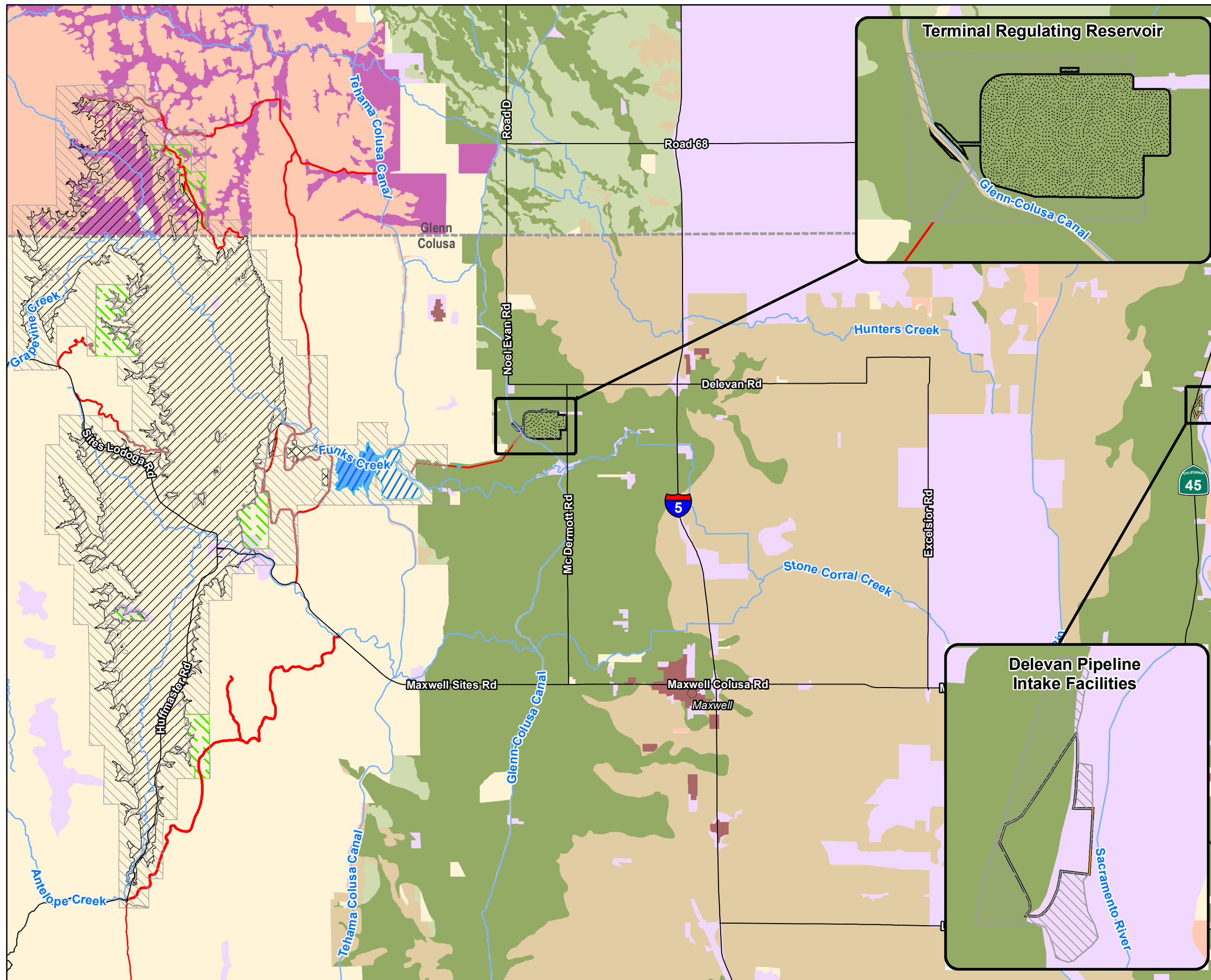
- LEGEND**
- Delevan Pipeline and Terminal Regulating Reservoir Pipeline
  - Delevan Pipeline Intake/Discharge Facilities
  - Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard
  - Delevan Pipeline and Terminal Regulating Reservoir Pipeline
  - Recreation Areas
  - Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road
  - Sites Reservoir Inundation Area and Sites Reservoir Dams
  - Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard
  - Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir
- Important Farmland**
- Farmland of Local Importance
  - Farmland of Statewide Importance
  - Grazing Land
  - Local Potential
  - Other Land
  - Prime Farmland
  - Unique Farmland
  - Urban and Built-up Land
  - Water

Source: Department of Conservation (DOC). 2014. FMMP data available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/2014/>

Figure represents land use in the general vicinity of the project and does not represent any specific alternative.



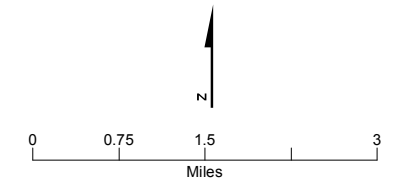
**FIGURE 20-3**  
**Agricultural Land Designations within Construction Footprint**  
**Sites Reservoir Project EIR/EIS**



- LEGEND**
- Delevan Pipeline Intake/Discharge Facilities
  - Holthouse Reservoir Complex, Holthouse Reservoir Electrical Switchyard, and Delevan Pipeline Electrical Switchyard
  - Project Buffer Alt C
  - Rec. Areas and Associated Transmission Lines
  - Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road
  - Sites Reservoir Inundation Area and Sites Reservoir Dams
  - Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard
  - Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir
- Important Farmland**
- Farmland of Local Importance
  - Farmland of Statewide Importance
  - Grazing Land
  - Local Potential
  - Other Land
  - Prime Farmland
  - Unique Farmland
  - Urban and Built-up Land
  - Water

Source: Department of Conservation (DOC). 2014. FMMP data available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/2014/>

Figure represents land use in the general vicinity of the project and does not represent any specific alternative.



**FIGURE 20-4**  
**Agricultural Land Designations within Permanent Footprint**  
**Sites Reservoir Project EIR/EIS**

The Recreation Areas would be located on lands that have a land use designation of Foothill Agriculture/Forestry and are zoned AP-160 in Glenn County, and a land use designation of Agriculture Upland and are zoned F-A in Colusa County. The Recreation Areas would be located on lands that have an FMMP designation of Grazing Land and Local Potential Farmland in Glenn County, and Farmland of Local Importance and Other Land in Colusa County. There are no WRP easements within any of the proposed Recreation Areas.

The Recreation Areas would be located on up to 15 parcels of land that have Williamson Act contracts. Of that total, five contracts are with Glenn County, and 10 contracts are with Colusa County.

### **Road Relocations, South Bridge, and Terminal Regulating Reservoir Pipeline Road**

Sites Reservoir would inundate several existing roads within Colusa County's jurisdiction; so, as part of the Project (all alternatives), several roads would be rerouted to provide alternate access routes. In addition, new roads would be required to access various Project facilities. The "Road Relocations" discussed in the following paragraphs include both the proposed re-routed existing roads and the Project roads. The South Bridge would be located within the footprint of the Sites Reservoir Inundation Area; therefore, this discussion is limited to only the roads.

The proposed road relocations would occur on lands that have a General Plan designation of Foothill Agriculture/Forestry and Intensive Agriculture, and are zoned AP-160 and AP-80<sup>5</sup> in Glenn County, and a land use designation of Agriculture Upland and State, Federal, or Other Agency Lands and are zoned F-A and SFA<sup>6</sup> in Colusa County. The road relocations would occur on lands that have an FMMP designation of Other Land, Grazing Land, and Local Potential Farmland in Glenn County, and Farmland of Local Importance and Other Land in Colusa County. There are no WRP easements within any of the proposed road relocations.

The proposed road relocations would occur on up to 50 parcels of land that have Williamson Act contracts. Of that total, 12 contracts are with Glenn County, and 38 contracts are with Colusa County.

### **Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard**

The Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure, Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard would all be located within Colusa County to the west of the existing Funks Reservoir.

Lands associated with the proposed facilities and associated construction disturbance have a General Plan designation of Agriculture Upland and State, Federal, or Other Agency Lands are zoned F-A and SFA. These lands have an FMMP designation of Farmland of Local Importance and Water. There are no WRP easements within any of the proposed facilities associated with the pumping/generating plant. These facilities would be located on up to 7 parcels of land that have Williamson Act contracts with Colusa County.

<sup>5</sup> AP = Agricultural Preserve (160 = 144-acre minimum/80 = 72-acre minimum)  
FA = Foothill Agriculture/Forestry (160 = 144-acre minimum)

<sup>6</sup> F-A = Agriculture Upland  
SFA = State, Federal, or Other Agency Lands

### **Holthouse Reservoir Complex and Electrical Substation**

The Holthouse Reservoir Complex (which includes Holthouse Reservoir and Dam, breached Funks Dam, the dredging of Funks Reservoir, Holthouse Spillway and Stilling Basin, Tehama-Colusa Canal Discharge Dissipater, the Funks Bypass Pipeline, and the Holthouse to Tehama-Colusa Canal Pipeline), and the Electrical Substation would all be located in Colusa County on lands that have General Plan designations of Agriculture General; State, Federal, or Other Agency Lands; and Agriculture Upland and are zoned F-A, SFA, and E-A, with an FMMP designation of Grazing Land and Farmland of Local Importance.

Funks Reservoir and Funks Dam are existing facilities with a General Plan designation of Agriculture General and are zoned E-A with an FMMP designation of Water. There are no WRP easements within any of the proposed facilities associated with the Holthouse Reservoir complex.

The Holthouse Reservoir Complex and associated construction disturbance area around these facilities would be located on eight parcels of land that have a Williamson Act contract with Colusa County.

### **Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir, Terminal Regulating Reservoir to Funks Creek Pipeline, Terminal Regulating Reservoir to Funks Creek Outlet, and Terminal Regulating Reservoir Electrical Switchyard**

Water conveyed down the Glenn-Colusa Irrigation District (GCID) Main Canal would be directed into the proposed terminal regulating reservoir (TRR). The TRR, TRR Pumping/Generating Plant, GCID Main Canal Connection to the TRR, TRR to Funks Creek Pipeline, TRR to Funks Creek Outlet, TRR Electrical Switchyard, and the construction disturbance area would all be located in Colusa County on lands that have a General Plan designation of Agriculture General and are zoned E-A, with an FMMP designation of Prime Farmland, Unique Farmland, and Other Land. There are no WRP easements or Williamson Act lands within these improvements.

### **Delevan Pipeline and Terminal Regulating Reservoir Pipeline**

The Delevan Pipeline and TRR Pipeline would be located in Colusa County. The 10-mile-long eastern portion of the Delevan Pipeline and the construction disturbance area would be located on lands with a General Plan designation of Agriculture General; State, Federal, or Other; and Resource Conservation (Alternative D only) and are zoned E-A, F-M, SFA, and R-M<sup>7</sup> (Alternative D only). The lands associated with the pipeline corridors have an FMMP designation of Prime Farmland, Unique Farmland, Farmland of Local Importance, and Other Land. There are no WRP easements within the Delevan or TRR pipelines.

The 3.5-mile-long western portion of the Delevan Pipeline, the TRR Pipeline, and their construction disturbance area would be located on lands with a General Plan designation of Agriculture General and are zoned E-A and have an FMMP designation of Prime Farmland and Farmland of Local Importance.

The Delevan and TRR pipelines and their associated construction disturbance area would be located on 33 parcels of land that have Williamson Act contracts with Colusa County.

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<sup>7</sup> R-M = Resource Management

### **Sites/Delevan Overhead Power Line**

A 230-kilovolt- (kV) Delevan Overhead Power Line would conduct electricity from an existing power source to provide all the electricity needed by the Project's pumping plants. All overhead power line towers/poles for all alternatives would be sited within a 150-foot-wide permanent overhead power line easement. All overhead power lines would be located in Colusa County. The Sites/Delevan Overhead Power Line would differ among alternatives and are grouped accordingly.

#### **Alternative A**

The overhead power line and associated construction disturbance area would be located on lands with General Plan designations of Agriculture Upland; Agriculture General; and State, Federal or Other Agency, and are zoned F-A, E-A, F-M and SFA with FMMP designations of Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land, and Other. There are 24 parcels within the overhead power line footprint that have Williamson Act contracts.

#### **Alternative B**

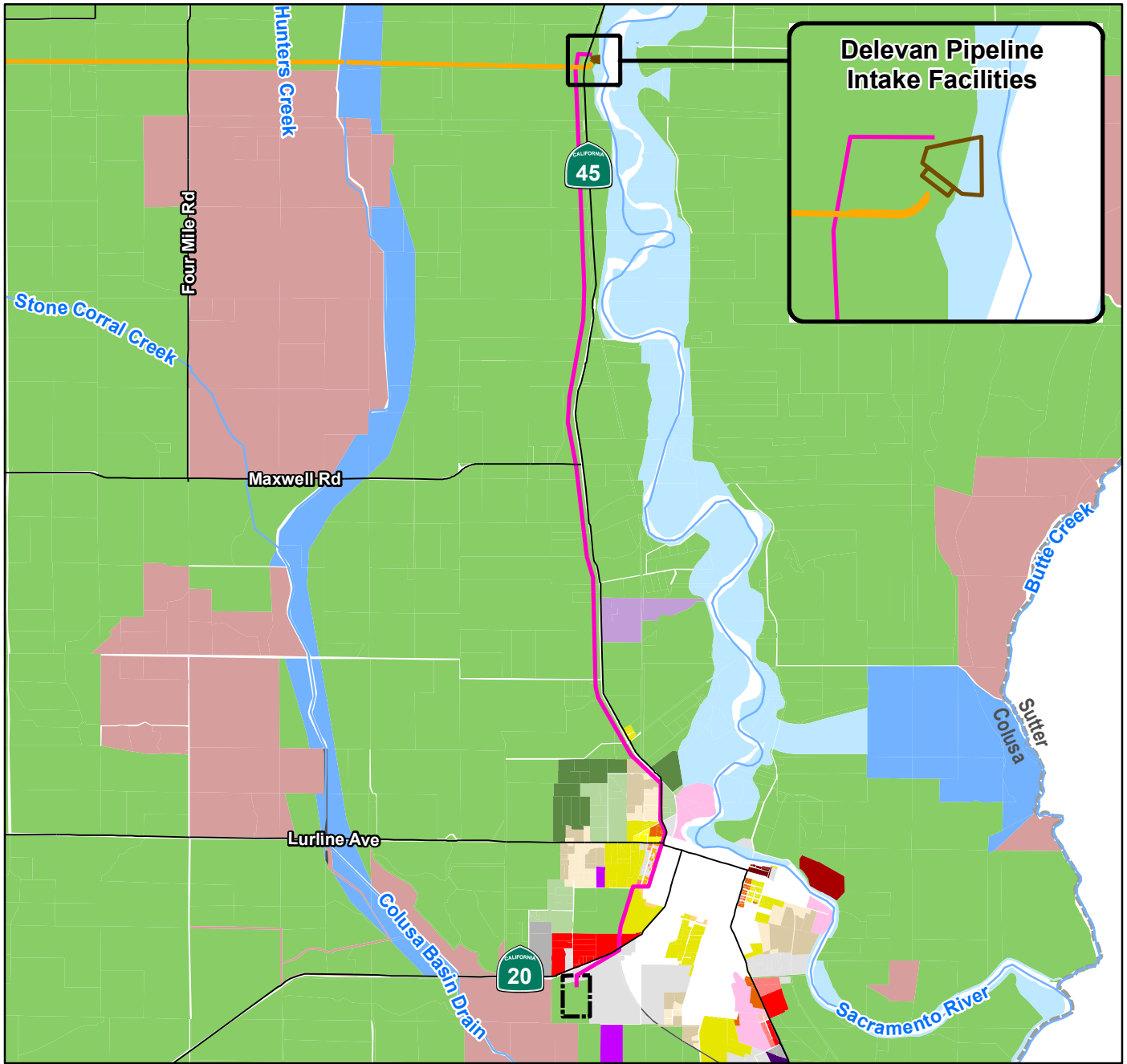
The overhead power line would be aligned only from its connection with the existing Pacific Gas and Electric Company (PG&E) 230-kV or Western Area Power Administration 500-kV/230-kV transmission line to the Sites Pumping/Generating Plant. No overhead power line along the Delevan Pipeline corridor (as is included in Alternative A) would be required because water would be released to the Sacramento River via gravity flow, and no diversions would occur. The overhead power line and associated construction disturbance area would be on lands with General Plan designations of Agriculture Upland and State, Federal, or Other Agency Lands with an FMMP designation of Farmland of Local Importance. There are 19 parcels within the overhead power line footprint that have a Williamson Act contract.

#### **Alternative C**

The overhead power line would parallel the Delevan Pipeline from the Delevan Pipeline Intake/Discharge Facilities to the TRR, and would be aligned from the TRR to the Sites Electrical Switchyard. This overhead power line would cross one parcel of land that is within a WRP easement (Delevan National Wildlife Refuge). The overhead power line and associated construction disturbance area would be located on lands with General Plan designations of Agriculture Upland, Agriculture General, and State, Federal, or Other Agency Lands, with an FMMP designation of Prime Farmland and Farmland of Local Importance. There are 24 parcels within the overhead power line footprint that have Williamson Act contracts.

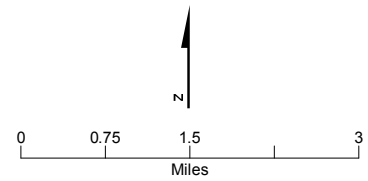
#### **Alternative D**

A 115-kV overhead power line would run north from a new substation near the town of Colusa, adjacent to and in parallel with the existing PG&E 65-kV lines along SR 45 to the proposed intake/discharge facility on the Sacramento River. The overhead power line and associated construction disturbance area would be located on lands with General Plan designations of Agriculture General, Rural Residential, Industrial, Commercial, Agriculture Transition, and Urban Reserve, and are zoned E-A, RR-2/5, R-1-6/8, RR-3/4, M-1C-H, and AT-10 (see Figure 20-5), with FMMP designations of Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, Grazing Land, and Other (see Figure 20-6). There are 11 parcels within the overhead power line footprint that have Williamson Act contracts.



**LEGEND**

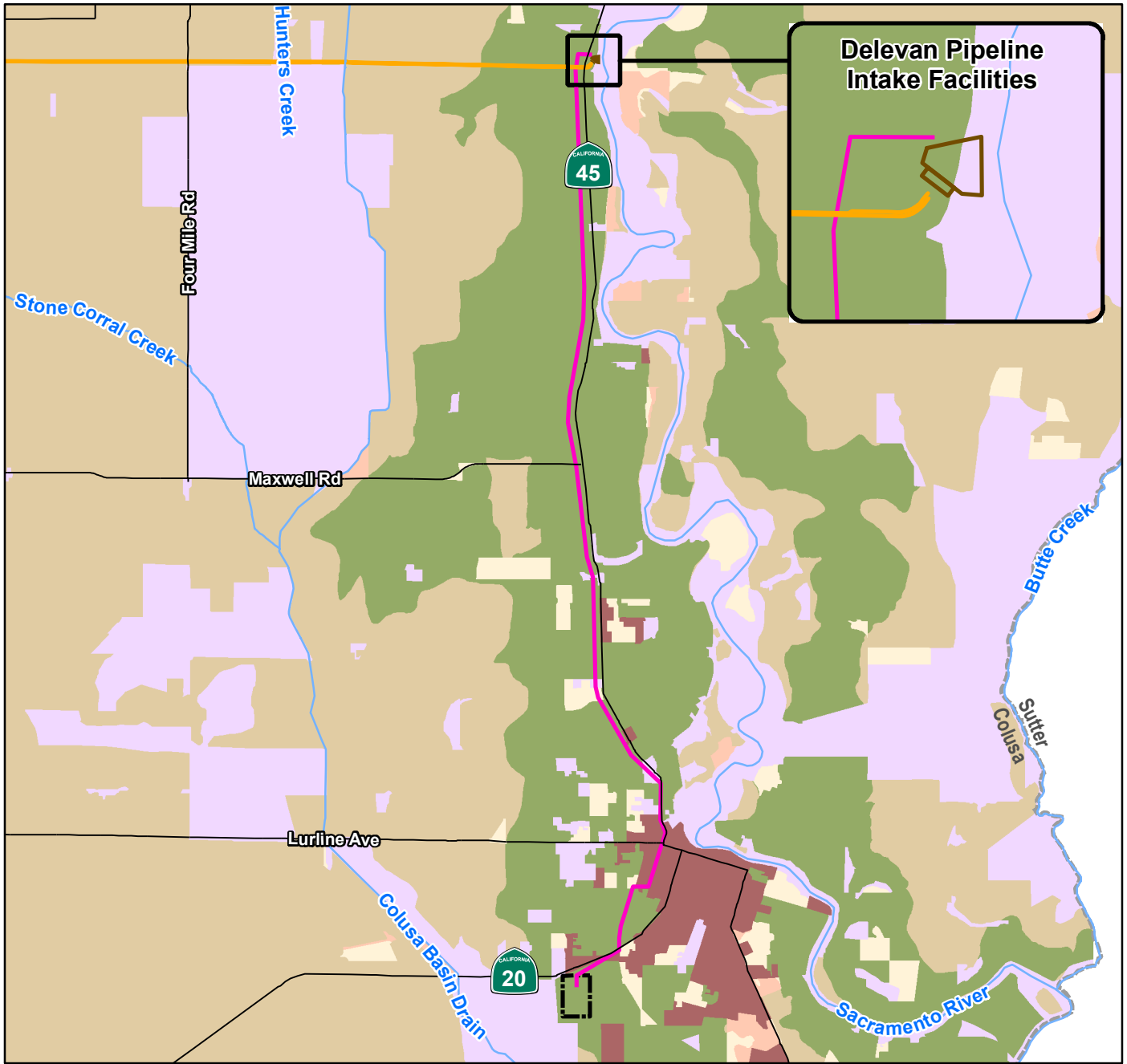
- Overhead Power Line
  - Delevan Pipeline
  - Inlet/Outlet
  - Substation
- Zoning Designations (Colusa County)**
- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li><span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> E-A: Exclusive Agriculture</li> <li><span style="background-color: #C8E6C9; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> AT-10: Ag Transition &lt;20ac</li> <li><span style="background-color: #81C784; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> AT-20: Ag Transition &gt;20ac</li> <li><span style="background-color: #FFF9C4; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> RR-2: Rural Residential, 2-acre min. lot</li> <li><span style="background-color: #D7CCC8; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> RR-5: Rural Residential, 5-acre min. lot</li> <li><span style="background-color: #FFF176; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-1-6: Residential Single-Family, 6,000-s.f. min. lot</li> <li><span style="background-color: #FFEB3B; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-1-8: Residential Single-Family, 8,000-s.f. min. lot</li> <li><span style="background-color: #FFCC80; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-2: Residential Two-Family</li> <li><span style="background-color: #FF9800; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-3: Residential Multiple Family</li> </ul> | <ul style="list-style-type: none"> <li><span style="background-color: #FF9800; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-4: Apartment-Professional</li> <li><span style="background-color: #FFCDD2; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> C-1: Neighborhood Commercial</li> <li><span style="background-color: #FF8A65; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> C-H: Highway Service Commercial</li> <li><span style="background-color: #FF7043; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> C-2: Community Commercial</li> <li><span style="background-color: #D32F2F; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> C-R: Commercial Resort</li> <li><span style="background-color: #795548; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> MU: Mixed Use</li> <li><span style="background-color: #9E9E9E; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> M-1: Light Industrial</li> <li><span style="background-color: #606060; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> M-2: Heavy Industrial</li> <li><span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-F: River Frontage</li> <li><span style="background-color: #4682B4; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> F-M: Flood Management</li> <li><span style="background-color: #D97073; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> R-M: Resource Management</li> <li><span style="background-color: #FFB74D; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> G-R: General Recreation</li> </ul> | <ul style="list-style-type: none"> <li><span style="background-color: #4B0082; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> A-V: Airport</li> <li><span style="background-color: #9C27B0; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> P-F: Public Facilities</li> <li><span style="background-color: #9575CD; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> T-L: Tribal Lands</li> <li><span style="background-color: #424242; border: 1px solid black; display: inline-block; width: 15px; height: 10px; margin-right: 5px;"></span> State, Federal, and Other Agency Land</li> </ul> |
|--|---|--|



**FIGURE 20-5**  
**Colusa County Zoning Designations within**  
**Overhead Power Line Alignment**  
**(Alternative D)**  
*Sites Reservoir Project EIR/EIS*

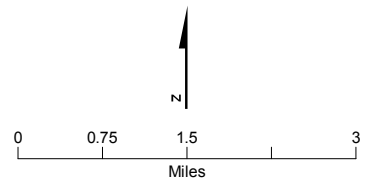
Source: Colusa County. 2016 GIS Parcel and Zoning data. December.  
 Glenn County. 2016. GIS Parcel and Zoning data. December.





LEGEND

- Overhead Power Line
- Delevan TRR Pipelines
- Inlet/Outlet
- Substation
- Important Farmland**
- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Local Potential
- Other Land
- Prime Farmland
- Unique Farmland
- Urban and Built-up Land
- Water



**FIGURE 20-6**  
**Agricultural Land Designations within**  
**Overhead Power Line Alignment (Alternative D)**  
**Sites Reservoir Project EIR/EIS**

Source: Department of Conservation (DOC). 2014. FMMP data available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/2014/>

## **Delevan Pipeline Intake/Discharge Facilities**

Alternatives A, C, and D include a fish screen and pumping/generating facilities to divert water from the Sacramento River, and also include a water release capability to the Sacramento River. Alternative B includes the release-only Delevan Pipeline Discharge Facilities and would provide no Sacramento River water diversion capability. However, because these facilities would be in the same location, they are discussed together below. These facilities would be located in Colusa County.

There are no WRP easements within the Delevan Pipeline Intake/Discharge Facilities and associated construction disturbance area. The Delevan Pipeline Intake/Discharge Facilities and associated construction disturbance area would be located on lands with a General Plan designation of Designated Floodway and Agriculture General, and are zoned R-F and E-A with FMMP designations of Prime Farmland and Other. There are no parcels that have Williamson Act contracts.

## **Project Buffer**

The Project Buffer would consist of the land surrounding Project facility footprints, extending out to the nearest parcel boundary, to create a buffer around most Project facilities. The Delevan and TRR pipelines, Sites/Delevan Overhead Power Line, and Road Relocations and South Bridge would not have an associated Project Buffer, but portions of these facilities would be located within the buffer of other facilities because of their proximity to or connection with other facilities. In addition, the GCID Main Canal Facilities Modifications would not have an associated Project Buffer. The outer perimeter boundary of the Project Buffer would be the same for the three alternatives. Because of the differences in Project facilities among the alternatives, the size and shape of the Project Buffer would differ among alternatives.

The Project Buffer for all alternatives would be located on lands that have a General Plan designation of Foothill Agriculture/Forestry and are zoned FA-160 and AP-160 in Glenn County, and a General Plan designation of Agriculture Upland; Agriculture General; Designated Floodway; and State, Federal, or Other Agency in Colusa County and are zoned E-A, F-A, SFA, and R-F. The portion of the Project Buffer in Glenn County has FMMP designations of Local Potential Farmland, Grazing Land, and Other Land. The portion of the Project Buffer in Colusa County has FMMP designations of Prime Farmland, Farmland of Local Importance, Unique Farmland, Grazing Land, Water, and Other. There are no WRP easements within the Project Buffer for any alternative.

The Alternative A Project Buffer would be located on 111 parcels of land that have Williamson Act contracts. Of that total, 13 contracts are with Glenn County, and 98 contracts are with Colusa County. The Alternatives B, C, and D Project Buffer would be located on 108 parcels of land that have Williamson Act contracts. Of that total, 13 contracts are with Glenn County, and 95 contracts are with Colusa County.

## **20.3 Environmental Impacts/Environmental Consequences**

### **20.3.1 Evaluation Criteria and Significance Thresholds**

The evaluation criteria used for this impact analysis represent a combination of the *CEQA Guidelines* in Appendix G and professional judgment that considers current regulations, standards, and/or consultation with agencies, knowledge of the area, and the context and intensity of the environmental effects, as required pursuant to the National Environmental Policy Act. Significance criteria represent the thresholds that were used to identify whether an impact would be potentially significant. For the purposes of this

analysis, an alternative would result in a potentially significant impact to land use and planning and agriculture and forestry resources if it would result in the following:

- Physically divide an established community?
- 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?
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
- Involve other changes in the existing environment which, because of their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?
- Changes in land use as a result of implementing the alternatives that are considered to be incompatible with the existing land uses adjacent to the Project facilities.
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to FMMP of the California Resources Agency, to non-agricultural use.
- Permanent conflict with existing zoning for agricultural use, and/or the permanent conversion of lands that have a Williamson Act contract. In contrast, temporary conflicts (i.e., during Project construction) with existing zoning for agricultural use, or the temporary conversion (i.e., during Project construction) of lands that have a Williamson Act contract would result in a **less-than-significant impact** if the lands are restored to agricultural land use.

### 20.3.2 Impact Assessment Assumptions and Methodology

Combinations of Project facilities were used to create Alternatives A, B, C, C<sub>1</sub>, and D. In all resource chapters, the Sites Project Authority (Authority) and Reclamation described the potential impacts associated with the construction, operation, and maintenance of each of the Project facilities for each of the five action alternatives. Some Project features/facilities and operations (e.g., reservoir size, overhead power line alignments, provision of water for local uses) differ by alternative, and are evaluated in detail within each of the resource areas chapters. As such, the Authority has evaluated all potential impacts with each feature individually, and may choose to select or combine individual features as determined necessary.

Impacts associated with the construction, operation, and maintenance for Alternative C<sub>1</sub> would be the same as Alternative C and are therefore not discussed separately below.

#### 20.3.2.1 Assumptions

The following assumptions were made regarding Project-related construction, operation, and maintenance impacts on land use:

- Direct Project-related construction, operation, and maintenance activities would occur in the Primary Study Area.

- Direct Project-related operational effects would occur in the Secondary Study Area.
- The only direct Project-related construction activity that would occur in the Secondary Study Area is the installation of two additional pumps into existing bays at the RBPP.
- The only direct Project-related maintenance activity that would occur in the Secondary Study Area is the sediment removal and disposal at the two intake locations (i.e., GCID Main Canal Intake and RBPP).
- No direct Project-related construction or maintenance activities would occur in the Extended Study Area.
- Direct Project-related operational effects that would occur in the Extended Study Area are related to San Luis Reservoir operation, increased reliability of water supply to agricultural, municipal, and industrial water users, and the provision of an alternate Level 4 wildlife refuge water supply. Indirect effects to the operation of certain facilities that are located in the Extended Study Area, and indirect effects to the consequent water deliveries made by those facilities, would occur as a result of implementing the alternatives.
- The existing bank protection located upstream of the proposed Delevan Pipeline Intake/Discharge Facilities would continue to be maintained and remain functional.
- No additional channel stabilization, grade control measures, or dredging in the Sacramento River at or upstream of the Delevan Pipeline Intake/ Discharge Facilities would be required as part of this Project.
- Temporary impacts on land use would occur during the Project construction period. Temporary impacts would occur within a “construction disturbance area”. Because land use changes could occur anywhere within each Project facility footprint once Project construction starts, and to provide a worst-case scenario of land use impacts, the construction disturbance area for every Project facility (except for the Recreation Areas) was determined to consist of (1) the Project facility footprint, plus (2) an area outside of the Project facility footprint where Project construction activities could occur, in which the following activities could include, but are not limited to, facility construction/installation, facility assembly, materials laydown/storage, soil stockpiling, borrow areas, spoils disposal areas, and/or deliveries. Because some Project facilities would be located close to other Project facilities, some of the construction disturbance areas would be used for more than one Project facility. For the Recreation Areas, the construction disturbance area was determined to be the same as the permanent disturbance area.
- Permanent impacts on land use would occur at the facility footprint of every Project facility (i.e., the permanent disturbance area) and would last for the period of Project analysis (i.e., 100 years). Permanent impacts would begin when Project construction is complete. Permanent impacts would occur as a result of the presence of the Project facilities, from Project facility operations and maintenance activities, and from the presence of the Project Buffer,<sup>8</sup> which could preclude some existing land uses from occurring within that area.

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<sup>8</sup> The Project Buffer lands would remain undeveloped; the existing vegetation would be maintained as wildlife habitat and protected from fuelwood harvest, grazing, and other forms of environmental degradation. Existing structures within the Project Buffer would be demolished and the remaining land would be managed as wildlife habitat. Existing agricultural lands would not be maintained as agriculture; they would be converted and managed as wildlife habitat.

- Defined construction disturbance areas were available for the Delevan and TRR pipelines, Sites/Delevan Overhead Power Line, Electrical Distribution Lines, and Roads Relocations. For all other Project facilities (in which the coordinate space was not defined for specific Project facilities or construction disturbance areas for the facilities), the following assumptions were developed regarding size and potential location.
  - **Sites Reservoir Inundation Area and Sites Reservoir Dams and Borrow Areas:** In addition to the acreage for the footprints of the Sites Reservoir Inundation Area and Sites Reservoir Dams and Borrow Areas, a 1,000-acre construction disturbance area would be located to the east of Sites Reservoir. The precise location has not been defined; however, the parcels of land that are being considered for this area encompass the Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard facility footprints, as well as several Project roads and other parcels located near those facilities. There are seven borrow areas defined within the Sites Reservoir Inundation Area, and they are accounted for within the inundation area acreage assumptions.
  - **Recreation Areas and Associated Electrical Distribution Lines:** The construction disturbance area would be the same as the permanent disturbance area (i.e., it is the footprint of each Recreation Area). All Project facilities that would be located within the Recreation Areas (e.g., roads and distribution lines) are accounted for within the Recreation Areas facility grouping.

Distribution lines to supply electricity to three of the Recreation Areas would be located within the Lurline Headwaters, Peninsula Hills, and Stone Corral recreation areas, and have been accounted for within the Recreation Areas facility grouping. Other distribution lines that would be needed for the Project (e.g., for Golden Gate Dam, Sites Dam, and South Bridge) and connections to the Recreation Areas (but located outside of the Recreation Areas) are included in the Electrical Distribution Lines facility grouping.

- **Road Relocations, South Bridge, and TRR Pipeline Road:** The defined construction disturbance area along all Project roads would be 200 feet wide (100 feet on both sides of the roadways' centerline – except for the TRR Pipeline Road discussed below – its construction disturbance area would be less); the permanent disturbance area along the roads' alignments would average approximately 60 feet wide. Portions of the proposed roads would be located within the 1,000-acre construction disturbance area associated with Sites Reservoir Inundation Area and Sites Reservoir Dams (and the other facilities listed above that are included within the 1,000 acres). Because it is uncertain which land parcels would comprise the 1,000 acres, it was determined that the footprints of the proposed roads in those parcels should be accounted for with the roads and not as part of the Sites Reservoir and Dams category listed above. The 20-foot-wide gravel inspection road from the TRR to Holthouse Reservoir and Dam (known as the TRR Pipeline Road) would generate permanent ground disturbance, and it is accounted for in these calculations.
- **Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel from Sites Pumping/Generating Plant to Sites Reservoir Inlet/Outlet Structure, and Field Office Maintenance Yard:** The construction disturbance area for these facilities would be approximately 100 acres (90 acres of facility footprints plus an assumed

10 percent extra [i.e., 9 acres] for construction activities). This 100 acres would be located within the 1,000 acres mentioned for the Sites Reservoir Inundation Area and Sites Reservoir Dams, and are accounted for in those calculations.

- **Holthouse Reservoir Complex:** The construction disturbance area for these facilities would be approximately 280 acres (255 acres of facility footprints plus an assumed 10 percent extra [i.e., 25 acres] for construction activities). The total facility footprints for this grouping would be approximately 500 acres, including 225 acres of water surface associated with the existing Funks reservoir and additional facility footprints of 280 acres for the Project facility grouping.
- **Terminal Regulating Reservoir, Terminal Regulating Reservoir Pumping/Generating Plant, Terminal Regulating Reservoir Electrical Switchyard, and Glenn-Colusa Irrigation District Canal Connection to the Terminal Regulating Reservoir:** The construction disturbance area for these facilities would be approximately 215 acres (195 acres of facility footprints plus an assumed 10 percent extra [i.e., 19 acres] for construction activities). The 215 acres would be located within the construction disturbance area for the Delevan and TRR pipelines, and are accounted for in those calculations.

The construction disturbance area for the GCID Main Canal Facility Modifications would be less than 1 acre (accounting for the canal lining, headgate structure and railroad siphon construction activities). The disturbance area would be located within the existing GCID Main Canal and the existing railroad siphon area.

- **Delevan Pipeline and Terminal Regulating Reservoir Pipeline:** The construction disturbance area for these underground pipelines would be 1,500 feet wide and 13 miles long. The construction disturbance area attributed to the pipelines is approximately 2,060 acres for Alternatives A and C, and 2,260 acres for Alternative B, excluding acreage that is already accounted for under other Project facility groupings. There would be permanent disturbance associated with the two pipelines from regularly spaced aboveground facilities, such as blow-off structures, air valve structures, and an outlet and energy dissipater structure.
- **Sites/Delevan Overhead Power Line:** The construction disturbance area for the Sites/Delevan Overhead Power Line would be 150 feet wide and would be located within the 1,500-foot-wide construction disturbance area for the Delevan and TRR pipelines for approximately 9 miles of their approximate 13-mile length. The remaining approximate portion of the Sites/Delevan Overhead Power Line that would not overlap with the Delevan and TRR pipeline construction disturbance area would result in approximately 95 acres of construction disturbance area. The Delevan Distribution line would result in approximately 25 acres of construction disturbance. For Alternative D, the overhead power line would occur along SR 45 and there would be no overlap with the Delevan and TRR pipeline, therefore the estimate includes the entire approximately 12-mile length, with an assumed construction disturbance area of 150 feet, and would result in approximately 200 acres of construction disturbance.

The permanent disturbance associated with the overhead power lines was calculated to be approximately 5 acres for Alternatives A and C, 1 acre for Alternative B, and 5 acres for Alternative D, and was based on an assumed number of towers/poles and an assumed disturbance needed for the footings of each tower/pole (144 towers /poles for Alternatives A and C, 40 towers/poles for Alternative B, and 154 towers/poles for Alternative D). Because the precise

locations of the towers/poles are not known, it was assumed that land use impacts from the tower/pole footings could occur anywhere along the overhead power line alignment. That assumption meant that the precise parcel of land, and its associated zoning, FMMP land use designation, and Williamson Act contract status could not be specifically determined. Therefore, in order to assess potential land use impacts, total construction acreages of the various land use types were converted to percentages for each type of zoning and FMMP land use designation. The percentages were applied to the impacted land uses identified in the construction areas, to provide an estimate of the potentially affected permanent acreage in the land use analysis, which represents a worst-case presentation of compatibility with existing zoning, FMMP land use designations, and Williamson Act contracts.

- **Delevan Pipeline Intake/Discharge Facilities (Alternatives A, C, and D):** The permanent disturbance area (i.e., facility footprint) would be approximately 20 acres. The construction disturbance area for this facility would be smaller than the facility footprint (it would be approximately 17 acres) because approximately 2 acres of the facility footprint overlaps with the Delevan Pipeline construction disturbance area, and the 2 acres are accounted for in those calculations. In addition, the portion of the Delevan Pipeline construction disturbance area that is near to the Delevan Pipeline Intake/Discharge Facilities is assumed to also be used for Delevan Pipeline Intake/Discharge Facilities construction activities.
- **Delevan Pipeline Discharge Facility (Alternative B):** The permanent disturbance area (i.e., facility footprint) would be approximately 8 acres. The construction disturbance area for this facility would be smaller than the facility footprint (it would be approximately 6 acres) because approximately 1.5 acres of the facility footprint overlaps with the Delevan Pipeline construction disturbance area, and the 1.5 acres are accounted for in those calculations. In addition, the portion of the Delevan Pipeline construction disturbance area that is near to the Delevan Pipeline Discharge Facility is assumed to also be used for Delevan Pipeline Discharge Facility construction activities.
- **Project Buffer:** The Project Buffer would consist of the land that would be acquired for the Project beyond the facility footprints, out to the nearest existing parcel boundaries. The Project Buffer would surround Sites Reservoir, the Holthouse Reservoir Complex, and all facilities located between these two facilities; the TRR and associated facilities; and the Delevan Pipeline Intake/Discharge Facilities.<sup>9</sup> Because the Project Buffer boundary would follow existing parcel boundaries, the width of the buffer around Project facilities would vary. The acreage for the temporary land use impacts of the Project Buffer would be zero; the changes in land use from creating this buffer (including fence construction, structure demolition, and fuelbreak creation) are considered a permanent land use impact.

### 20.3.2.2 Methodology

Existing conditions and the future No Project/No Action alternatives were assumed to be similar in the Primary Study Area given the generally rural nature of the area and limited potential for growth and development in Glenn and Colusa counties within the 2030 study period used for this EIR/EIS as further described in Chapter 2 Alternatives Analysis. As a result, within the Primary Study Area, it is anticipated

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<sup>9</sup> The Delevan Overhead Power Line and the Delevan Pipeline would not have an associated buffer. These two Project facilities do not require additional lands for long-term operation and maintenance.

that the No Project/No Action Alternative would not entail material changes in conditions as compared to the existing conditions baseline.

With respect to the Extended and Secondary study areas, the effects of the proposed action alternatives would be primarily related to changes to available water supplies in the Extended and Secondary study areas and the Project's cooperative operations with other existing large reservoirs in the Sacramento watershed, and the resultant potential impacts and benefits to biological resources, land use, recreation, socioeconomic conditions, and other resource areas. DWR has projected future water demands through 2030 conditions that assume the vast majority of CVP and SWP water contractors would use their total contract amounts, and that most senior water rights users also would fully use most of their water rights. This increased demand in addition to the projects currently under construction and those that have received approvals and permits at the time of preparation of the EIR/EIS would constitute the No Project/No Action Condition. As described in Chapter 2 Alternative Analysis, the primary difference in these projected water demands would be in the Sacramento Valley; and as of the time of preparation of this EIR/EIS, the water demands have expanded to the levels projected to be achieved on or before 2030.

Accordingly, existing conditions and the No Project/No Action alternatives are assumed to be the same for this EIR/EIS and as such are referred to as the Existing Conditions/No Project/No Action Condition, which is further discussed in Chapter 2 Alternatives Analysis. With respect to applicable reasonably foreseeable plans, projects, programs and policies that may be implemented in the future but that have not yet been approved, these are included as part of the analysis of cumulative impacts in Chapter 35 Cumulative Impacts.

For the Extended and Secondary study areas, the Project operational modeling results were reviewed to determine the expected changes in water deliveries and associated increased water supply reliability. These changes would not result in changes to existing land uses as described below.

For the Primary Study Area, the methodology used for assessing changes to land use, compatibility with Zoning and FMMP land use designations, and Williamson Act contract and Wetland Reserve Program (WRP) easement status of parcels that would be potentially affected by Project facilities (all four alternatives) was a multi-step process. Project impacts are shown for both temporary (construction) impacts and permanent impacts.

Project facilities that would be located near each other were grouped to prevent double-counting acreages. Acreages of the groups and associated construction disturbance areas around them were calculated using geographic information system (GIS). In instances where the coordinate space was not defined for specific Project facility footprints or construction activity areas, assumptions were made regarding size and potential location.

The following Project facilities were assumed to have spatially defined construction disturbance areas: Delevan and TRR pipelines, Sites/Delevan Overhead Power Line, Electrical Distribution Lines, and Road Relocations. For all other Project facilities (except for Sites Reservoir and the Project Buffer), the construction disturbance area associated with Alternatives A, B, C, and D was calculated as the Project facility footprint plus additional acreage that was added to the facility footprint (an assumed 10 percent of the facility footprint). Because the 10 percent additional acreage could be located in any area surrounding a Project facility, "potentially affected" parcels were identified and a list was created through a mapping review of the adjacent and overlapping parcel data.



To calculate permanent disturbance to land uses from the Project (Alternatives A, B, C, and D), the Project facility groupings were combined using a Union tool in GIS, which enabled all overlap between permanent facility footprints and the Project Buffer to be defined and eliminated prior to comparison with the agency datasets (i.e. Zoning, FMMP land use designations, Williamson Act contract status, and WRP easement status).

Subsequently, the consistency of Project facilities (including construction, operation, and maintenance activities) with the Zoning FMMP designated land uses and the counties' General Plans' policies was evaluated. In addition, the parcels where Project facilities would be constructed that have Williamson Act contracts and/or WRP easements were identified. Finally, the compatibility of Project facilities (including construction, operation, and maintenance activities) with existing land uses at and near those facility locations was evaluated.

It should be noted that the acreages presented in this chapter do not match acreages presented in other chapters in this EIR/EIS for every Project facility. This discrepancy is due to the necessary difference in methodology used to account for temporary and permanent impacts for the various environmental resources.

### **20.3.3 Topics Eliminated from Further Analytical Consideration**

San Luis Reservoir is not discussed in the Extended Study Area because changes to San Luis Reservoir storage conditions and flow regime changes would have no effect on any of the land use issues being evaluated in this chapter.

Because no Project facilities would be constructed or maintained within the Extended Study Area, only operational impacts were discussed in the impacts analysis for the Extended Study Area (i.e., construction and maintenance impacts were not discussed).

Trinity Lake, Lewiston Lake, Trinity River, Klamath River downstream of the Trinity River, Whiskeytown Lake, Spring Creek, Shasta Lake, Keswick Reservoir, Sacramento River, Clear Creek, Lake Oroville, Thermalito Complex (Thermalito Diversion Pool, Thermalito Forebay, and Thermalito Afterbay), Feather River, Sutter Bypass, Yolo Bypass, Folsom Lake, Lake Natoma, American River, the Delta, Suisun Bay, San Pablo Bay, and San Francisco Bay are not discussed in the Secondary Study Area because reservoir storage conditions and flow regime changes of those CVP/SWP reservoirs, rivers, creeks, and associated floodplains would have no effect on land use issues.

Established communities (**Impact Land-1**) are not discussed for the Primary Study Area for Alternatives A, B, C, and D except in the Sites Reservoir Inundation Area and Sites Reservoir Dams discussion; that criterion is not relevant to any other Project facility. The town of Sites (which exists within the proposed footprint of the Sites Reservoir Inundation Area) is the only established community that would have direct Project effects within the Project footprint of the Primary Study Area.

### **20.3.4 Impacts Associated with Alternative A**

#### **20.3.4.1 Extended and Secondary Study Areas – Alternative A**

##### **Construction Impacts**

Alternative A would cause no impacts in the Extended Study Area under the land use significance thresholds. There would be no construction of Project facilities within the Extended Study Area; hence,

there would be no land use impacts caused by construction of Alternative A (i.e., no changes in zoning, land use, or policies in adopted general plans).

### ***Pump Installation at the Red Bluff Pumping Plant***

Within the Secondary Study Area, Alternative A includes the installation of two pumps into existing concrete bays at the RBPP. The proposed additional pumps would not increase the frequency of maintenance activities that are required at the pumping plant and would be compatible with existing land uses (see Chapter 3 Description of the Sites Reservoir Project Alternatives). As such, there would be no impacts on established communities, farmlands, forest lands, or land uses within or surrounding the RBPP.

## **Operation Impacts**

### ***Agricultural Water Use, Municipal and Industrial Water Use, and Wildlife Refuge Water Use***

With respect to the operation of the Project and potential land use impacts in the Extended and Secondary study areas, modeling indicates a potential change in CVP agricultural water supply deliveries between Alternative A and the Existing Conditions/No Project/No Action Condition would range between 2 and 11 percent, depending on hydrologic region and year type. Similarly, potential changes in SWP agricultural water supply deliveries between Alternative A and the Existing Conditions/No Project/No Action Condition are projected to range between 0 to 13 percent depending on hydrologic region and year type. Increased supply reliability would generally be in dryer years. This increased reliability is anticipated to decrease the need to either use groundwater or fallow crops in dryer years, but would not be expected to alter existing agricultural land uses.

No appreciable change in CVP M&I water supply deliveries between Alternative A and the Existing Conditions/No Project/No Action Condition is anticipated. Changes in SWP M&I deliveries would range between 0 and 9 percent, depending on hydrologic region and year type with the higher end of the range occurring in dryer years (refer to Chapter 6 Surface Water Resources for details). The increased reliability in dryer years would allow for existing residential, municipal, and industrial uses to continue and reduce dryer year shortages to some extent, but would not be expected to alter existing M&I land uses.

With implementation of Alternative A, water delivery, location of water delivery, and amount of water to be delivered to wildlife refuges in the Extended Study Area would be similar or slightly more than deliveries compared to the Existing Conditions/No Project/No Action Condition; therefore, no associated land use impacts on established communities, farmlands, forest lands or land uses are expected.

### ***20.3.4.2 Primary Study Area – Alternative A***

The construction of a 1.3-million-acre-foot Sites Reservoir would require the construction of Sites Dam, Golden Gate Dam, and seven saddle dams. Alternative A would include the construction of up to five recreational areas; road relocations, including the South Bridge and new access roads; the Sites Pumping/Generating plant, inlet/outlet structures, switchyard, and Field Office Maintenance Yard; the Holthouse Reservoir Complex; the TRR and associated facilities; the Delevan pipeline and associated facilities; the Sites/Delevan overhead power lines; and the Delevan Pipeline Intake/Discharge Facilities. Alternative A would also require modifications to the GCID Main Canal.

Construction-related ground-disturbing activities and the subsequent filling of the reservoir would result in the direct and permanent loss of the community of Sites, as well as the permanent conversion of lands to new uses.

### **Construction, Operation, and Maintenance Impacts**

#### ***Impact Land-1: Physical Division of an Established Community***

Implementation of Alternative A, would require demolition of approximately 20 residences, 25 barns, and 40 other structures (a combination of sheds, silos, and a pump house) and the displacement of residents in the town of Sites, to accommodate the Inundation Area. Two private cemeteries (Sites Cemetery and a Rancheria Cemetery) would need to be relocated. These activities would eliminate the town of Sites. Additionally, the town of Lodoga, located west of the Inundation Area in Colusa County, would be divided, given the schools that serve the town are located in Maxwell.

Given the Project includes the bridge extending over the reservoir, providing through access for the town of Lodoga eastward to Maxwell, impacts would be **less than significant**. However, construction and operation of Alternative A would cause the physical division of an established community, resulting in a **significant impact** to the town of Sites when compared to the Existing Conditions/No Project/No Action Condition.

#### ***Impact Land-2: Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect***

The goals, objectives, and policies included in the land use elements of the Glenn County and Colusa County general plans place an emphasis on the preservation of agricultural land uses (refer to Appendix 4A Environmental Compliance for the list of applicable policies). Alternative A may not be considered completely compatible with the existing lands in Glenn and Colusa Counties that are zoned for Agricultural uses and would result in conversion of lands that promote agricultural land uses to land uses that would support the Project (for example recreational or public facility).

The Project may not be completely consistent with properties in Glenn County that are zoned for agricultural uses and could result in a conflict with the County's General Plan and Zoning Ordinance. In order for the Project to be fully consistent with the Glenn County General Plan and Zoning Ordinance, Glenn County may need to process a General Plan Amendment and Zoning Amendment to address the proposed changes in land use from Agriculture, to one that is more fully compatible with the Project, such as Recreation Zone. It should be noted that reservoirs are a conditional use in Glenn County's agricultural zones.

Because the Sites Project EIR/EIS addresses changes in the physical environment related to Project construction, this document can be utilized by the counties to support its necessary planning processes (including additional environmental analysis as determined necessary by the county). Should either county determine that land use changes are necessary in order to ensure that all elements of the Project are fully compatible with properties in the County that are zoned for agricultural uses, there would be a **potentially significant impact** when compared to the Existing Conditions/No Project/No Action Condition.

The Colusa County General Plan Land Use Element (Goal LU 4 and associated objectives and policies) provides for the creation of Sites Reservoir, including action items to create a Sites Area Plan and the

County's active participation in the Authority. Additionally, the Colusa County General Plan Land Use Map and Zoning Map have also already identified the proposed Sites Reservoir as a study area. When Colusa County adopted its new General Plan in 2012 and Zoning Code in 2014, the County did not adopt specific land use designations to reflect the Sites Reservoir because of the uncertainty, at that time, of the specific details for the Project. Rather, the County in its General Plan and Zoning Code anticipated that it would most likely subsequently modify the applicable General Plan and Zoning designations in the future. Colusa County's General Plan and Zoning Ordinance allow for some and/or anticipated some of the uses anticipated with the Sites Reservoir, for example, public parks, campgrounds, or boat ramps are allowed with a use permit (Planning Commission or Planning Director level). However, in order for the reservoir to be fully consistent with the Colusa County General Plan and Zoning Ordinance, Colusa County would most likely need to process a General Plan Amendment and Zoning Amendment to address the full breadth of proposed changes to land use that the necessary and desired infrastructure would bring.

Colusa County staff have preliminarily determined that the more appropriate General Plan Land Use Designation to be Public/Semi- Public Services (PS) and that the Zoning Classification of Public Facilities (P-F) would be better suited for the dams, pumping plants and water storage areas, associated with the Project (Plucker, 2017, pers. comm.). These land use regulations would also be applied to the proposed recreation areas, which would allow for the construction and use of boat ramps and camping areas; depending on the final arrangement possibly with the approval of a Use Permit. Colusa County intends to utilize this EIR/EIS to addresses changes in the physical environment related to the Project to support any additional planning processes in the future. Based upon specific Use Permit applications, if necessary, for the recreational uses, Colusa County may determine that additional environmental analysis is necessary if the scope of any such application was not fully considered in this document.

County staff have also determined that the Delevan pipeline would be considered a minor utility based upon the temporary interruption of farming activities during construction and negligible permanent loss of farmland along any of the proposed routes. As such, they would be a permitted use in the agricultural zones and no change in land use regulations would be necessary.

Because some elements of the Project may not be compatible with properties in the counties that are zoned for agricultural uses, the Project could result in a **potentially significant impact** when compared to the Existing Conditions/No Project/No Action Conditions.

***Impact Land-3: Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land (as Defined in Public Resources Code Section 12220(g)), Timberland (as defined by Public Resources Code Section 4526), or Timberland Zoned Timberland Production (as defined by Government Code Section 51104(g))***

There is no forest land, timberland, or timberland zoned Timberland Production within the Alternative A Primary Study Area; therefore, there would be **no impact**.

***Impact Land-4: Involve Other Changes in the Existing Environment which, Because of Their Location or Nature, Could Result in Conversion of Farmland to Non-agricultural Use or Conversion of Forest Land to Non-forest Use***

There are no lands affected by the Project that are zoned forest land within either Glenn or Colusa counties.

Construction, operation, and maintenance of Alternative A would result in the conversion of Farmland to non-agricultural uses, specifically to lands in Glenn County that are zoned as Agricultural Preserve and lands in Colusa County that are zoned Agricultural Preserve and Foothill Agriculture. Under Alternative A, approximately 21,000 acres in Colusa County, and approximately 3,500 acres of agricultural lands in Glenn County would be permanently converted to non-agricultural uses. The conversion represents approximately 4 percent and 0.01 percent of the agricultural lands for each county respectively.

Table 20-3 provides a summary of existing zoning within the Project footprint, and the total acreages of temporary and permanent conversion of land from existing land uses.

**Table 20-3  
Zoning Designations and Acreage of Impacts – Alternative A**

Project Feature/Facilities	County Zoning	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>	Compatible with Existing Use?
<b>Glenn County</b>				
Sites Reservoir and Dams	FA-160	--	188	Y
	AP-160	--	1,597	N
Recreation Areas and Associated Electrical Distribution Lines	AP-160	--	300	N
Road Relocations	AP-160	87	66	N
	AP-80	53	15	N
Project Buffer	FA-160	--	260	Y
	AP-160	--	1,608	N
<b>Colusa County</b>				
Sites Reservoir and Dams	E-A	--	5	N
	F-A	--	10,521	N
	R-S	--	29	N
Recreation Areas and Associated Electrical Distribution Lines	F-A	--	877	N
Road Relocations and South Bridge	E-A	646	4	Y
	F-A	--	200	Y
	SFA	13	5	Y
Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, and Field Office Maintenance Yard	F-A	2	79	N
	SFA	--	10	Y
Holthouse Reservoir Complex	E-A	25	182	N
	F-A	--	0.8	N
	SFA	--	296	Y
TRR Complex	E-A	--	195	N
Delevan and TRR Pipelines	E-A	1,954	0	Y
	F-M	73	0	Y
	SFA	6.7	0	Y
Sites/Delevan Overhead Power Line	E-A	38	2	Y
	F-A	55	3	Y
	SFA	.9	0.03	Y

Project Feature/Facilities	County Zoning	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>	Compatible with Existing Use?
Delevan Pipeline Intake/Discharge Facilities	R-F	--	4.5	Y
	E-A	--	15	Y
Project Buffer	E-A	0	526	Y
	F-A	0	9,075	Y
	R-F	0	10	Y
	SFA	0	336	Y

<sup>a</sup>Acreage represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

<sup>b</sup>-- = There is no additional temporary disturbance required for construction of the Project feature/facility

<sup>c</sup>0 = There is no temporary disturbance to or permanent loss of acreage associated with the Project feature/facility

#### Glenn County Zoning Designations

AP = Agricultural Preserve (160 = 144-acre minimum/80 = 72-acre minimum)

FA = Foothill Agriculture/Forestry

#### Colusa County Zoning Designations

E-A = Exclusive Agriculture

F-A = Foothill Agriculture

F-M = Flood Management

R-F = River Frontage

R-S = Rural Services

SFA = State, Federal, or Other Agency Lands

Because the Project is being implemented to provide a secure source of water (including to agricultural water users) during dry and critically dry water years, and that the total conversion of farmland to non-agricultural use represents a small amount of the agricultural lands in both Colusa and Glenn counties; the permanent conversion of agricultural land to non-agricultural use from Project operation and maintenance would be a **less-than-significant impact** when compared to the Existing Conditions/No Project/No Action Condition.

#### ***Impact Land-5: Changes in Land Use as a Result of Implementing the Alternatives that Are Considered to Be Incompatible with the Existing Land Uses Adjacent to the Project Facilities***

The majority of the Project would be consistent with adjacent land uses. The construction activities and location of the proposed Delevan Pipeline Intake/Discharge Facilities would be coordinated with the operation of the existing Maxwell Irrigation District facilities located adjacent to and upstream from the proposed facilities. This would result in **no impact** on that land use, when compared to the Existing Conditions/No Project/No Action Condition.

#### ***Impact Land-6: 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 Non-agricultural Use.***

No Prime Farmland in Glenn County would be impacted by the construction, operation and maintenance of Alternative A.

Table 20-4 shows the FMMP designations and acreage of impacts for Alternative A in Glenn and Colusa counties. Construction of Alternative A, specifically the construction of the Delevan Pipeline, overhead power lines, and TRR Complex, would result in the temporary loss of 1,163 acres of Prime Farmland (approximately 0.5 percent of the total Prime Farmland), in Colusa County. While the loss of Prime Farmland would be temporary, construction of these facilities could extend over a 5-year period. Once

construction is completed, however, agricultural lands would be returned to productivity, therefore there would not be a conversion of land uses within the Delevan pipeline corridor.

**Table 20-4  
FMMP Designations and Acreage of Impacts – Alternative A**

Project Feature/Facilities Complex	FMMP Designations	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>
<b>Glenn County</b>			
Sites Reservoir and Dams	Other Land	--	5.5
	Grazing Land	--	726
	Local Potential	--	986
	Farmland of Local Importance	--	56
Recreation Areas and Associated Electrical Distribution Lines	Grazing Land	--	232
	Local Potential	--	60
Road Relocations	Other Land	4	2
	Grazing Land	77	51
	Local Potential	52	29
Project Buffer	Other Land	0	12
	Grazing Land	0	1,586
	Local Potential	0	266
<b>Colusa County</b>			
Sites Reservoir and Dams	Other Land	--	110
	Grazing Land	--	1.3
	Farmland of Local Importance	--	10,578
Recreation Areas and Associated Electrical Distribution Lines	Other Land	--	66
	Farmland of Local Importance	--	810
Road Relocations and South Bridge	Other Land	.25	0
	Farmland of Local Importance	463	206
	Unique Farmland	0	.05
	Prime Farmland	0	3.7
Sites Reservoir Inlet/Outlet Structure, Sites Pumping/Generating Plant, Sites Electrical Switchyard, Tunnel, and Field Office Maintenance Yard	Farmland of Local Importance	2	89
	Water	--	.001
Holthouse Reservoir Complex	Grazing Land	--	5
	Farmland of Local Importance	25	250
	Water	0	224
TRR Complex	Other	--	0.3
	Unique Farmland	--	0.01
	Prime Farmland	--	195
Delevan and TRR Pipelines	Other Land	50	0
	Unique Farmland	1,003	0
	Farmland of Local Importance	51	0
	Prime Farmland	952	0

Project Feature/Facilities Complex	FMMP Designations	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>
Delevan Overhead Power Line	Other Land	0.29	0.01
	Grazing Land	0.59	0.02
	Unique Farmland	.39	0.02
	Farmland of Local Importance	87	4.6
	Farmland of Statewide Importance	2.44	0.12
	Prime Farmland	3.9	0.2
Delevan Pipeline Intake/Discharge Facilities	Other Land	--	6
	Prime Farmland	--	13
Project Buffer	Other Land	0	103
	Grazing Land	0	18
	Farmland of Local Importance	0	9,624
	Unique Farmland	0	15
	Prime Farmland	0	242
	Water	0	2.6

<sup>a</sup> Acreage represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

<sup>b</sup>-- = There is no additional temporary disturbance required for construction of the Project feature/facility

<sup>c</sup>0 = There is no temporary disturbance to or permanent loss of acreage associated with the Project feature/facility

Alternative A would not result in the permanent conversion of any Prime Farmland, Unique Farmland or Farmland of Statewide Importance in Glenn County.

Alternative A would result in the permanent conversion of 216 acres of Prime Farmland, 15 acres of Unique Farmland, in Colusa County, the majority of which is associated with construction of the TRR Complex. The permanent loss would represent approximately 0.1 percent of all Prime Farmland and less than 0.1 percent of Unique Farmland within the county. Although the Project is being implemented to provide a secure source of water during dry and critically dry water years (including to agricultural water users), and loss of Prime Farmland represents a small amount of the total Prime Farmland in Colusa County, impacts from the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be **significant** when compared the Existing Conditions/No Project/No Action Condition.

***Impact Land-7: Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that Have a Williamson Act Contract.***

Land uses, as they relate to a permanent conflict with existing zoning for agricultural use, are described in **Impact Land-4**. Up to 341 parcels associated with Alternative A could require the permanent removal from Williamson Act contracts. This permanent long-term impact would result in a **potentially significant impact** when compared to the Existing Conditions/No Project/No Action Condition.



## 20.3.5 Impacts Associated with Alternative B

### 20.3.5.1 Extended and Secondary Study Areas – Alternative B

#### **Construction, Operation, and Maintenance Impacts**

The impacts associated with Alternative B, as they relate to division of an established community (**Impact Land-1**), potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); potential conflicts with existing zoning for forest land, timberland, or timberland production (**Impact Land-3**); conversion of farmlands or forest lands (**Impact Land-4**); incompatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); or conflicts with existing agricultural zoning, or conversion of lands that have Williamson Act contracts (**Impact Land-7**) would be the same as those described for Alternative A for the Extended and Secondary study areas.

### 20.3.5.2 Primary Study Area – Alternative B

#### **Construction, Operation, and Maintenance Impacts**

If Alternative B is implemented, the footprint or construction disturbance area of Sites Reservoir Inundation Area, Sites Reservoir Dams, and South Bridge; the Road Relocations and TRR Pipeline Road; the Sites/Delevan Overhead Power Line; and the Electrical Distribution Lines would differ from Alternative A. In addition, the Delevan Pipeline Intake/Discharge Facilities would be replaced by the Delevan Pipeline Discharge Facilities. The boundary of the Project Buffer would be the same for Alternatives A and B, but because the footprints of some of the Project facilities would differ among the alternatives, the acreage of land within the Project Buffer would also differ. Total conversion of agricultural lands to non-agricultural lands as well as the temporary and permanent loss of Prime Farmland and Unique Farmland within both Glenn and Colusa counties would be within the same percentages as indicated for Alternative A.

Additionally, Alternative B would result in up to 344 parcels removed from Williamson Act Contracts. The acreage summaries of the potential temporary and permanent land use changes associated with Alternative B are presented in Tables 20-5 and 20-6.

**Table 20-5  
Zoning Designations and Acreage of Impacts – Alternative B**

Complex	County Zoning	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>	Compatible with Existing Use?
<b>Glenn County</b>				
Sites Reservoir and Dams	FA-160	--	265	Y
	AP-160	--	1,911	N
Recreation Areas and Associated Electrical Distribution Lines	AP-160	--	300	N
Road Relocations	AP-160	87	66	N
	AP-80	53	15	N
Project Buffer	FA-160	0	182	Y
	AP-160	0	1,301	N

Complex	County Zoning	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>	Compatible with Existing Use?
<b>Colusa County</b>				
Sites Reservoir and Dams	E-A	--	5	N
	F-A	--	12,065	N
	R-S	--	29	N
Recreation Areas and Associated Electrical Distribution Lines	F-A	--	877	N
Road Relocations	E-A		4	Y
	F-A	450	202	Y
	SFA	13	5	Y
Sites Pumping/Generating Plant, Switchyard, Tunnel, and Maintenance Yard	F-A	--	80	N
	SFA	--	10	Y
Holthouse Reservoir Complex	E-A	25	182	N
	F-A	--	0.8	N
	SFA	--	296	Y
TRR Complex	E-A	--	194	N
Delevan and TRR Pipelines	E-A	2,149	0	Y
	F-M	81	0	Y
	SFA	8	0	Y
Overhead Power Lines	E-A	21.9	0.2	Y
	F-A	55.6	0.5	Y
	SFA	0.9	0	Y
Delevan Pipeline Discharge Facilities	R-F	--	2.5	Y
	E-A	--	5	Y
Project Buffer	E-A	0	535	N
	F-A	0	7,530	N
	R-F	0	12	Y
	SFA	0	336	Y

<sup>a</sup>Acres represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

<sup>b</sup>-- = There is no additional temporary disturbance required for construction of the Project feature/facility

<sup>c</sup>0 = There is no temporary disturbance to or permanent loss of acreage associated with the Project feature/facility

#### Glenn County Zoning Designations

AP = Agricultural Preserve (160 = 144-acre minimum/80 = 72-acre minimum)

FA = Foothill Agriculture/Forestry

#### Colusa County Zoning Designations

E-A = Exclusive Agriculture

F-A = Foothill Agriculture

F-M = Flood Management

R-F = River Frontage

R-S = Rural Services

SFA = State, Federal, or Other Agency Lands

**Table 20-6  
FMMP Designations and Acreage of Impacts – Alternative B**

<b>Complex</b>	<b>FMMP Designations</b>	<b>Temporary Disturbance (Acres)<sup>a,b,c</sup></b>	<b>Permanent Loss (Acres)<sup>c</sup></b>
<b>Glenn County</b>			
Sites Reservoir and Dams	Other Land	--	6
	Grazing Land	--	1,014
	Local Potential	--	1088
	Farmland of Local Importance	--	56
Recreation Areas and Associated Electrical Distribution Lines	Grazing Land	--	232
	Local Potential	--	60
Road Relocations	Other Land	4	2
	Grazing Land	84	53
	Local Potential	51	27
Project Buffer	Other Land	0	12
	Grazing Land	0	1,302
	Local Potential	0	168
<b>Colusa County</b>			
Sites Reservoir and Dams	Other Land	--	133
	Grazing Land	--	1.7
	Farmland of Local Importance	--	12,114
Recreation Areas and Associated Electrical Distribution Lines	Other Land	--	66
	Farmland of Local Importance	--	810
Road Relocations	Other Land	.08	0.02
	Farmland of Local Importance	464	208
	Unique Farmland	0	0.05
	Prime Farmland	0	4
Sites Pumping/Generating Plant, Switchyard, Tunnel, and Maintenance Yard	Farmland of Local Importance	2	89
	Water	--	0.001
Holthouse Reservoir Complex	Grazing Land	--	5
	Farmland of Local Importance	25	250
	Water	0	224
TRR Complex	Other	0.3	0.3
	Unique Farmland	0.01	0.01
	Prime Farmland	195	195
Delevan and TRR Pipelines	Other Land	55	0
	Unique Farmland	1,121	0
	Farmland of Local Importance	51	0
	Prime Farmland	1,036	0
Delevan Overhead Power Line	Other Land	0.2	0.002
	Grazing Land	0.6	0.5
	Farmland of Local Importance	77.5	0.2

Complex	FMMP Designations	Temporary Disturbance (Acres) <sup>a,b,c</sup>	Permanent Loss (Acres) <sup>c</sup>
Delevan Pipeline Discharge Facilities	Other Land	--	3
	Prime Farmland	--	4
Project Buffer	Other Land	0	83
	Grazing Land	0	17
	Farmland of Local Importance	0	8,087
	Unique Farmland	0	15
	Prime Farmland	0	251
	Water	0	3

<sup>a</sup>Acreage represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

<sup>b</sup>-- = There is no additional temporary disturbance required for construction of the Project feature/facility

<sup>c</sup>0 = There is no temporary disturbance to or permanent loss of acreage associated with the Project feature/facility

The differences in the size of the facility footprint, alignment, or construction disturbance area would not change the type of construction, operation, and maintenance activities that were described for Alternative A. They would, therefore, have the same impacts as they relate to division of an on established community (**Impact Land-1**), as follows: potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); potential conflicts with existing zoning for forest land, timberland, or timberland production (**Impact Land-3**); conversion of farmlands or forest lands (**Impact Land-4**); incompatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); conflicts with existing agricultural zoning, or conversion of lands that have Williamson Act contracts (**Impact Land-7**). These impacts associated with Alternative B would be the same as those described for Alternative A.

### 20.3.6 Impacts Associated with Alternative C

#### 20.3.6.1 Extended and Secondary Study Areas – Alternative C

##### **Construction, Operation, and Maintenance Impacts**

The impacts associated with Alternative C, as they relate to division of an established community (**Impact Land-1**) potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); conflicts with existing zoning for forest land, timberland, or timberland production (**Impact Land-3**); conversion of farmlands or forest lands (**Impact Land-4**); compatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); conflicts with existing agricultural zoning, or conversion of lands that have Williamson Act contracts (**Impact Land-7**). would be the same as those described for Alternative A for the Extended and Secondary study areas.

#### 20.3.6.2 Primary Study Area – Alternative C

##### **Construction, Operation, and Maintenance Impacts**

Many of the Project facilities for Alternative C are the same as those that are included in Alternative B (see Table 3-1 in Chapter 3 Description of the Sites Reservoir Project Alternatives). Construction, operation, and maintenance of Alternative C would be expected to result in similar impacts to existing land uses and farmlands shown in Tables 20-5 and 20-6 above for Alternative B, with exception to the Delevan Pipeline Intake/Discharge Facilities and Overhead Power Lines, which would be the same as

Alternative A, as shown in Tables 20-3 and 20-4. Total conversion of agricultural lands to non-agricultural lands as well as loss of Prime Farmland within both Glenn and Colusa counties would be within the same percentages as indicated for Alternative A. Additionally, Alternative C would result in up to 349 parcels removed from Williamson Act Contracts.

Facilities included as part of Alternative C would require the same construction methods and operations and maintenance activities as the other alternatives identified above, and would therefore result in the same construction, operation, and maintenance impacts to land uses.

Alternative C would, therefore, have the same impacts that are described for Alternative B as they relate to division of an established community (**Impact Land-1**); potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); compatibility with existing zoning for forest land, timberland, or timberland production (**Impact Land-3**); conversion of farmlands (**Impact Land-4**); compatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); or conflicts with existing agricultural zoning, or conversion of lands that have Williamson Act contracts (**Impact Land-7**).

### **20.3.7 Impacts Associated with Alternative D**

#### **20.3.7.1 Secondary and Extended Study Areas – Alternative D**

##### **Construction, Operation, and Maintenance Impacts**

Alternative D would have the same impacts that are described for Alternative A as they relate to division of an established community (**Impact Land-1**) potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); conflicts with existing zoning for forest land, timberland, or timberland production (**Impact Land-3**); conversion of farmlands or forest lands (**Impact Land-4**); compatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); or conflicts with existing agricultural zoning, or conversion of lands that have Williamson Act contracts (**Impact Land-7**).

#### **20.3.7.2 Primary Study Area – Alternative D**

##### **Construction, Operation, and Maintenance Impacts**

Many of the Project facilities for Alternative D would be the same as those included in Alternative C (see Table 3-1 in Chapter 3 Description of the Sites Reservoir Project Alternatives). Construction, operation, and maintenance of Alternative D would be expected to result in similar impacts to existing land uses and farmlands shown above for Alternative B, with exception to the overhead power lines and substation. Total conversion of agricultural lands to non-agricultural lands as well as loss of Prime Farmland within both Glenn and Colusa counties would be within the same percentages as indicated for Alternative A. Alternative D would result in up to 336 parcels removed from Williamson Act Contracts. Construction, operation, and maintenance of Alternative D would be expected to result in similar impacts to existing land uses and farmlands as shown above for Alternative B, with the additional impacts and loss of agricultural lands from the overhead power line and substation listed in Tables 20-7 and 20-8, which are exclusive to Alternative D. Other than the features listed below, which are exclusive to Alternative D, impacts for Alternative D facilities have the same impacts described for Alternative B as they relate to division of an established community (**Impact Land-1**); potential conflicts with land use plans, policies, or regulations (**Impact Land-2**); compatibility with existing zoning for forest land, timberland, or

timberland production (**Impact Land-3**); conversion of farmlands (**Impact Land-4**); compatibility with existing land uses (**Impact Land-5**); conversion of Prime Farmland pursuant to FMMP (**Impact Land-6**); or conflicts with existing agricultural zoning or conversion of lands that have Williamson Act contracts (**Impact Land-7**):

- Alternative D would include the development of only two recreation areas (Stone Corral Recreation Area and Peninsula Hills Recreation Area) instead of up to five recreation areas that would be developed for each of the other alternatives. Alternative D would also include a boat ramp on the western side of the reservoir, where the existing Sites Lodoga Road would be inundated. Only two recreation areas under Alternative D is not expected to substantially change the potential impacts to land uses or farmlands.
- Under Alternative D, the TRR would be approximately 80 acres smaller; therefore, there would be a reduced amount of impacted acreage and subsequent impacts to existing land uses and Prime Farmland than indicated under Alternative B.
- For Alternative D, the Delevan Pipeline alignment would be approximately 50 to 150 feet south of the alignment for Alternatives A, B, and C. This alignment takes advantage of existing easements to reduce impacts on local landowners. The shift in alignment is expected to reduce impacts related to lands zoned as Exclusive Agriculture and land designated as Prime Farmland and Unique Farmland.
- The boundary of the Project Buffer would be the same for all alternatives, but because the footprints of some of the Project facilities included in the Project Buffer would differ among the alternatives, the acreage of land within the Project Buffer would also differ. However, these differences in the size the buffer would not change the type of construction, operation, and maintenance activities, and the impacts would be similar to the impacts for the other alternatives.
- The South Bridge alignment would be similar to Alternative B; however, the alignment varies slightly with an adjusted alignment near the east side approach. The proposed alignment would be within the construction area of the other alternatives, and would not result in additional impacts related to existing land uses.
- Under Alternative D, the Lurline Headwaters Recreation Area would not be constructed; therefore, the road segment providing access to that recreation area would not be required. Alternative D includes an additional 5.2 miles of roadway from Huffmaster Road to Leesville Road. Otherwise, the design of the Sites Reservoir Inundation Area and Dams and the South Bridge would be the same as under Alternative C. The relatively slight difference in roads used to complete construction of Project facilities would not change the total acreage of potential impacts related to existing land uses and farmlands from those described for Alternative B.
- Alternative D includes a north-south alignment of the Delevan Overhead Power Line rather than the west-east alignment between the TRR and the Delevan Pipeline Intake/Discharge Facilities. Alternative D also includes a proposed electrical substation west of Colusa in addition to the substation located near the Holthouse Reservoir. The north-south alignment would be approximately 1 mile longer; however, it would be located within an existing transportation and utility corridor along SR 45, and would result in less impacts to agricultural land uses and Prime Farmland as described for Alternatives A, B, and C. The installation of the power line and substation would require similar construction methods and operation and maintenance activities as identified for

Alternatives A, B, and C, other than the potential incorporation of existing power lines currently along SR 45 into joint facilities for Alternative D.

- Potential temporary and permanent land use impacts associated with the overhead power line and substation for Alternative D are presented in Tables 20-7 and 20-8. All impacts would occur in Colusa County.

**Table 20-7**

**Zoning Designations and Acreage of Impacts – Alternative D Overhead Power Line and Substation**

County Zoning	Temporary Disturbance (Acres) <sup>a,b</sup>	Permanent Loss (Acres) <sup>b</sup>	Compatible with Existing Use?
RR-2/RR-5	7	0.1	Y
EA	151	2.5	Y
AT-10	4	0.01	Y
R-1-6/8	0.6	0.01	Y
R-3/4	6	0.1	Y
C-2	2	0.01	Y
M-1	11	0.2	Y
C-H	1	0.01	Y

<sup>a</sup>Acreage represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

<sup>b</sup>0 = There is no temporary disturbance to or permanent loss of acreage associated with the Project feature/facility

Colusa County Zoning Designations

RR-2/5 = Rural Residential (2-acre/5-acre minimum lot size)

E-A = Exclusive Agriculture

AT-10 = Agricultural Transition (10-acre/20-acre lot size)

R-1-6/8 = Residential Single-Family

R-3/4 = Residential Multiple Family/Apartment-Professional

C-2 = Community Commercial

M-1 = Light Industrial

C-H = Highway Service Commercial

**Table 20-8**

**FMMP Designations and Acreage of Impacts – Alternative D Overhead Power Line and Substation**

FMMP Designations	Temporary Disturbance (Acres) <sup>a</sup>	Permanent Loss (Acres)
Other Land	7	0.1
Farmland of Local Importance	4	0.01
Prime Farmland	170	2.5
Urban and Built Up Land	22	0.3

<sup>a</sup>Acreage represents temporary disturbance associated with the defined construction disturbance area of the Project feature/facilities.

## 20.4 Mitigation Measures

Mitigation measures are provided in this section and summarized in Table 20-9 for the impacts that have been identified as potentially significant.

**Table 20-9  
Summary of Mitigation Measures for Project Impacts on Land Use**

<b>Impact</b>	<b>Associated Project Facility</b>	<b>LOS Before Mitigation</b>	<b>Mitigation Measure</b>	<b>LOS After Mitigation</b>
<b>Impact Land-1:</b> Physical Division of an Established Community	Sites Reservoir Inundation Area and Sites Reservoir Dams (construction, operation, and maintenance effects on the town of Sites)	Potentially Significant	No feasible mitigation	Significant and Unavoidable
<b>Impact Land-2:</b> Conflict with an Applicable Land Use Plan, Policy, or Regulation of an Agency with Jurisdiction over the Project Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations; South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; the Electrical Switchyard; TRR; TRR Pumping/Generating Plant; GCID Main Canal Connection to the TRR; TRR Electrical Switchyard; Delevan Pipeline Intake/Discharge Facilities; Delevan Pipeline Discharge Facility (construction, operation, and maintenance)	Potentially Significant	<b>Mitigation Measure Land-2:</b> Work with Glenn and Colusa Counties to Modify or Amend Counties General Plans and/or Zoning Ordinances to Bring lands into Consistency with the Project Land Uses	Less than Significant
<b>Impact Land -6:</b> 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 non-agricultural use	Road Relocations and South Bridge, TRR Complex, Delevan Overhead Power Line, Delevan Pipeline Intake/Discharge Facilities, Project Buffer	Potentially Significant	No feasible mitigation	Significant and Unavoidable



Impact	Associated Project Facility	LOS Before Mitigation	Mitigation Measure	LOS After Mitigation
<b>Impact Land-7:</b> Permanent Conflict with Existing Zoning for Agricultural Use, and/or the Permanent Conversion of Lands that have a Williamson Act Contract	Sites Reservoir Inundation Area and Sites Reservoir Dams; Recreation Areas; Road Relocations, South Bridge, and TRR Pipeline Road; Sites Pumping/Generating Plant; Sites Electrical Switchyard; Tunnel from Sites Pumping/Generating Plant to Sites Inlet/Outlet Structure; Sites Reservoir Inlet/Outlet Structure; Field Office Maintenance Yard; Asphalt Batch Plant; Holthouse Reservoir Complex; Electrical Switchyard; Delevan Overhead Power Line; Delevan Pipeline Intake/Discharge Facilities; Delevan Pipeline Discharge Facility; Electrical Distribution Lines; Project Buffer (operation and maintenance)	Potentially Significant	<b>Mitigation Measure Land-7a:</b> Acquire lands through eminent domain or work with land owners to acquire properties and pay any cancellation fees associated with removing lands from Williamson Act contracts.  <b>Mitigation Measure Land-7b:</b> For Land Permanently Acquired other than by Eminent Domain, Seek County Approvals to Rescind Williamson Act Contracts and Enter in Open Space Contracts or Open Space Easements	Less than Significant

## Notes:

“Temporary” impacts, as discussed in this chapter, are the “construction” impacts listed in this table. “Permanent” impacts, as discussed in this chapter, are the “operation and/or maintenance” impacts listed in this table.

LOS = Level of Significance

***Mitigation Measure Land-2: Work with Glenn and Colusa counties to modify or amend their general plans and/or zoning ordinances to bring lands into consistency with the Project land uses.***

Prior to the start of Project construction, the Authority and Reclamation shall work with Glenn and Colusa counties to request modifications or amendments to their general plans and zoning ordinances to ensure consistency with Project land uses.

***Mitigation Measure Land-7a: Acquire lands through eminent domain or work with land owners to acquire properties and pay any cancellation fees associated with removing lands from Williamson Act contracts.***

The Authority and Reclamation shall either acquire lands through eminent domain, or work with property owners to acquire Project lands. For lands that are enrolled in Williamson Act contracts, fees associated with cancellation of contracts will be incurred by the Project sponsors.

***Mitigation Measure Land-7b: For land permanently acquired that will require removal from Williamson Act contracts, seek County approvals to enter into Open Space Contracts or Open Space Easements.***

Prior to permanently acquiring and removing lands that are enrolled in Williamson Act contracts, the Authority and Reclamation shall seek County opportunities to enter into Open Space Use Agreements or Open Space Easements with each of the counties.

There is no feasible mitigation for **Impact Land-1** as it relates to the town of Sites, so it is considered potentially significant and unavoidable. Additionally, there is no feasible mitigation for **Impact Land-6**, as the permanent conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance cannot be mitigated, so it is considered potentially significant and unavoidable.

Implementation of **Mitigation Measures Land-2, -7a, and -7b** would reduce the LOS of Project impacts to **less than significant**.