

3. ENVIRONMENTAL SETTING

3.1. DESCRIPTION of the PLAN AREA

VCIP Plan Area

The Plan Area encompasses the entire Fresno County portion of the District's service area, which consists of approximately 534,800 acres in western Fresno County. It comprises approximately 85 percent of District's approximately 614,700-acre service area. The Plan Area does not include any lands within the Kings County portion of the District's service area (see Figures 3.1-1 through 3.1-8).

The Plan Area consists entirely of lands on the floor of the western San Joaquin Valley. It is generally bounded on the west by the foothills of the Coastal Ranges, on the north by West Nees Avenue, on the east by Fresno Slough, and the south by the Fresno/Kings County boundary. The terrain is generally level, with a slight downgradient to the northeast. The Plan Area contains no rivers, and a few creeks emerge from the western foothills and terminate on the west side of the valley in self-contained watersheds with no outlets. The three main drainage courses in the Plan Area include Panoche Creek, Cantua Creek, and Arroyo Pasajero Creek (also known as the Los Gatos Creek). For a detailed description, see Section 4.10. *Hydrology and Water Quality*.

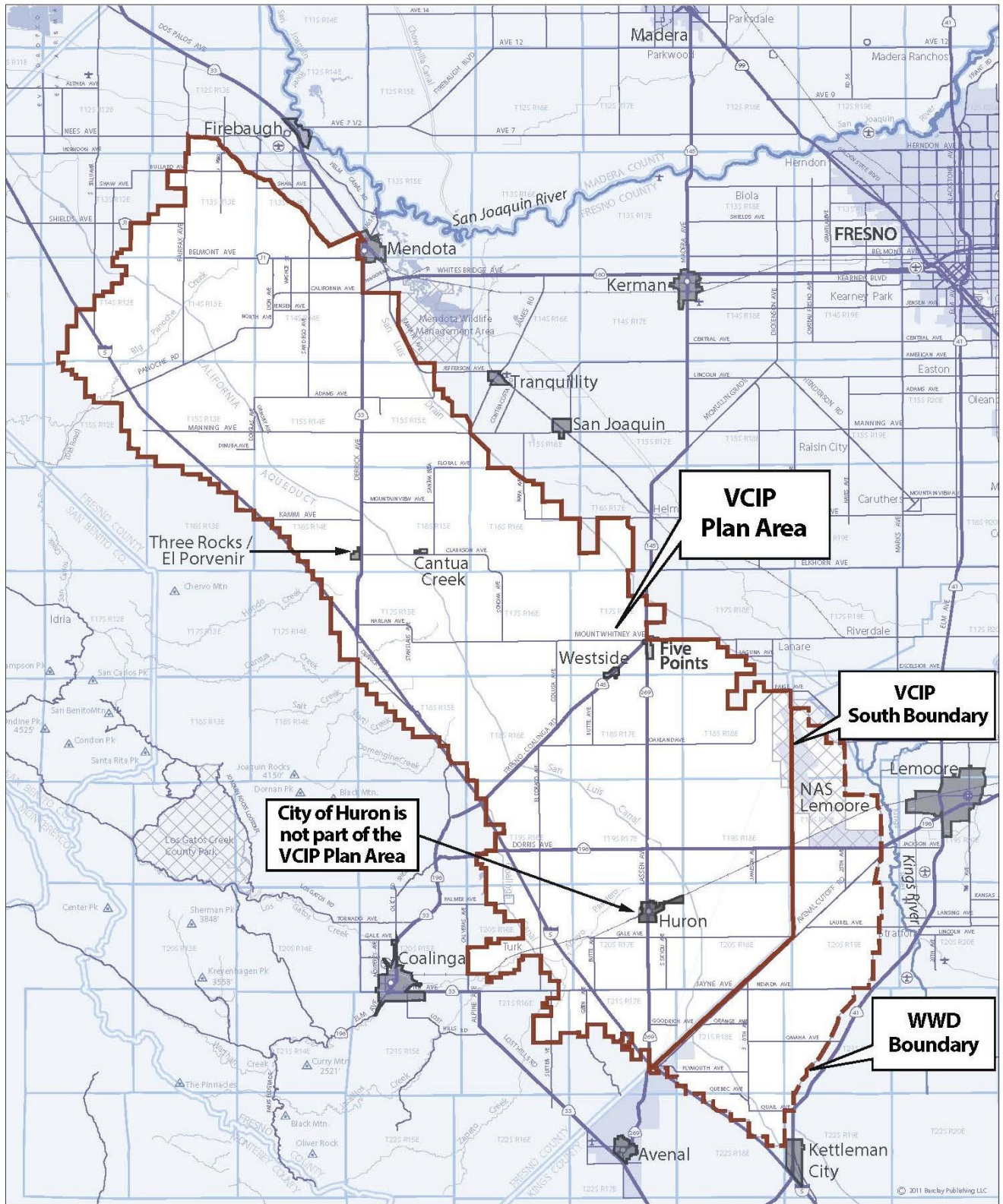
The Plan Area is served by a network of state highways including Interstate-5 (I-5), State Route (SR)-33, SR-145, SR-180, SR-198, and SR-269, as well as major county roads like W. Nees, N. Russell, W. Fairview, W. Shaw, W. Shields, Belmont, W. Panoche, W. Manning, W. Kamm, W. Mountain View, and W. Mount Whitney, among others. These highways and roads are in good condition and provide effective transportation access throughout the Plan Area. For a detailed description, see Section 4.15. *Transportation*.

Most of the Plan Area is devoted to agricultural cultivation and supporting uses. The main crops are tree crops such as almonds and pistachios, and row crops such as tomatoes, grapes, cotton, and wheat. On average, approximately 189,640 acres are fallowed each year, mainly due to water supply constraints. Water supply for crop irrigation is primarily provided by deliveries of Central Valley Project (CVP) contract water. CVP contract water supply is conveyed to the District through the California Aqueduct/San Luis Canal which runs through the western parts of the Plan Area. In recent years, actual deliveries of CVP contract water have been dramatically curtailed. The District delivers its allocated CVP contract water throughout the Plan Area by the District's extensive water distribution system from a series of turnouts located at approximately one-mile intervals along the San Luis Canal. Other agricultural supporting infrastructure within the Plan Area includes groundwater wells, storage sheds and shops, electrical power lines, and farm roads. The Plan Area also includes former irrigation trenches and return flow drainage ditches, most of which have been disused due to the advent of drip irrigation as the primary method of crop irrigation in the Plan Area. For a more detailed description of agriculture in the Plan Area, see Section 4.2. *Agriculture and Forestry Resources*.

The Plan Area includes numerous land uses that serve or are associated with agricultural production. These include several large agricultural processing facilities such as tomato processing plants, almond hulling plants, packing plants, cold storage facilities, and fertilizer manufacturing plants, as well as feed lots, and equipment and materials storage yards.

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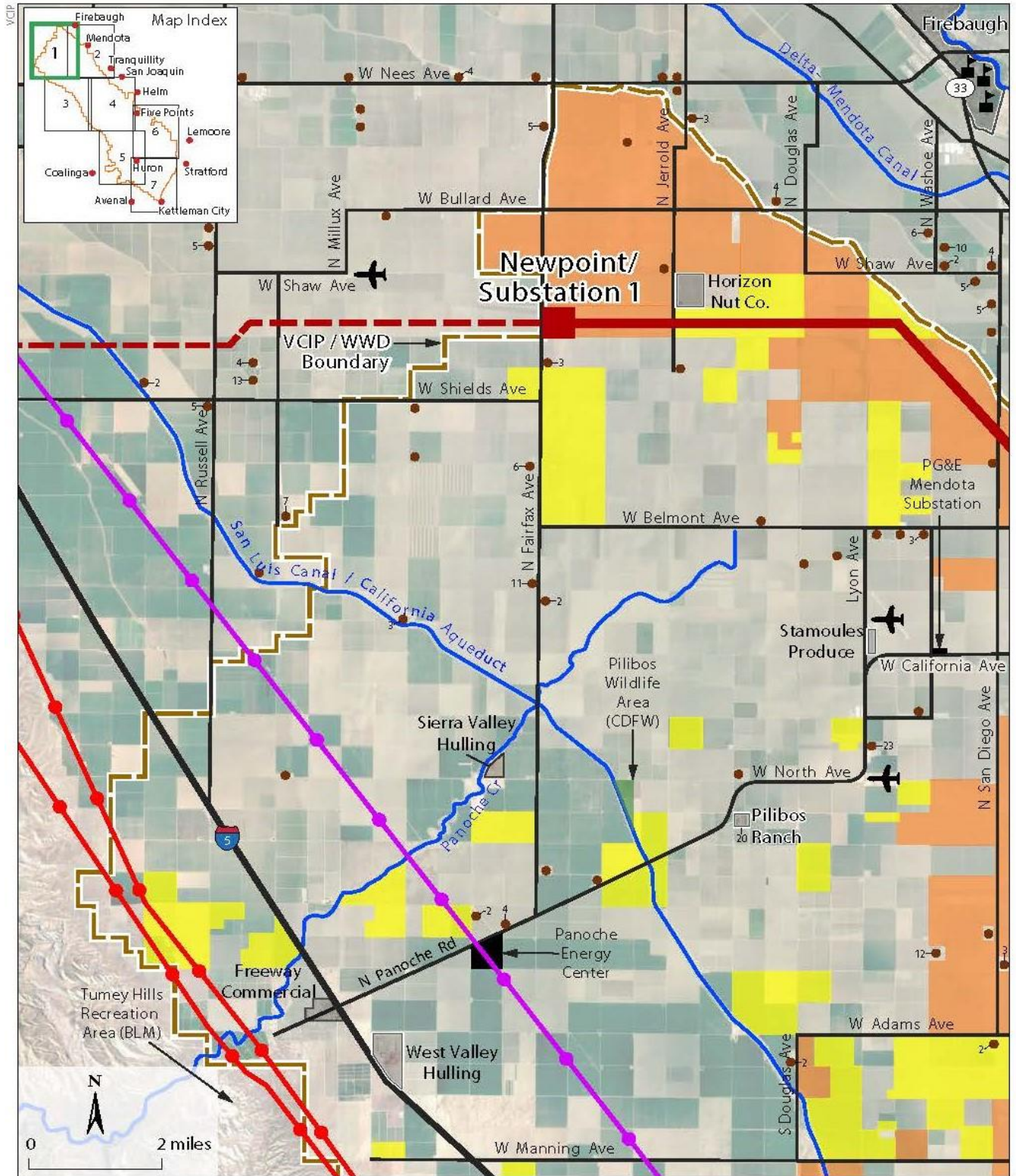
3. Environmental Setting
3.1. Description of the Plan Area



Source: WWD

VCIP Setting
Figure 3.1-1

3. Environmental Setting
 3.1. Description of the Plan Area



DEVELOPMENT FOCUS AREAS

- WWD-Owned Lands
- Privately-Owned Lands
- Existing Solar Facility

TRANSMISSION LINES

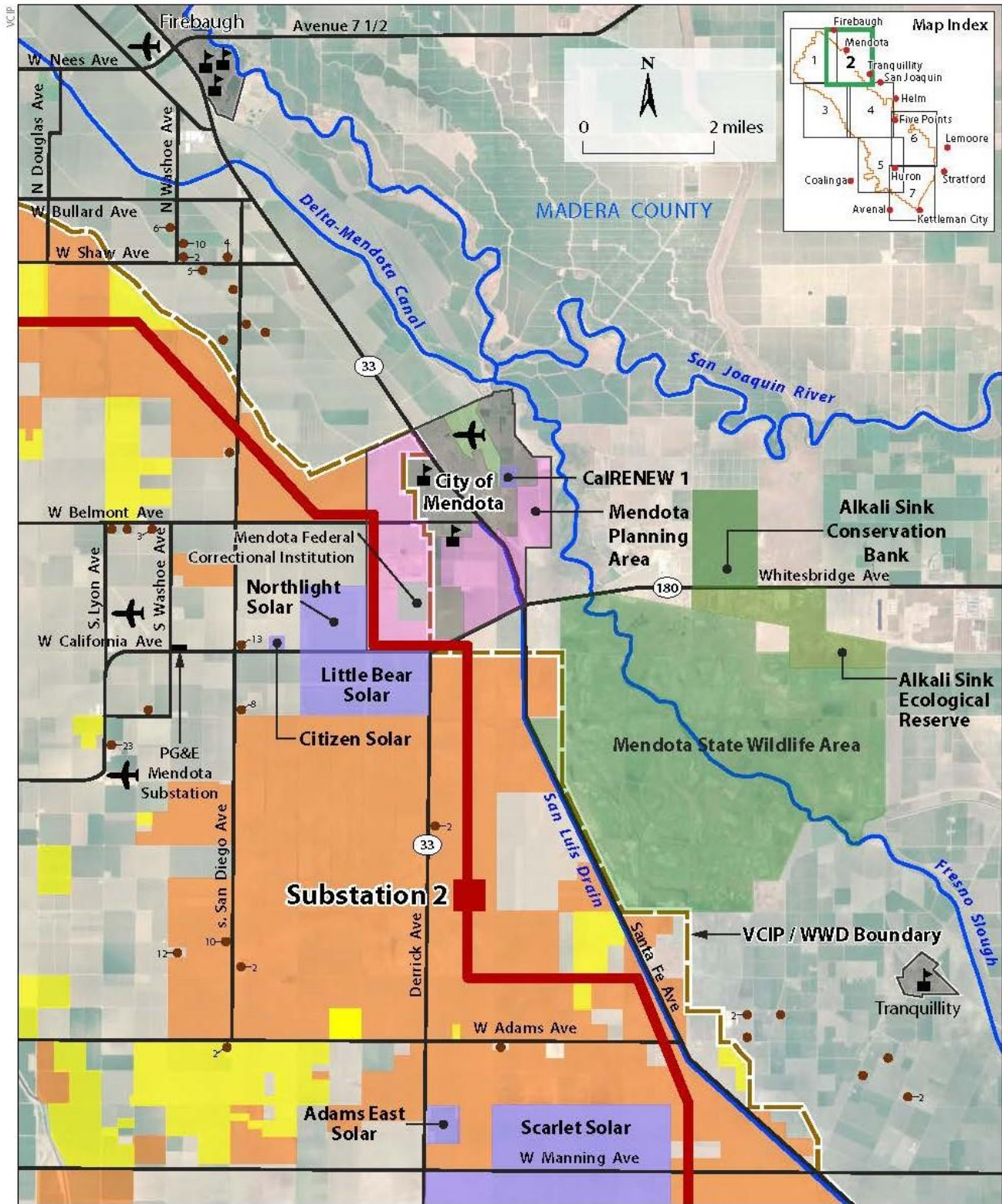
- 230-kV (existing)
- 500-kV (existing)
- 500-kV (planned)
- 500-kV (export line)

COMMUNITIES AND DWELLINGS

- Community with number of dwellings
- Single Dwelling
- Dwellings with number shown

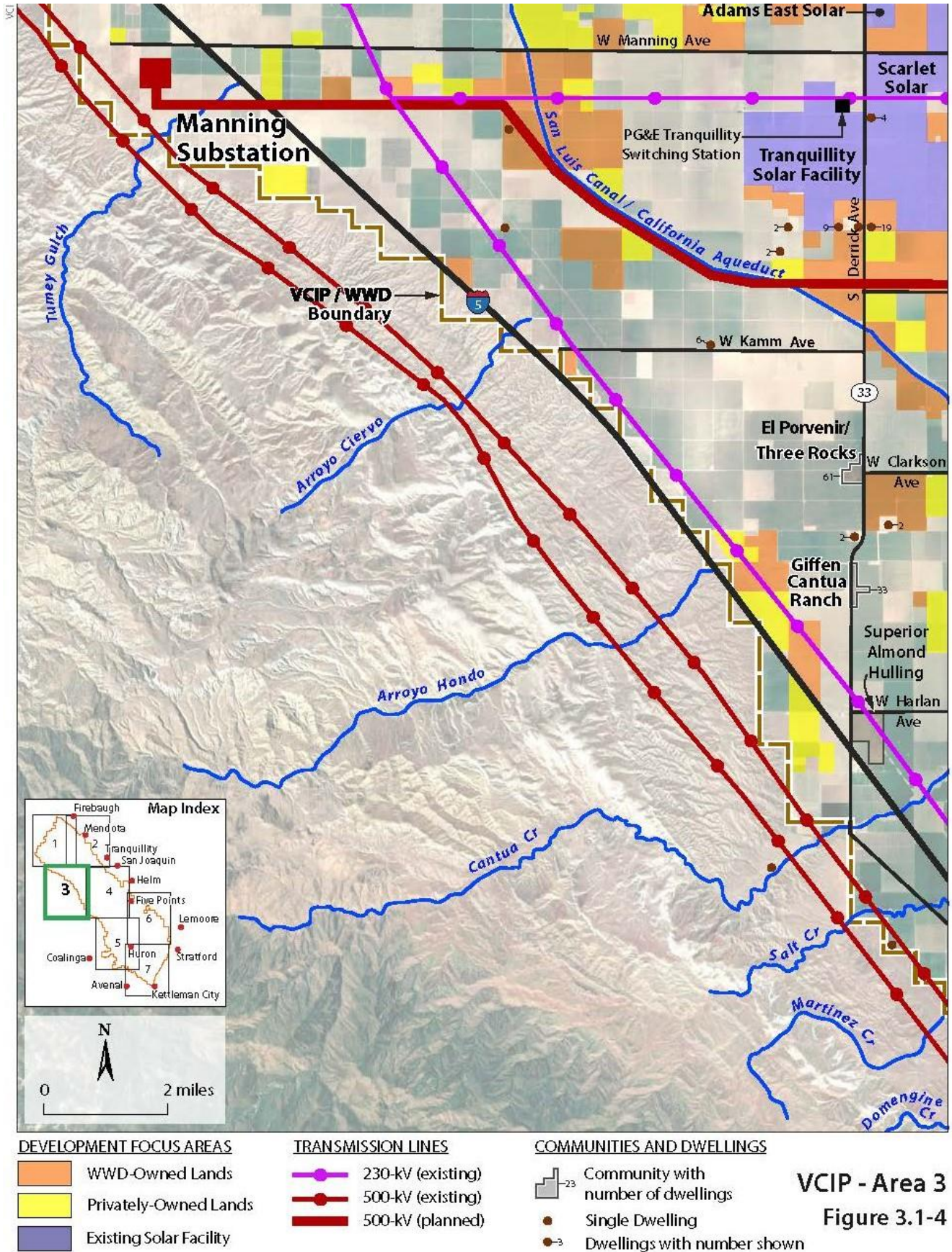
VCIP -Area 1
 Figure 3.1-2

3. Environmental Setting
 3.1. Description of the Plan Area

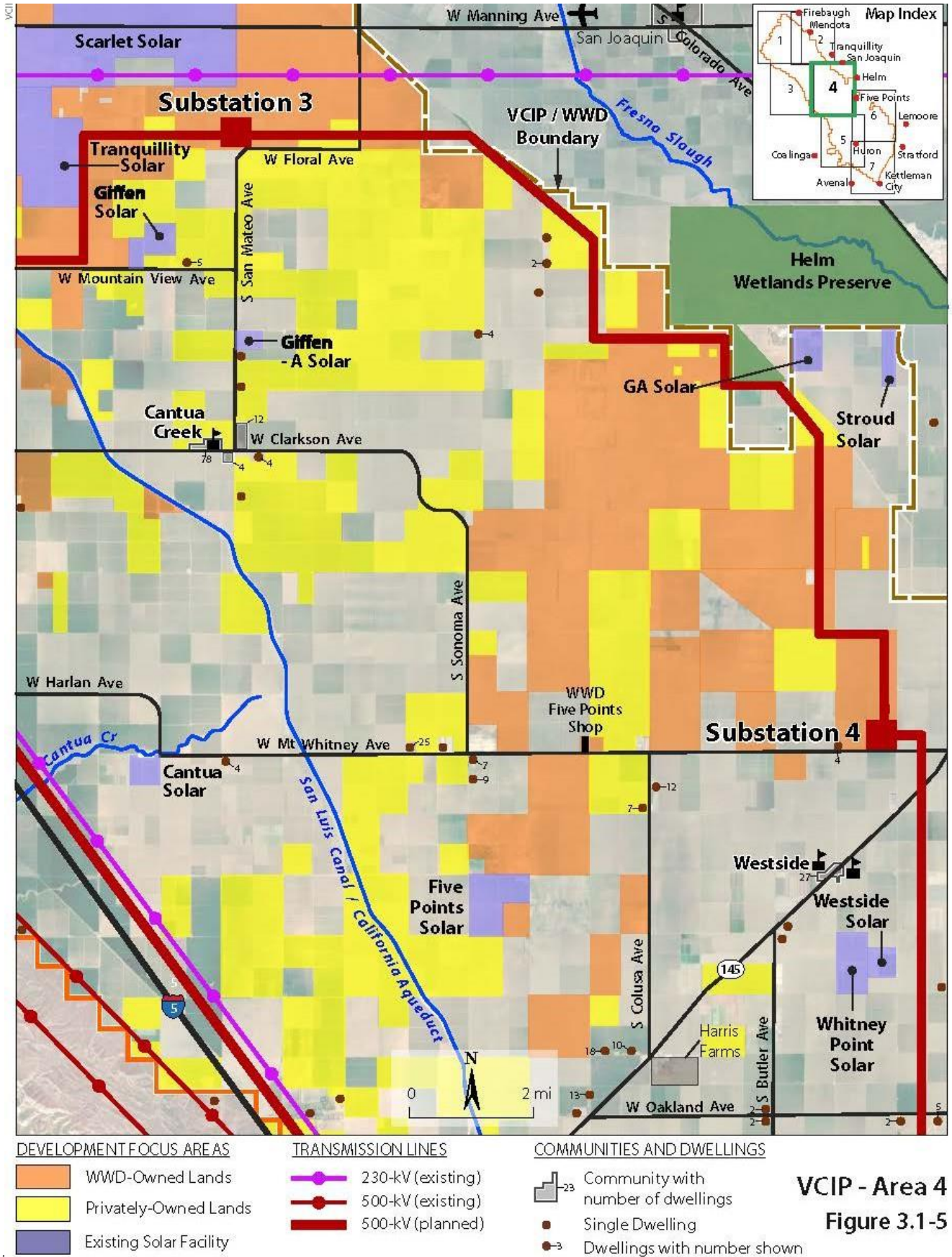


VCIP - Area 2
 Figure 3.1-3

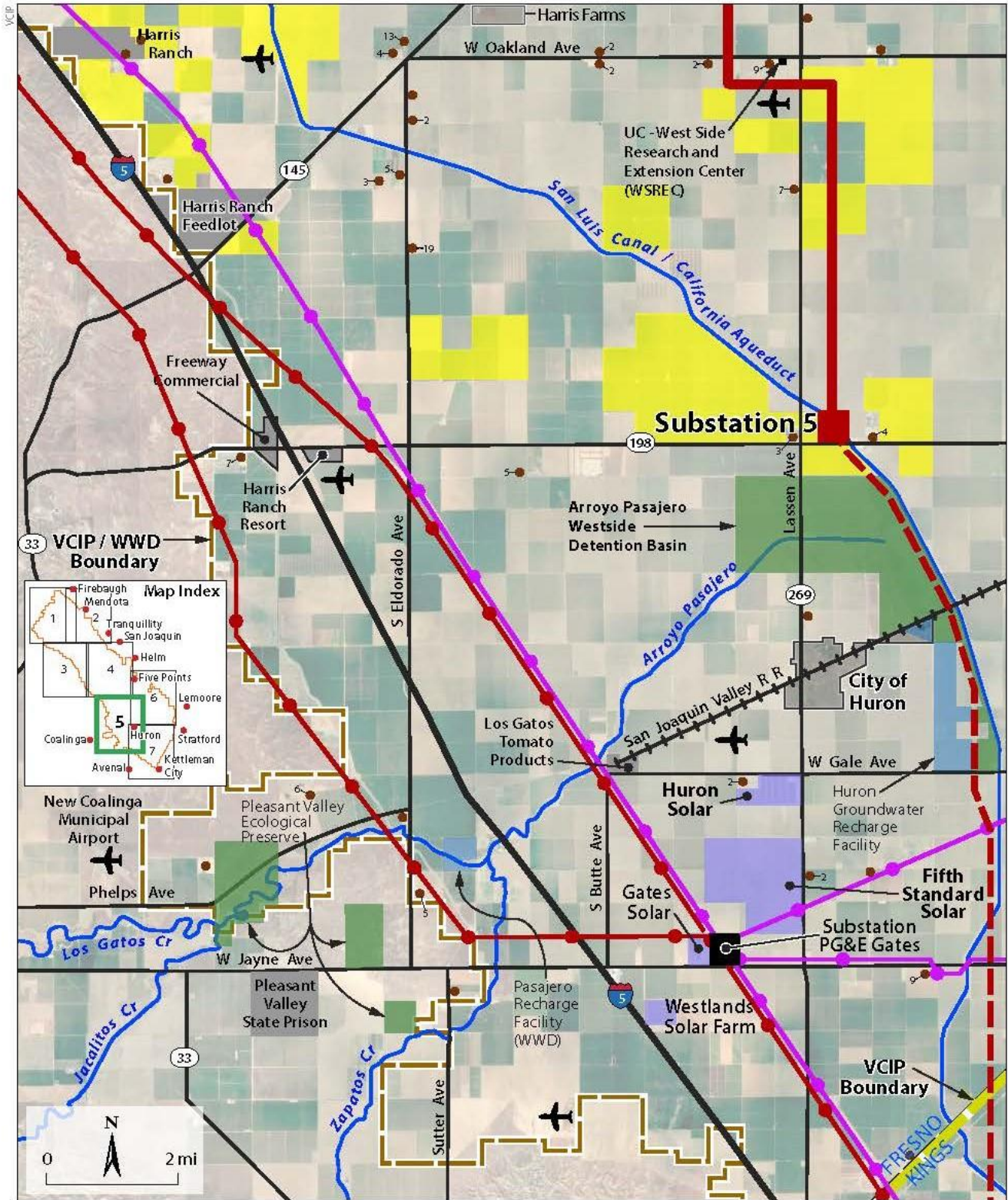
3. Environmental Setting
 3.1. Description of the Plan Area



3. Environmental Setting
 3.1. Description of the Plan Area



3. Environmental Setting
 3.1. Description of the Plan Area



DEVELOPMENT FOCUS AREAS

- WWD-Owned Lands
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TRANSMISSION LINES

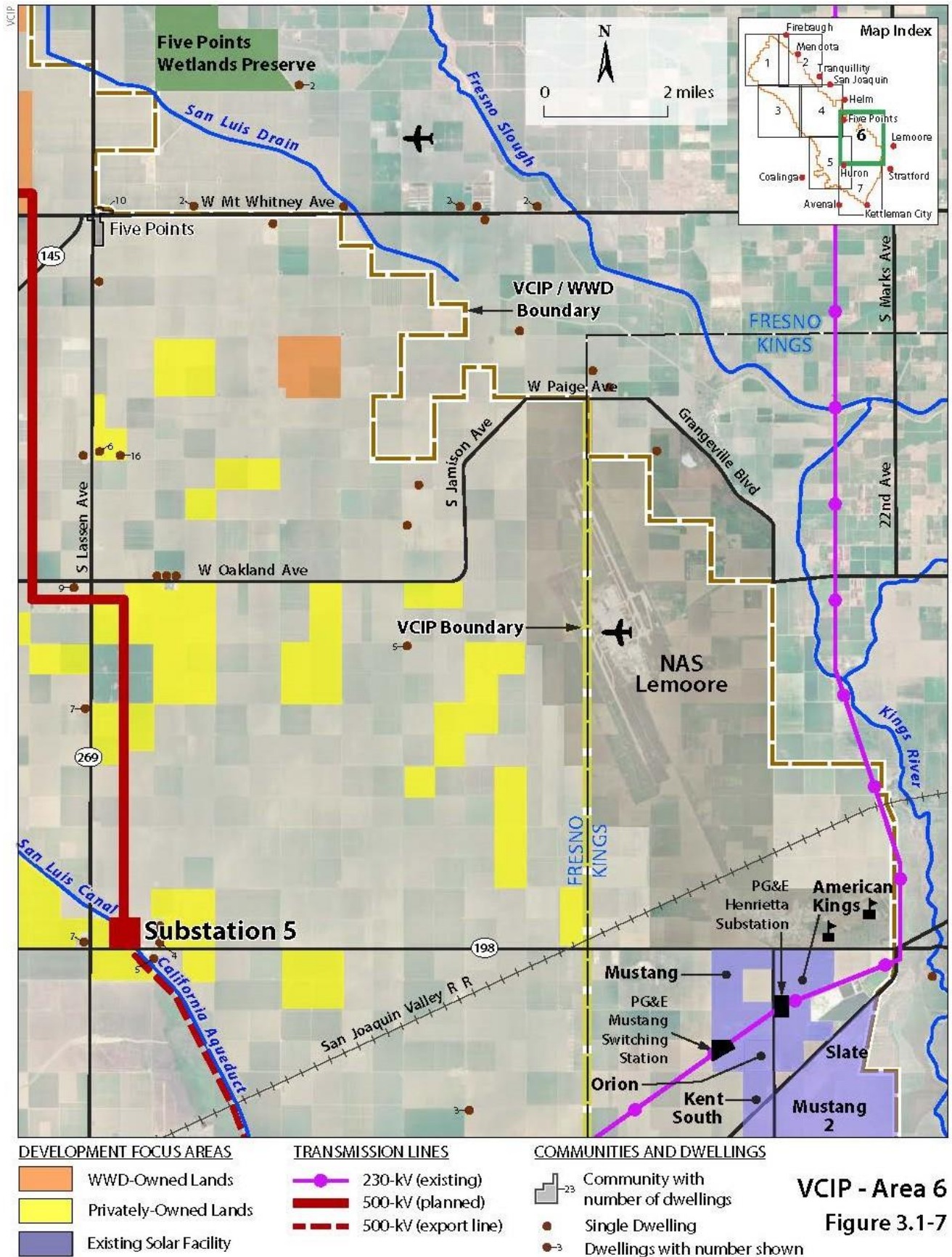
- 230-kV (existing)
- 500-kV (existing)
- 500-kV (planned)
- 500-kV (export line)

COMMUNITIES AND DWELLINGS

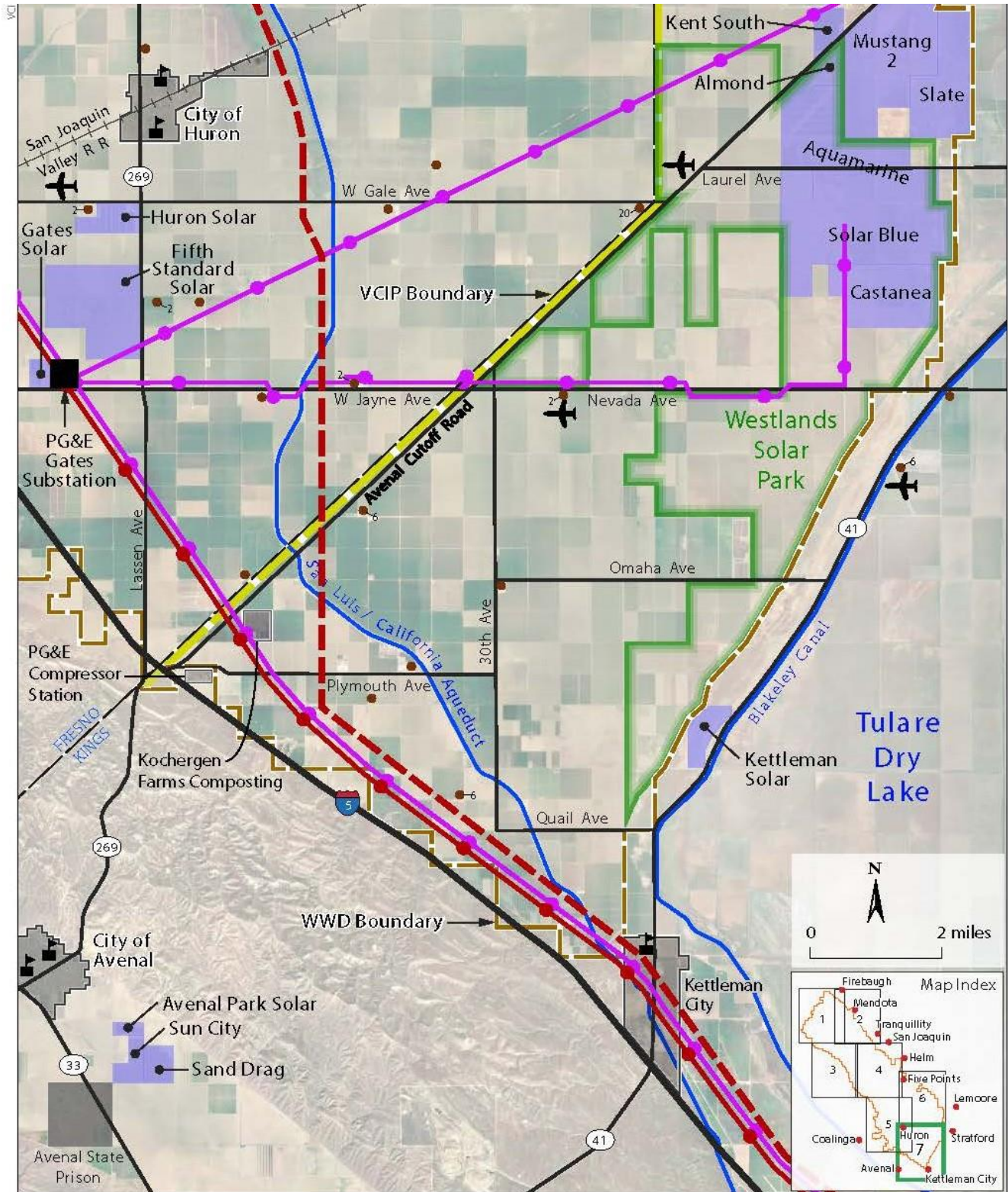
- Community with number of dwellings
- Single Dwelling
- ³ Dwellings with number shown

VCIP - Area 5
 Figure 3.1-6

3. Environmental Setting
 3.1. Description of the Plan Area



3. Environmental Setting
 3.1. Description of the Plan Area



DEVELOPMENT FOCUS AREAS

- WWD-Owned Lands
- Privately-Owned Lands
- Existing Solar Facility

TRANSMISSION LINES

- 230-kV (existing)
- 500-kV (existing)
- 500-kV (export line)

COMMUNITIES AND DWELLINGS

- Community with number of dwellings
- Single Dwelling
- Dwellings with number shown

VCIP - Area 7

Figure 3.1-8

The Plan Area includes several unincorporated communities including Cantua Creek, Three Rocks/El Porvenir, Westside/O’Neill, and Five Points. These communities are primarily residential with limited commercial retail or service uses. The Plan Area includes two elementary schools at Cantua Creek and Westside. Otherwise, the Plan Area is sparsely settled with ranches, individual dwellings and clusters of dwellings (farmworker housing) dispersed throughout the area (see Figures 3.1-9a and 3.1-9b). See Section 4.11. *Land Use and Planning* for a detailed description.

There are several incorporated cities in the Plan Area vicinity. These include the cities of Coalinga, Mendota, Firebaugh, San Joaquin, Avenal, and Lemoore, and the unincorporated communities of Tranquillity, Helm, Kettleman City, and Stratford. The City of Huron is surrounded by the VCIP Plan Area, but it is not within the Westlands service area and is not included in the VCIP Plan Area.

The Plan Area also includes several clusters of highway commercial development along I-5, including restaurants and gas stations at the Panoche Road, W. Jayne Ave., and SR-269 Interchanges, as well as hotels at the SR-198 interchange.

Federal and state institutions and facilities in the Plan Area include: the Federal Correctional Institution (FCI) Mendota, the University of California West Side Research and Extension Center (WSREC) near Five Points, and a portion of Naval Air Station (NAS) Lemoore.

The District has several facilities in the Plan Area, including its field office and shop at Five Points, and field offices near Huron and Tranquillity. The District also operates over 1,000 miles of water distribution pipeline with numerous pump stations and storage tanks, as well as the Pasajero Groundwater Recharge Facility.

In addition to the California Aqueduct/San Luis Canal and I-5, other major regional infrastructure also passes through the Plan Area. These include several PG&E high voltage transmission lines, including two 230-kV lines and a 500-kV line running parallel to I-5, as well as several other 230-kV lines and medium-voltage lines running through the interior of the Plan Area. PG&E operates two major regional substations in the Plan Area, including the Gates Substation on W. Jayne Avenue and the Panoche Substation on W. Panoche Road, as well as several smaller substations dispersed throughout the Plan Area. PG&E also has a major natural gas pipeline that runs parallel to I-5, and several other transmission pipelines that branch off the primary line to the east and northeast through the Plan Area. There is also a major crude oil pipeline that runs along the base of the foothills on the western margin of the Plan Area. The lone rail line in the Plan Area is the locally-serving San Joaquin Valley Railroad line running southwest from Fresno through the City of Huron and on to the Los Gatos Tomato Products Plant.

The Plan Area is also the site of several oil and gas fields which once included hundreds of oil and gas wells dispersed throughout the area. The oil and gas fields have been officially declared abandoned by the state, and almost all remaining wells have been plugged and abandoned. There is little to no surface evidence of these former wells, which were severed several feet below the ground surface with the upper piping removed. See Section 4.9 *Hazards and Hazardous Materials* for a detailed description of these facilities and infrastructure.

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3. Environmental Setting
3.1. Description of the Plan Area



Photo 1: Typical Agricultural Scene



Photo 2: Cantua Creek



Photo 3: Three Rocks / El Porvenir

VCIP Plan Area - Representative Photos
Figure 3.1-9a

3. Environmental Setting
3.1. Description of the Plan Area



Photo 4: Almond Hulling Plant



Photo 5: Freeway Commercial at I-5 / SR-198

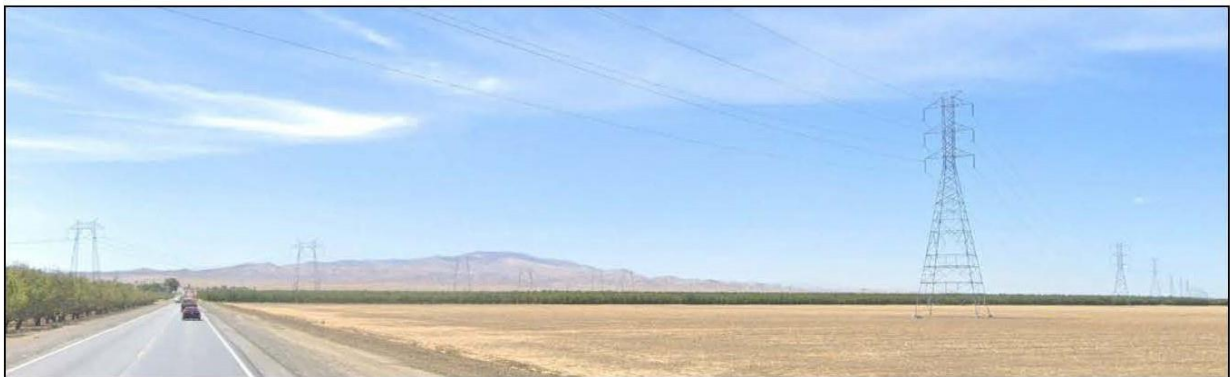


Photo 6: Rural Scene with Transmission Tower Lines

VCIP Plan Area - Representative Photos
Figure 3.1-9b

The Plan Area also includes several large and medium-sized solar generating facilities, all of which were constructed over the past 10 years, most on lands previously acquired by the District for repurposing. Twenty operating solar facilities currently occupy approximately 14,000 acres within the Plan Area, and an additional 11 pending and approved solar and energy storage projects will occupy about 17,200 acres in the Plan Area upon completion. These projects include supporting infrastructure such as on-site substations and gen-tie lines for interconnection to the nearest regional collection substations.

The landscape of the Plan Area has been highly altered by the introduction of agricultural cultivation over the past 100 years. There are few areas of natural and naturalizing vegetative cover. These areas include: the Pleasant Valley Ecological Preserve, which is partially located within the Plan Area near Coalinga; the Arroyo Pasajero Westside Detention Basin located north of Huron; and the Pilibos Wildlife Area located adjacent to the San Luis Canal north of N. Panoche Road. Some remaining natural vegetation occurs along the larger drainage courses such as Panoche and Cantua Creeks, and Arroyo Pasajero. Elsewhere, the vegetation associated with the farmlands of the Plan Area is largely confined to landscape trees and shrub species planted around ranch complexes and individual dwellings.

Surrounding Land Uses

Outside the Plan Area boundaries, the adjacent and nearby lands to the north, east, and south are similar in character to the lands within the Plan Area, and consist predominantly of agricultural land in row crops, tree crops, and fallow fields, along with widely dispersed rural dwellings and agriculture-related commercial uses. The lands to the west and southwest consist mainly of annual grasslands covering the foothills of the Diablo Range. The hills near Coalinga and Kettleman City include several major oil and gas fields, which are in decline, but some wells still operate.

Several Fresno County communities are adjacent and near the Plan Area, including the Cities of Coalinga, Mendota, Firebaugh, San Joaquin, and the unincorporated communities of Tranquillity and Helm.

Nearby communities in Kings County to the south include the Cities of Lemoore and Avenal, and the unincorporated communities of Kettleman City and Stratford. The adjacent areas of Kings County also include the major portion of NAS Lemoore, as well as the partially completed Westlands Solar Park and other solar facilities that occupy approximately 12,500 acres, with another 6,000 acres approved for construction.

There are also several wildlife areas near and adjacent to the Plan Area. These include the Mendota State Wildlife Area, the Alkali Sink Ecological Reserve, and the Alkali Sink Mitigation Bank, all of which are located east of Mendota and just outside the Plan Area. Other nearby wildlife areas include the Helm Wetlands Preserve located adjacent to the Plan Area near the community of Helm, the Five Points Wetlands Preserve located northeast of Five Points, and the Pleasant Valley Ecological Preserve located partially within the Plan Area near Coalinga.

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