

**California Department of Conservation  
FARMLAND MAPPING AND MONITORING PROGRAM**

**2014 FIELD REPORT**

**COUNTY:** Kern

**FIELD MAPPER(S):** Kerri Kisko

**IMAGE DATA USED:**

Source: National Agriculture Imagery Program, USDA
Acquisition date: Summer 2014
Data description: True color mosaic, 1 meter resolution
Coverage gaps: None
Additional imagery used: None

**WRITTEN, DIGITAL & ORAL INFORMATION SOURCES:**

*The following entities and individuals provided information used to conduct 2014 mapping.*

<b>Local Review Comments</b> (submitted by cities, counties, & others on 2012 maps)
None
<b>Personal Contacts</b>
None
<b>Websites Used for Reference</b>
Google Earth, Street View: <a href="http://maps.google.com">http://maps.google.com</a> Kern County, California: <a href="http://www.co.kern.ca.us/">http://www.co.kern.ca.us/</a>
<b>GIS Data Used for Reference</b>
California City Boundary Layer version 14.2 Kern County Base Map Kern County Crop Data 2014 (from <a href="http://www.kernag.com/gis/gis-data.asp">http://www.kernag.com/gis/gis-data.asp</a> ) Kern County Digital Soil Surveys Solid Waste Information System data

## 2012-2014 CHANGE SUMMARY:

Changes made during the map update are summarized by type and location. Particular attention is paid to large or unusual changes and their estimated acreages. Please note that land use type, size of land use unit, soil quality, and Farmland of Local Importance definition (if any) determines the final Important Farmland (IFL) category. [See definitions](#) at bottom of table.

Conversions to Urban Land	
Irrigated Farmland to Urban Land	42 changes
<p>These changes were primarily due to the construction of buildings, infrastructure and solar facilities.</p> <p><b><u>City of Bakersfield:</u></b> There was a Winco and Smart n Final shopping center (~15 acres) added in the City of Bakersfield, as well as other businesses (~15 acres). Approximately 145 acres of groundwater recharge ponds were also added. Also, approximately 15 acres of new homes were noted.</p> <p><b><u>City of Shafter:</u></b> The Ross/dd's distribution center (~75 acres) was added as well as the Bakersfield Pipe and Supply warehouse (~20 acres). Also, solar panels (~5 acres) were added at the Bidart Brothers Apple Packing facility along with approximately 15 acres of new businesses.</p> <p><b><u>City of Delano:</u></b> The Pioneer School (~30 acres) was added along with buildings and paved parking at the Bakersfield College, Delano Campus (less than 5 acres). Also, a warehouse and paved parking was added at Columbine Vineyards (~15 acres).</p> <p><b><u>Community of Mettler:</u></b> New solar facilities were added along Crider Road (~155 acres) and along David Road next to a processing plant (~10 acres). Also, an approximately 10-acre electrical substation was added along Crider Road.</p> <p><b><u>Community of Tupman:</u></b> Approximately 490 acres of groundwater recharge ponds were added by the West Kern Water District and another area of recharge ponds (~355 acres) was added along Stockdale Highway.</p> <p><b><u>Antelope Valley area:</u></b> Approximately 1,860 acres of solar facilities were added in the Antelope Valley, including Array 14 &amp; 15 (~395 acres), Astoria Solar Project (~290 acres), and Solar Star 2 (~100 acres). Other unnamed solar conversions occurred on the Fairmont Butte (~250 and 50 acres) and Little Buttes (~260, 190, 135, 120, and 60 acres) quads.</p> <p><b><u>Other Conversions Throughout the County:</u></b> The Aera Belridge Producing Complex (~25 acres) was added in Belridge, and solar panels (~25 acres) were added in Edison. New buildings (~15 acres) were added at Supreme Almonds of California in Wasco and paved parking (~15 acres) was added at Caterpillar in Tejon Ranch. In Weed Patch, approximately 190 acres of solar panels were added along Herring Road.</p>	

Nonirrigated Land Uses and Other Land to Urban Land

258 changes

These changes were primarily due to the construction of homes, buildings, schools, infrastructure and solar facilities.

**City of Bakersfield:** There was approximately 780 acres of homes added throughout the City of Bakersfield, including Saddleback II (~95 acres), Bridgeton (~80 acres), Park Avenue (~45 acres), Tradewinds (~45 acres), Summerlyn (~40 acres), Village Green (~35 acres) and Rock canyon (~30 acres) developments. Further development included Derrel's Mini Storage (~20 acres), a business park including United Rentals and Arsenal Equipment Rentals (~55 acres), another business park including Tubular Transport & Logistics (~30 acres) and Advanced Industrial Services and San Joaquin Valley Air (~15 acres) were also in evidence. The Dr. Douglas K. Fletcher Elementary School and Paul L. Cato Middle School (~45 acres) were noted and the Bakersfield Sport Village Soccer Complex was expanded by approximately 40 acres. The Kern River Raceway Park race track (~65 acres) was finished and the paved track (~10 acres) at the Bakersfield Cart Raceway was noted. Also, portions of the new Westside Parkway and an interchange (~155 acres) were added, two landfills were identified (~140 and 80 acres) and groundwater recharge ponds (~115 acres) were added.

**City of Shafter:** There was approximately 75 acres of new homes added throughout the City of Shafter, including the Gracie Collections (~15 acres) development and several other developments. California Paper Products (~25 acres) and LUFKIN Industries (~15 acres) were added as well as new buildings at International Water Screens (~10 acres). Solar facilities were added at the Delmart Cold Storage Facility making it predominately urban (~25 acres). Further, solar facilities were added behind Lerdo Prison (~10 acres), at the Premier Oil Field (~10 acres) and at PFG Customized Distribution (~5 acres). Finally, Veterans Park was expanded by approximately 10 acres.

**City of California City:** Approximately 15 acres of new homes were added as well as approximately 15 acres of new buildings and paved parking. Also, Autozone and Dollar General Market businesses (~5 acres) were added.

**City of Delano:** The Delano Marketplace shopping center featuring a Walmart and Ross (~35 acres) was added along with other paved parking lots (~15 acres). Also, approximately 10 acres of new homes were added as well as new solar (~5 acres) at the Delano Growers Grape Products facility.

**City of Ridgecrest:** Approximately 10 acres of new homes were added along with approximately 125 acres of housing due to the increased density of homes. China Lake Sierra Vista RV Park (~10 acres) was added as well as new buildings (~15 acres). Also, a solar facility (~60 acres) was noted.

**City of Tehachapi:** There were approximately 15 acres of new businesses added, including Dollar General Market, Dougan's Collision, Sheppard's Auto & Muffler, and Tehachapi Transmission. New solar at the California Institution at Tehachapi (~10 acres) was noted as well as other new buildings (~10 acres). Also, approximately 65 acres of

homes were added due to increased density.

**City of Wasco:** Approximately 40 acres of new homes were added, including Valley Rose Estates (~10) acres. New businesses and paved parking (~40 acres) were added, including a Chevron and a Dollar General Market.

**Antelope Valley area:** Approximately 1,540 acres of new solar facilities were added in the Antelope Valley, including Columbia 3 (~465 acres) and the Astoria Solar Project (~110 acres). Other unnamed solar conversions occurred on the Little Buttes (~20 and 70 acres), Soledad Mtn. (~270 acres) and Willow Springs (~490, 55, and 15 acres) quads. Also, two electrical substations were added, approximately 105 acres on the Fairmont Butte quad (along 170<sup>th</sup> Street) and approximately 85 acres on the Monolith quad (the Windhub substation).

**Other Conversions Throughout the County:** The Outlets at Tejon shopping center along with a new interchange (~70 acres) was added in Tejon Ranch. On Cache Peak, new solar panels (~35 acres) were added at the windmill farm. In Lost Hills, new solar panels (~10 acres) were added along with a new sports field (~10 acres). The Power Redwood Solar Facility was expanded by approximately 10 acres in Edison. In Kernville, the Kern Valley Airport was expanded and the runways paved making it qualify for urban (~25 acres). Lastly, in Oildale, the new Villa Alegre apartments and Fabulous Burgers (~10 acres) was added as well as buildings and solar panels (~15 acres) at TRB Oilfield Services.

**Conversions from Irrigated Farmland  
aside from urbanization**

Irrigated Farmland to Nonirrigated Land Uses

226 changes

The majority of these changes were due to irrigated farmland being fallow for three or more update cycles. Fallow farmland is mapped as Grazing Land in Kern County. These changes were primarily located in the San Joaquin and Antelope Valleys. These changes ranged in size from 10 acres to 1,100 acres. Approximately 110 of the changes were 30 acres or less, 35 changes ranged from 30-100 acres in size, and 39 changes were 100 acres or larger. The largest changes (500 acres or larger) occurred on the Buena Vista Lake Bed (~515 acres), Emigrant Hill (~ 505 acres), Little Buttes (~570 acres), Pentland (~670 and 1,100 acres), and Wasco NW (~635 acres) quads.

Other conversions were due to the identification of nonirrigated grain. Nonirrigated grain is mapped as Grazing Land in Kern County due to the lack of a Farmland of Local Importance definition. The conversions primarily occurred in the San Joaquin Valley. These changes ranged between 10 to 1,130 acres. The largest conversions (300 acres or larger) occurred on the Lost Hills (~300, 495 and 770 acres), Pentland (~310 acres), and Sawtooth Ridge (~1,130 acres) quads.

Irrigated Farmland to Other Land

113 changes

Oil extraction facility expansion, low-density housing (ranchettes), farmsteads, rural commercial, agricultural equipment storage areas, disturbed land and nonagricultural

vegetation accounted for the majority of the changes. These changes were scattered throughout the San Joaquin Valley portion of the county and were primarily between 10-30 acres in size. A few changes of note include: on the Antelope Plain quad approximately 460 acres of irrigated farmland was changed to Other Land due to an expansion of the Lost Hills Oil Field, the South Belridge Oil Field (~75 acres) was expanded on the Belridge quad, and approximately 60 acres was changed to confined animal agriculture due to an expansion of compost piles at a dairy on the Oildale quad.

### Conversions to Irrigated Farmland

Nonirrigated Land Uses and Other Land to Irrigated Farmland

168 changes

The majority of the irrigated farmland was added in the San Joaquin Valley. Most of the changes were 10-60 acres in size and consisted of orchards, row crops, grape vines, field crops and irrigated pasture. Some changes of note include the addition of orchards, most likely pistachios, (~1,235 acres) on the Richgrove quad. Also added were new carrots and almond orchards (~480 acres) on the Antelope Plain quad. Further, orchards, probably pistachios, (~355 and 215 acres) were added on the Inyokern quad. Finally, row crops, likely carrots, (~340 acres) were added on the Lost Hills quad and pistachio orchards (~320 acres) were an addition on the Conner SW quad.

### Unusual Changes

(Types of change not already described or special circumstances during the 2014 update.)

Nonirrigated Land Uses to Other Land: There were 530 conversions of nonirrigated land uses to Other Land. These changes were primarily due to expansion of oil extraction facilities, low-density housing (ranchettes), farmsteads, rural commercial, agricultural equipment storage areas, disturbed land and nonagricultural vegetation. These changes occurred throughout the county and were primarily 10-40 acres in size. The largest change occurred on the Tupman quad where approximately 165 acres was converted to Vacant and Disturbed Land due to an expansion of oil extraction facilities at the North Coles Levee Oil Field.

Other Land to Nonirrigated Land Uses: There were 47 conversions of Other Land to nonirrigated land uses. These changes were primarily due to the identification of nonirrigated grain. Nonirrigated grain is mapped as Grazing Land in Kern County due to the lack of a Farmland of Local Importance definition. One change of note occurred on the Buena Vista Lake Bed quad where approximately 600 acres of nonirrigated grain was identified.

Conversions from Urban Land: There were 43 conversions from Urban Land. Urban Land was converted to irrigated farmland, Other Land, and Grazing Land. There were 6 conversions to irrigated farmland, primarily due to new crops being grown on former, now defunct, urban land such as recharge ponds (~130 acres) on the Weed Patch quad and an abandoned golf course (~75 acres) on the Wasco SW quad. The conversions to Other Land and Grazing Land were primarily due to the abandonment or removal of infrastructure for three or more update cycles and occurred throughout the county. Some changes of note include: approximately 335 acres of housing removed at Edwards Air

Force Base and defunct golf courses on the Lamont (~110 acres), Mojave (~65 acres) and Stevens (~195 acres) quads. The remaining changes were due to improved digital imagery that allowed for the delineation of more distinct urban boundaries.

Conversions between Irrigated Farmland categories: There were 4 conversions between irrigated farmland categories. Three of these changes were due to irrigated farmland having been converted to nonirrigated orchards and a potted plant nursery. Nonirrigated orchards and potted plant nurseries are considered Unique Farmland regardless of the underlying soil. The other change was due to a potted plant nursery being converted to an irrigated orchard. These changes may result in conversions between Prime Farmland, Farmland of Statewide Importance, and Unique Farmland.

### **Areas of Concern for Future Updates**

(Locations or map categories noted as needing careful checking during 2016 update, and reasons.)

Watch for more solar facilities being built in the Antelope Valley and elsewhere in the county.

### **Definitions:**

**Irrigated Farmland** includes most irrigated crops grown in California. When combined with soil data, these farmed areas become the Important Farmland (IFL) categories of Prime Farmland, Farmland of Statewide Importance & Unique Farmland. Because of the nature of the IFL definitions, some irrigated uses, such as irrigated pastures or nurseries, may not be eligible for all three IFL categories.

**Nonirrigated land uses** include grazing areas, land used for dryland crop farming, and formerly irrigated land that has been left idle for three or more update cycles. These uses are frequently incorporated into county Farmland of Local Importance definitions.

**Other Land** includes a variety of miscellaneous uses, such as low density rural residential development, mining areas, vacant areas and nonagricultural vegetation. Confined animal agriculture facilities are mapped as Other Land unless incorporated into a county Farmland of Local Importance definition.

**Urban Land** includes residential, industrial, recreational, infrastructure and institutional uses.

For more on map categories, including Farmland of Local Importance definitions, visit the [FMMP web site](#).

**LABOR ESTIMATE:**

*Time estimates for conducting the 2014 update.*

Image interpretation, start date: July 20, 2015
Image interpretation, number of days: 26
Ground truth dates: December 7-11, 2015
Number of days for post-ground truth clean-up: 15

*Further information on the Farmland Mapping and Monitoring Program can be found at:*

<http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>