

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

**2016 FIELD REPORT**

**COUNTY:** Kern

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

**IMAGE DATA USED:**

Source: National Agriculture Imagery Program, USDA
Acquisition date: Summer 2016
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 2016 mapping.*

<b>Local Review Comments</b> (submitted by cities, counties, & others on 2014 maps)
City of Tehachapi Eastern Kern County RCD Arvin-Edison Water Storage District
<b>Personal Contacts</b>
None
<b>Websites Used for Reference</b>
Google Maps, Street View: <a href="http://maps.google.com">http://maps.google.com</a>
<b>GIS Data Used for Reference</b>
FRAP California City Boundary Layer (2016) Kern County Crop Data 2016 (from <a href="http://www.kernag.com/gis/gis-data.asp">http://www.kernag.com/gis/gis-data.asp</a> )

**2014-2016 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.](#)

<b>Conversions to Urban Land</b>	
<b>Irrigated Farmland to Urban Land</b>	<b>32 changes</b>
<p>These changes were primarily due to the construction of solar facilities, warehouses, commercial buildings, and homes.</p> <p>The addition of solar facilities encompassed 14 of the 32 changes, totaling approximately 2,200 acres of irrigated farmland. Additions of solar facilities were made in both the San Joaquin and Antelope Valleys. These additions included portions of the Redwood Cluster (~480 acres), Regulus (~460 acres), Lost Hills (~300 acres), Kingbird (~290 acres), Old River One (~190 acres), Antelope Valley Solar (~160 acres), Garland (~100 acres), and Wildwood (~80 acres) Solar Projects. Further, a few more additions of solar facilities (~40 acres) were made that were associated with dairies or water treatment facilities.</p> <p>Next, warehouses as well as commercial and industrial buildings contributed to the urbanization of irrigated farmland. In Shafter, the ATD warehouse (~50 acres), paved parking (~40 acres) at the Ross warehouse, and a Fed Ex warehouse (~20 acres) were notable conversions. Meanwhile, the Tasteful Selections facility (~50 acres) was added to the east of Lamont. Finally, a Derrel's Mini Storage (~20 acres) was added in Bakersfield and a new Walmart (~20 acres) was in evidence in Wasco.</p> <p>Lastly, irrigated farmland was converted to Urban Land in the form of new homes (~70 acres) in Bakersfield and the Horizon Elementary School (~20 acres) in McFarland.</p>	
<b>Nonirrigated Land Uses and Other Land to Urban Land</b>	<b>87 changes</b>
<p>These changes were primarily due to the construction of solar facilities and homes.</p> <p>The conversion of nonirrigated land due to the construction of solar facilities encompassed 24 of 87 changes, totaling approximately 4,600 acres of nonirrigated and Other Land. Additions of solar facilities were made in the San Joaquin, Antelope, and Fremont Valleys. These additions included portions of the Springbok 1 (~750 acres), FVPWB Project Site 1 (~640 acres), Astoria (~630 acres), Barren Ridge I (~450 acres), Garland (~300 acres), Rosamond (~220 acres), South Kern (~200 acres), Isis (~190 acres), Catalina 2 (~180 acres), Pioneer Green (~150 acres), Mojave West (~150 acres), Maricopa Sun (~140 acres), Astoria 3 (~130 acres), Morelos Del Sol (~130 acres), Valley Solar (~110 acres), Beacon (~100 acres), and Wildwood (~80 acres) Solar Projects.</p> <p>New home construction was another cause of the urbanization of nonirrigated and Other Land. Significant additions of new homes were seen in Bakersfield (~650 acres), Rosamond (~150 acres), Wasco (~30 acres), McFarland (~30 acres), and Arvin (~30 acres).</p> <p>Finally, the Riverlakes Galleria (~20 acres) and the Zephyr Lane Elementary School (15 acres) were notable additions in Bakersfield.</p>	

**Conversions from Irrigated Farmland  
aside from urbanization**

Irrigated Farmland to Nonirrigated Land Uses

112 changes

These conversions were primarily due to irrigated farmland having been fallow or used for dry grain production for three or more update cycles. The majority of these changes occurred in the San Joaquin and Antelope Valleys. Quads which showed the most conversion from irrigated to nonirrigated land use included the Lamont (8 changes), Sawtooth Ridge (7 changes), Wasco (7 changes), and Wasco SW (6 changes) quads.

Conversions varied in size, but the majority of changes were for less than 50 acres. Singular conversions from irrigated farmland for greater than 500 acres due to fallowing occurred on the Sawtooth Ridge (~700 acres) and Belridge (~500 acres) quads. Further, there were 14 conversions greater than 100 acres. These conversions took place on the Stevens (2 changes), Wasco NW (2 changes), Belridge (1 change), Blackwells Corner (1 change), Conner SW (1 change), Gosford (1 change), Little Buttes (1 change), Lost Hills NE (1 change), Pond (1 change), Sawtooth Ridge (1 change), Weed Patch (1 change) and Weldon (1 change) quads.

On the other hand, conversions were also made from irrigated farmland to a nonirrigated land use due to dry grain production for three or more update cycles. There were 16 of these types of conversions, totaling approximately 1,400 acres. In these cases, irrigated farmland was converted to Grazing Land since Kern County has no Farmland of Local Importance definition.

Irrigated Farmland to Other Land

20 changes

The majority of these changes were due to irrigated farmland having been fallow for three or more update cycles that was too small to be mapped as Grazing Land or was disturbed. Further changes in this category were due to the delineation of low-density housing (ranchettes), farmsteads, surface mining, electrical substation yards, and rural commercial uses.

The most notable conversion of this type occurred on the Neenach School quad where an area (~350 acres) had been fallow for three update cycles and was graded for the development of a solar facility.

**Conversions to Irrigated Farmland**

Nonirrigated Land Uses and Other Land to Irrigated Farmland

106 changes

Irrigated farmland was primarily added in the San Joaquin Valley area. The majority of these additions were for less than 50 acres and consisted of orchards, primarily almonds and pistachios, and row crops. Crop information detailed in this section was garnered from Kern County 2016 GIS Crop Data and by field visit.

The most notable addition of irrigated farmland this update occurred on the Quincy School quad near Locked Gate Gulch where approximately 790 acres of pistachio orchards were added. Meanwhile, tomatoes (~480 acres) were an addition on the Pentland Quad, in the Maricopa Flat area. Carrots, alfalfa, and grapes (~330 acres) were a significant addition on the East Elk Hills quad. Further, almonds (~210 acres) were

added on the Buena Vista Lake Bed quad, to the northeast of the Taft Federal Correctional Institution. Finally, pistachios (~160 acres) were a notable addition in the Indian Wells Valley, near Brown.

### Unusual Changes

(Types of change not already described or special circumstances during the 2016 update.)

Conversions from Urban Land: The most notable conversion from Urban land involved the removal of wastewater ponds (~500 acres) in the Missouri Triangle area. On the other hand, almonds replaced defunct golf courses nearby Arvin (~175 acres) and Wasco (~80 acres). The remaining changes were due to a lack of sufficient infrastructure and the use of improved digital imagery that allowed for the delineation of more distinct urban boundaries.

### Areas of Concern for Future Updates

(Locations or map categories noted as needing careful checking during 2018 update, and reasons.)

None

### 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 2016 update.*

Image interpretation, start date: March 28, 2017
Image interpretation, number of days: 22
Ground truth dates: June 12-16, 2017
Number of days for post-ground truth clean-up: 3

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

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