

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

2016 FIELD REPORT

COUNTY: Merced

FIELD MAPPER(S): Kerri 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.

Local Review Comments

(submitted by cities, counties, & others on 2014 maps)

None

Personal Contacts

None

Websites Used for Reference

Google Maps, Street View: <http://maps.google.com>

Grasslands Mitigation Bank: <http://www.wesmitigation.com/cabanks/grasslands-mitigation-bank/>

Merced County Agricultural Commissioner: <https://www.co.merced.ca.us/58/Agricultural-Commissioner>

Quinto Solar Project: <http://www.mortenson.com/solar/projects/quinto-solar>

Vega Merced Solar Power Plant: <https://www.industryabout.com/country-territories-3/1073-usa/solar-energy/25958-vega-merced-solar-power-plant>

GIS Data Used for Reference

California City Boundary Layer (2016)

Merced County Base Map (2016)

Merced County Digital Soil Survey (2016)

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.

Conversions to Urban Land	
Irrigated Farmland to Urban Land	29 changes
These changes were primarily due to the construction of new infrastructure in the form of solar facilities, water storage ponds, and improvements to Highway 99. Also, businesses were expanded and new homes were built.	
<p><u>City of Atwater</u>: There were three new solar facilities (approximately 10 acres each) added in the City of Atwater. Approximately 10 acres of new homes were added as well as some new buildings (~5 acres). Also, approximately 55 acres of improvements to interchanges along Highway 99 were noted.</p>	
<p><u>City of Livingston</u>: Improvements to Highway 99 and an interchange involved approximately 20 acres this update. Also, two businesses added water control ponds (~10 and 5 acres).</p>	
<p><u>City of Los Baños</u>: The Vega Merced Solar Power Plant (~180 acres) was added south of the city along Woo Road. Also, Liberty Packing was expanded by approximately 20 acres.</p>	
<p><u>City of Merced</u>: New solar facilities were added along Vassar Road (~35 acres).</p>	
<p><u>Community of Santa Nella</u>: Part of the Quinto Solar Project (~350 acres total among 5 areas of solar panels) was added west of Interstate 5 along McCabe Road.</p>	
<p><u>Other Conversions Throughout the County</u>: In the Community of Dos Palos Y, a new solar facility (~15 acres) and new homes (~10 acres) were added. New homes (~5 acres) and new buildings (~5 acres) were added in Gustine. Hilmar added approximately 20 acres of water control ponds. Three areas of water control ponds (~10, 10 and 5 acres) were added near Le Grand. Lastly, approximately 25 acres of water control ponds were added in Planada.</p>	
Nonirrigated Land Uses and Other Land to Urban Land	
45 changes	
These changes were primarily due to the construction of homes, buildings, infrastructure, and solar facilities.	

City of Atwater: There were approximately 145 acres of new homes added throughout the City of Atwater, including the Silva Meadows (~25 acres), Meadow View (~20 acres), Claremont (~20 acres), and Fáilte Meadows (~15 acres) developments. Further developments included four water storage pond areas (~30, 10, 10, and 10 acres).

City of Livingston: The Livingston Commons shopping center featuring a Rancho San Miguel Market and CVS (~15 acres) was added. Approximately 10 acres of new homes were added, as well. Also, some new buildings and solar panels were added at a packing facility (~15 acres).

City of Los Baños: There were approximately 70 acres of new homes added throughout the City of Los Baños, including the Capistrano (~25 acres), Davis Park (~20 acres) and Southbrook (~20 acres) developments. The Creekside Junior High School (~10 acres) was added along with a new solar facility (~10 acres). Also, the expansion of infrastructure at an almond hulling plant (~20 acres) and at the Dos Amigos pumping plant (~10 acres) was noted. Finally, a new water storage pond (~15 acres) was added as well as the expansion of the Billy Wright Landfill (~5 acres).

City of Merced: New homes were added at Bellevue Ranch (~30 acres) and Rosetta Creek (~10 acres) in the City of Merced. Also, there were new buildings (~10 acres) as well as a newly improved interchange (~15 acres) along Highway 99.

Community of Santa Nella: Part of the Quinto Solar Project (~200 acres total among 2 areas of solar panels) was added west of Interstate 5 along McCabe Road.

Other Conversions Throughout the County: In Delhi, there were new buildings added (~10 acres) as well as expansion at a nearby truck stop (~5 acres) and expansion of a compost facility (~10 acres). Three areas of new homes (~5 acres each) were added in Dos Palos. Ingomar Packing added new solar panels (~10 acres) in Ingomar. Near Le Grand, six water storage ponds were shifted to Urban Land due to their permanent status (~10, 15, 20, 25, 30 and 40 acres).

Conversions from Irrigated Farmland aside from urbanization	
Irrigated Farmland to Nonirrigated Land Uses	143 changes
The majority of these changes were due to irrigated farmland having been fallow for three or more update cycles. Fallow farmland is mapped as Farmland of Local Importance in Merced County. These conversions were primarily located on the west side of the San Joaquin Valley. These changes ranged in size from 10 acres to 275 acres. The largest changes (100 acres or larger) occurred on the Howard Ranch (~275 acres), Delta Ranch (~ 200 acres), San Luis Dam (~190 acres), and Santa Rita Bridge (~145 acres) quads.	

Other conversions were due to the identification of nonirrigated grain. Nonirrigated grain is also mapped as Farmland of Local Importance in Merced County. These conversions primarily occurred in the San Joaquin Valley. These changes ranged between 10 to 145 acres in size. The largest conversions (75 acres or larger) occurred on the Sandy Mush (~75 acres), Howard Ranch (~85 and 145 acres), and Arena (~100 acres) quads.

Further conversions were due to the identification of irrigated pasture on poor soils. Irrigated pastures that occur on poor soils are mapped as Farmland of Local Importance in Merced County. There were 7 conversions of this type and the majority were less than 30 acres. One change of note occurred on the San Luis Ranch quad where an approximately 85-acre area was identified as irrigated pasture.

Irrigated Farmland to Other Land	121 changes
<p>Low-density housing (ranchettes), expansions of confined livestock facilities, farmsteads, rural commercial, agricultural equipment storage areas, improvements to Highway 99, disturbed land and nonagricultural vegetation accounted for the majority of the changes. These changes were scattered throughout the county and were primarily between 10-30 acres in size. A few changes of note include: on the Merced quad approximately 770 acres of irrigated farmland was changed to Other Land due to improvements to Highway 99, Minturn Hulling (~50 acres) was expanded on the Plainsburg quad, and two expansions of active mining (~40 and 30 acres) occurred on the Winton quad.</p>	
Conversions to Irrigated Farmland	
Nonirrigated Land Uses and Other Land to Irrigated Farmland	183 changes
<p>The majority of the irrigated farmland was added on the eastern side of the San Joaquin Valley. Most of the changes were 10-60 acres in size and consisted of orchards, field crops, row crops, grape vines, and irrigated pasture. Some changes of note include the addition of orchards, most likely almonds (~600, 400, 265 and 105 acres) on the Yosemite Lake quad. Also added were grapevines (~370, 180 and 175 acres) and almond orchards (~190 and 165 acres) on the Winton quad. Further, orchards, probably almonds and pistachios (~185, 170, 145 and 110 acres), were added on the Planada quad. Additionally, row crops were added on the Ingomar (~225 acres) and Sandy Mush (~175 acres) quads. Finally, almond orchards (~185 acres) were an addition on the Atwater quad and a field of corn (~175 acres) was added on the El Nido quad.</p>	
Unusual Changes	
<p>(Types of change not already described or special circumstances during the 2016 update.)</p>	
<p><u>Nonirrigated Land Uses to Other Land:</u> There were 122 conversions of nonirrigated land uses to Other Land. These changes were primarily due to low-density housing (ranchettes), farmsteads, rural commercial, agricultural equipment storage areas, mining</p>	

and disturbed land, expansions to confined livestock facilities, and nonagricultural vegetation. These changes occurred throughout the county and were primarily 10-40 acres in size. The largest change occurred on the Ingomar quad where approximately 150 acres was converted to Nonagricultural and Natural Vegetation due to an expansion of wetlands nearby the Kerry Duck Club.

Grazing Land to Farmland of Local Importance: There were 19 conversions of Grazing Land to Farmland of Local Importance. These changes were primarily due to the identification of nonirrigated grain. Nonirrigated grain is mapped as Farmland of Local Importance in Merced County. Two changes of note occurred on the Ingomar (~245 acres) and Merced (~250 acres) quads where nonirrigated grain was identified.

Conversions from Urban Land: There were 40 conversions from Urban Land. Urban Land was converted to irrigated farmland, Farmland of Local Importance, Other Land, and Grazing Land. There were 9 conversions to irrigated farmland and Farmland of Local Importance, primarily due to new crops being grown on former, now defunct, urban land such as recharge ponds or empty lots. 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 160 acres of water ponds that were identified as Namakan West Fisheries and changed to Confined Animal Agriculture on the Ingomar quad and the remainder of the defunct golf course at U.C. Merced that hasn't been converted to another urban use (~110 acres) was changed to Vacant or Disturbed Land on the Merced quad. The remaining changes were due to improved digital imagery that allowed for the delineation of more distinct urban boundaries.

Conversions to Water: There were 3 conversions of Water to Other Land. These changes were due to the continued lack of water for four update cycles at Big Water Lake (~95 acres) on the Los Baños quad, Buttonwillow Lakes (~25 acres) on the San Luis Ranch quad, and a former lake (~30 acres) nearby Volta on the Volta quad.

Conversions between Irrigated Farmland categories: There were 2 conversions between irrigated farmland categories. 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. Both of these changes occurred on the Howard Ranch quad and converted a total of 72 acres of Prime Farmland to Unique Farmland. Other changes are due to soil unit changes from the incorporation of the statewide gridded soil survey and resulted 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 2018 update, and reasons.)

Watch for more solar facilities being built west of Interstate 5 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 2016 update.

Image interpretation, start date: August 10, 2017

Image interpretation, number of days: 20
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Ground truth dates: September 11-15, 2017

Number of days for post-ground truth clean-up: 25

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

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