

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

2010 FIELD REPORT

COUNTY: Kings

FIELD MAPPER(S): Kerri Kisko

IMAGE DATA USED:

Source	National Agriculture Imagery Program, USDA
Acquisition date	Summer 2010
Data description	True color mosaic, 1 meter resolution
Coverage gaps	None
Additional imagery used	National Agriculture Imagery Program, USDA; summer 2009

WRITTEN, DIGITAL & ORAL INFORMATION SOURCES:

The following entities and individuals provided information used to conduct 2010 mapping.

Local Review Comments

(submitted by cities, counties, & others on 2008 maps)

None.

Personal Contacts

Rick Besecker, Dudley Ridge Water District: (559) 449-2700; rbesecker@ppeng.com

Steve Couture, Couture Farms: cfhuron@aol.com

Mark Gilkey, Tulare Lake Basin Water Storage District: (559) 992-4127; mgilkey@tlbwsd.com

Steve Schweizer, Kings County Department of Agriculture/Measurement Standards: (559) 582-3211; Steve.Schweizer@co.kings.ca.us

Websites Used for Reference

College of the Sequoias: <http://www.cos.edu/Pages/default.aspx>

County of Kings: <http://www.countyofkings.com/>

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

West Hills College Campus Map:

<http://www.westhillscollge.com/lemoore/about/facilities/maps/documents/WHCLMap2009.pdf>

GIS Data Used for Reference

Bureau of Reclamation Water District Data (2001)

California City Boundary Layer

Kings County Base Map

Kings County Digital Soil Surveys

Kings County Water Control Structure Data (2008)

2008-2010 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	17 changes
<p>These changes were primarily due to the construction of homes, schools, buildings, and water control structures.</p> <p><u>City of Hanford:</u> There was approximately 45 acres of new homes added throughout the City of Hanford, including the Independence solar development and part of the Vineyards development. New schools were also added, such as Sierra Pacific High School (~40 acres) and the new Hanford campus of the College of the Sequoias (~65 acres). Also, new buildings (~5 acres) were added along Glendale Avenue.</p> <p><u>City of Avenal:</u> There were approximately five acres of new homes added as well as a sports field (~5 acres).</p> <p><u>City of Corcoran:</u> A paved lot used for crate storage at the J.G. Boswell tomato processing facility (~20 acres) was added along with approximately 5 acres of homes.</p> <p><u>City of Lemoore:</u> The Sunflower Fields Cemetery (~5 acres) was added.</p> <p><u>Community of Armona:</u> Approximately five acres of new buildings were added.</p> <p><u>Water Control Structures:</u> There were two additions of large water control structures in the Tulare Lake Bed area. These ponds were noted during the field verification process on irrigated farmland that had been fallow for three update cycles.</p> <ul style="list-style-type: none"> • Dudley Ridge Water District: on the Los Viejos quad, a landowner installed berms to encompass approximately 470 acres of land to use as water storage. • Tulare Lake Drainage District: approximately 325 acres of evaporation ponds were noted on the Guernsey quad along Nevada Avenue. 	
Nonirrigated Land Uses and Other Land to Urban Land	21 changes
<p>These changes were primarily due to new homes, commercial buildings, municipal facilities, churches, and water control structures.</p> <p><u>City of Hanford:</u> The other part of the Vineyards housing development (~15 acres) was added. A new shopping center (~20 acres) including Lowe's, Wendy's and a carwash was noted as well as other new buildings (~10 acres). The Adventist Medical Center (~10 acres) was added nearby. Also, the Koinonia Christian Fellowship church (~10 acres) was added.</p> <p><u>City of Avenal:</u> The City of Avenal Sports Complex (~25 acres) was added as well as approximately five acres of new buildings. Also, the Avenal Regional Landfill was expanded by approximately 35 acres.</p>	

City of Corcoran: The J.G. Boswell tomato processing plant (~15 acres) was upgraded to urban due to the new pavement and other infrastructure present. Also, approximately five acres of new apartments were added.

City of Lemoore: Approximately 20 acres of new homes were added along with the new Church of the Nazarene (~5 acres) and an expansion of the West Hills College (~15 acres).

Water Control Structures: There were two additions of large water control structures in the Tulare Lake Bed area. These ponds were noted during the field verification process on land that had been used for water storage for three update cycles.

- Dudley Ridge Water District: on the West Camp quad, a landowner installed berms to encompass approximately 420 acres of land to use as water storage.
- Tulare Lake Basin Water Storage District: approximately 1,870 acres of water storage ponds were noted on the Lone Tree Well quad along the Liberty Canal.

Conversions from Irrigated Farmland aside from urbanization

Irrigated Farmland to Nonirrigated Land Uses	137 changes
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The majority of these changes were due to irrigated farmland being fallow for three or more update cycles. These changes were primarily located in the San Joaquin Valley. Other changes occurred along the Kettleman Plain and in Sunflower Valley. These changes ranged in size from 10 acres to 2,750 acres. Approximately 55 of the changes were 30 acres or less, 25 changes ranged from 30-100 acres in size, and 23 changes were 100 acres or larger. The largest changes (500 acres or larger) occurred on the Avenal Gap (~1,010 acres), Dudley Ridge (~945 and 2,750 acres), Los Viejos (~830 acres), Pyramid Hills (~ 1,110 and 2,045 acres), Westhaven (~500 acres), and West Camp (~635 and 1,375 acres) quads.

Other conversions were due to the identification of nonirrigated grain. Nonirrigated grain is mapped as Grazing Land in Kings County. These changes primarily occurred in the western valleys and foothills of the county. Most of these changes were greater than 50 acres. The largest conversions occurred on the Avenal (~105 acres), Garza Peak (~235 acres), Kettleman City (~945 acres), and Pyramid Hills (~930 acres) quads.

Further conversions were due to the identification of confined livestock. Confined livestock in the form of dairies, feedlots, and poultry facilities are part of the Farmland of Local Importance definition in Kings County. Most of these conversions were due to small expansions (between 10-30 acres) of existing dairies. A few changes of note include new dairies on the Guernsey (~235 acres), and Waukena (~160 and 170 acres) quads.

Irrigated Farmland to Other Land	29 changes
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Low-density housing (ranchettes), farmsteads, rural commercial, agricultural equipment storage areas and disturbed land accounted for the majority of the changes. These changes were scattered throughout the San Joaquin Valley portion of the county and were

primarily between 10-45 acres in size. One change of note occurred on the Corcoran quad where approximately 45 acres of irrigated farmland was changed to Other Land due to the J.G. Boswell tomato processing facility adding a fenced gravel lot used for storing the tomato hauling trucks and other equipment.

Conversions to Irrigated Farmland

Nonirrigated Land Uses and Other Land to Irrigated Farmland | 54 changes

The majority of the irrigated farmland was added in the San Joaquin Valley and the Kettleman Plain. Most of the changes were 10-50 acres in size and consisted of row crops, field crops, orchards, and irrigated pasture. Some changes of note included the addition of row crops (~125, 480, and 1,430 acres) on the Guernsey quad, carrots (~155 acres) on the Kettleman Plain quad, row crops (~120 acres) on the Stratford quad, and row crops (~560 acres) on the Westhaven quad.

Unusual Changes

(Types of change not already described or special circumstances during the 2010 update.)

Conversion from Urban Land: There was one conversion from Urban Land. In the City of Hanford, an area of irrigated farmland (~55 acres) was noted on a formerly vacant lot next to the wastewater treatment plant along 11th Avenue.

Conversions between Irrigated Farmland categories: There were 2 conversions between irrigated farmland categories. These changes were due to an area of irrigated farmland being converted to a potted plant nursery (~15 acres) and a nonirrigated orchard being converted to an irrigated orchard (~30 acres). Potted plant nurseries and nonirrigated orchards are considered Unique Farmland regardless of the underlying soil. These changes may result in conversions between Prime Farmland, Farmland of Statewide Importance, and Unique Farmland.

Water Control Structures: There were 4 conversions to Urban Land due to field and/or personal contact verified water control structures. These changes accounted for approximately 3,100 total acres of conversion to Urban Land. Please see the above categories of **Irrigated Farmland to Urban Land** and **Nonirrigated Land Uses and Other Land to Urban Land** for more detail on specific changes. FMMP maintains a separate data layer of water control facilities which is available for user adjustments.

Areas of Concern for Future Updates

(Locations or map categories noted as needing careful checking during 2012 update, and reasons.)

There are large areas of the Kettleman Plain and Sunflower Valley that are due to be converted to Grazing Land next update if the areas continue to be fallow or used to grow nonirrigated grain. Careful field verification of these areas may be required.

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 2010 update.

Image interpretation, start date	May 17, 2011
Image interpretation, number of days	11
Ground truth dates	June 27-30, 2011
Number of days for post-ground truth clean up	9

Further information on the Farmland Mapping and Monitoring Program can be found at:
<http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>