California Department of Conservation
FARMLAND MAPPING AND MONITORING PROGRAM

2012 FIELD REPORT

COUNTY: Kings

FIELD MAPPER(S): Patrick Hennessy

IMAGE DATA USED:

Source	National Agriculture Imagery Program, USDA
Acquisition date	Summer 2012
Data description	True color mosaic, 1 meter resolution
Coverage gaps	None
Additional imagery used	Google Streetview

WRITTEN, DIGITAL & ORAL INFORMATION SOURCES:
The following entities and individuals provided information used to conduct 2012 mapping.

Local Review Comments (submitted by cities, counties, & others on 2010 maps)
Dudley Ridge Water District
Personal Contacts
None.
Websites Used for Reference
Various sites regarding solar facilities and High Speed Rail development proposals.
GIS Data Used for Reference

2010-2012 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	11 changes
Conversions to Urban from Irrigated Farmland were not very common with one exception. The Avenal Solar Facility was responsible for 360 acres of new Urban. The remaining ten changes were all less than 15 acres each, consisting mostly of new homes.	
Nonirrigated Land Uses and Other Land to Urban Land	20 changes
Again, not a high number of changes, with one exception. The Kansas South solar project was responsible for approximately 200 acres of new Urban just south of the city of Lemoore, not far from Highway 41. The remaining changes were less than 40 acres each	

and consist of new homes, industrial expansion, new Fedex buildings (25 acres) and religious structures for Kings Ranch Ministries (11 acres) and Koinonia Christian Fellowship (7 acres).

Conversions from Irrigated Farmland **aside urbanization**	
Irrigated Farmland to Nonirrigated Land Uses	135 changes

Conversions from Irrigated Farmland to Nonirrigated Land Uses are the most significant changes in Kings County this update. There were eight changes that exceed one thousand acres. The largest is 2,742 acres in the Kettleman Plain where Highways 41 and 33 intersect that was field checked and confirmed as non-irrigated grains. Along the Liberty Farms South Canal, there were two large changes that were not accessible from a public street, one is 2,390 acres and the other is 1,672 acres. Near the Pyramid Hills in the Sunflower Valley, 2,305 acres were field verified as non-irrigated grains. In the Tulare Lakebed, one change of 1,914 acres was along Racine Avenue, and along Tehama Avenue there were 1,913 acres converted. Near Avenal, 1,198 acres were changed to non-irrigated grains on the west side of Highway 33. Directly south and adjacent to the Avenal Solar Facility, 1,279 acres were field verified as non-irrigated grains. There are more changes that are hundreds of acres, changed for similar reasons, throughout the county.

Irrigated Farmland to Other Land	72 changes

There is a significant quantity of this type of change, but only three were larger than fifty acres. The largest is 212 acres due to a heavy equipment yard southeast of Kettleman City. Many of the small changes went fallow for three or more updates, but were too small to be mapped as Grazing Land. These areas were adjacent to Other Land and therefore went to that classification.

Conversions to Irrigated Farmland	
Nonirrigated Land Uses and Other Land to Irrigated Farmland	32 changes

Most of the changes of this type were small additions to existing orchards and other agriculture, with two notable exceptions. Over 600 acres of new agriculture was mapped near Highway 41 and Omaha Avenue, on the east side of the Blakeley Canal. South of the Rancheria Santa Rosa, nearly 315 acres of alfalfa was confirmed with Google streetview imagery dated January 2012.

Unusual Changes
(Types of change not already described or special circumstances during the 2012 update.)

There are two changes from Urban and Built Up Land to Other Land. One is 52 acres that was tracked for three update cycles for a lack of structures. The other change is 32 acres for a borrow pit that was field verified. This pit was likely misinterpreted as a water control structure in the past.

Areas of Concern for Future Updates
(Locations or map categories noted as needing careful checking during 2014 update, and reasons.)

There are approximately 18,000 acres of irrigated farmland that are noted as fallow or non-irrigated grains for two cycles during the 2012 update. In theory, this amount could go out of production in the 2014 data. Of greater concern is the 68,000 acres that were noted as

fallow or non-irrigated grains for one cycle during the 2012 update. This is obviously a significant increase and something to watch in future updates.

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 2012 update.

Image interpretation, start date	August 19, 2013
Image interpretation, number of days	18
Ground truth dates	September 23-27, 2013
Number of days for post-ground truth clean up	7

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