California Department of Conservation FARMLAND MAPPING AND MONITORING PROGRAM

2012 FIELD REPORT

COUNTY: Kern

FIELD MAPPER(S): Troy Dick

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: None

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)

None

Personal Contacts

None

Websites Used for Reference

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

GIS Data Used for Reference

California City Boundary Layer

Kern County Base Map

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

14 changes

The majority of these changes occurred in or adjacent to the City of Bakersfield, the rural southern part of Kern County, and in the City of Shafter. The largest conversions occurred in or adjacent to the City of Bakersfield where a total of approximately 350 acres were converted for recharge ponds for the Strand Ranch Project, North Point Estates, other new homes and businesses. Meanwhile in the rural southern part of Kern County on the Fairmont Butte quad approximately 160 acres was converted for groundwater recharge ponds. Furthermore in the City of Shafter approximately 60 acres was converted for a Bakers Hughes building, Mi Swaco, and other new buildings.

Nonirrigated Land Uses and Other Land to Urban Land

82 changes

The majority of the urbanization this update was due to the expansion of urban development in or adjacent to the City of Bakersfield and the town of Bear Valley Springs. The largest conversions occurred in or adjacent to the City of Bakersfield, where approximately 710 acres was added for new water control ponds, water recharge ponds, parking lot for and additions to the Bakersfield Sports Village Soccer Complex, Legacy homes, Horizons, Halliburton Warehouse, Village Green neighborhood, Polo Community Park, City in the Hills Park, Grey Stone Park, and other new homes. In the town of Bear Valley Springs approximately 160 acres was added for a new sports park, in addition to the use of high resolution (1 meter) imagery to delineate existing homes.

Conversions from Irrigated Farmland aside from urbanization	
Irrigated Farmland to Nonirrigated Land Uses	202 changes

There were three primary reasons for the conversion of irrigated farmland to nonirrigated uses:

First, the majority of these changes were due to plots of irrigated land having been fallow for three or more update cycles. County wide approximately 16,470 acres went out of production. Most of the changes in this category occurred on the Lost Hills NW quad with approximately 3,180 acres going out of production. This was followed by the Semitropic and Lost Hills quads with approximately 1,280 and 1,000 acres, respectively, going out of production.

Second, areas of irrigated farmland were identified that were no longer being irrigated but, instead, were being used for the cultivation of nonirrigated grain crops. These areas had not been irrigated for multiple update cycles. The largest changes due to nonirrigated grain production occurred on the Pyramid Hills quad (1,230 acres) followed by the Antelope Plain quad (360 acres).

Third, areas of irrigated farmland were identified that are no longer being irrigated but, instead are being used for Confined Livestock. These areas had not been irrigated for three or more update cycles. The largest changes occurred on the Conner quad where approximately 60 acres converted to Confined Livestock. This was followed by the Millux quad with approximately 20 acres converting to Confined Livestock.

Irrigated Farmland to Other Land

47 changes

A majority of these conversions were due to a combination of irrigated farmland having been fallow for three or more update cycles which has been graded for development, or were too small to be mapped as nonirrigated land uses, as well as areas of vacant or disturbed land, or natural vegetation. The use of high resolution (1 meter) imagery assisted in delineating areas of rural residential land, and low-density commercial areas throughout the county. The majority of these conversions happened on the Semitropic quad with approximately 570 acres converting to natural vegetation for wetlands. This was followed by the Gosford quad with approximately 440 acres converting to vacant or disturbed land for plots of irrigated farmland having been fallow for three or more update cycles which has been graded for development.

Conversions to Irrigated Farmland

Nonirrigated Land Uses and Other Land to Irrigated Farmland

117 changes

This update a total of approximately 6,910 acres was converted to irrigated farmland. The most notable addition of irrigated farmland occurred on the Allensworth quad with a total of approximately 720 acres being converted to irrigated farmland for row crops. This was followed by the Hacienda Ranch and Wasco NW quads with approximately 700 and 520 acres, respectively, converting to irrigated farmland.

Unusual Changes

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

<u>Conversion between Irrigated Farmland categories:</u> There were 3 conversions between irrigated farmland categories. These changes were due to either irrigated pasture being replaced by irrigated crops or irrigated crops being replaced by irrigated pasture. These changes may result in conversions between Unique Farmland and Grazing Land.

Other Land to Grazing Land: There were 8 conversion of Other Land to Grazing Land. These changes were due to the identification of nonirrigated grain. Nonirrigated grain is mapped as Grazing Land in Kern County since there is no Farmland of Local Importance. The most notable addition of nonirrigated grain occurred on the Avenal Gap quad with a total of approximately 2,630 being converted to Grazing Land.

<u>Grazing Land to nonirrigated grain:</u> There were 11 conversions of Grazing Land to nonirrigated grain. County wide approximately 1,830 acres went from Grazing Land to nonirrigated grain, however, due to there not being a Farmland of Local Importance category in Kern County these conversions will not affect the statistics.

<u>Conversions from Urban Land:</u> There were 20 conversions from Urban Land. Urban Land was converted to irrigated farmland, Other Land, and Grazing Land due to 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 2014 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 2012 update.

Image interpretation, start date: November 22, 2013

Image interpretation, number of days: 21

Ground truth dates: March 10 - 14, 2014

Number of days for post-ground truth clean-up: 6

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