

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

**2010 FIELD REPORT**

**COUNTY:** Contra Costa

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

**IMAGE DATA USED:**

Source	National Agricultural Imagery Program, USDA
Acquisition date	Summer 2009
Data description	True color mosaic, 1 meter resolution
Coverage gaps	none
Additional imagery used	Landsat 2010

**WRITTEN, DIGITAL & ORAL INFORMATION SOURCES:**

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

<b>Local Review Comments</b> (submitted by cities, counties, & others on 2008 maps)
Cities of Oakley and Antioch
<b>Personal Contacts</b>
None
<b>Websites Used for Reference</b>
The Delta Wetlands Project: <a href="http://www.deltawetlands.com/index.html">http://www.deltawetlands.com/index.html</a>
<b>GIS Data Used for Reference</b>
California City Boundary Layer Contra Costa County Base Map

**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.*

<b>Conversions to Urban Land</b>	
Irrigated Farmland to Urban Land	5 changes
<p>The largest conversions from irrigated farmland to Urban Land occurred in Oakley where the Diamond Hill Sports Club (~20 acres) and adjacent homes (~15 acres) were added along with new homes (~20 acres) in the Magnolia Park development. Approximately 10 acres of new homes were also added in Brentwood. In Antioch, a new Markstein Sales Company building (~15 acres) was a notable addition. Finally, the Old River Elementary School (~20 acres) was added nearby Discovery Bay.</p>	

Nonirrigated Land Uses and Other Land to Urban Land	34 changes
<p>These conversions were primarily due to new homes, commercial developments, and schools.</p> <p><u>City of San Ramon:</u> Approximately 180 acres of new homes were added, with half of those acres added in the Windemere development. The Gale Ranch Middle School (~25 acres) was a further addition.</p> <p><u>City of Oakley:</u> Approximately 90 acres of new homes, including additions to the Live Oak Ranch and Summer Lake developments, were added as well as a new church (~10 acres).</p> <p><u>City of Brentwood:</u> Commercial development accounted for the majority of the urbanization with approximately 50 acres for the Streets of Brentwood mall along with another new shopping center (~15 acres). New home construction urbanized another approximately 30 acres.</p> <p><u>City of Pittsburg:</u> New homes (~20) and the San Marcos Villas apartments (~25 acres) were added along with the new Rancho Medanos Jr High School (~25 acres).</p> <p><u>Town of Danville :</u> Approximately 50 acres of new homes were added. The Creekside Elementary School (~10 acres) and the Mustang Soccer Complex (~10 acres) were further additions.</p> <p><u>City of Antioch:</u> Approximately 40 acres of new homes were seen as well as the Dozier-Libbey Medical High School (~10 acres).</p> <p><u>City of Richmond:</u> New homes were added (~10 acres).</p>	
<b>Conversions from Irrigated Farmland aside from urbanization</b>	
Irrigated Farmland to Nonirrigated Land Uses	45 changes
<p>These conversions were primarily due to plots of irrigated farmland having been fallow for three or more update cycles. There was a notable concentration of these changes on the Brentwood quad (35 changes) where approximately 950 acres of conversion from irrigated farmland took place.</p>	
Irrigated Farmland to Other Land	8 changes
<p>The majority of these changes were due to the use of high resolution imagery to delineate areas of low-density housing, such as groups of farmsteads or ranchettes, with 6 of these changes occurring on the Brentwood quad.</p>	
<b>Conversions to Irrigated Farmland</b>	
Nonirrigated Land Uses and Other Land to Irrigated Farmland	25 changes
<p>Conversions to irrigated farmland were primarily between 10 and 50 acres and involved the addition of row and field crops along with some orchards (such as alfalfa and olive orchards), primarily in the eastern portion of the county. Seventeen of the 25 additions of irrigated crops were made on the Brentwood quad, totaling approximately 380 acres. A couple of additions of irrigated pasture (~100 acres) were also made on Veale Tract and to the south of Byron. Finally, the largest conversions occurred on Webb Tract where approximately 400 acres of irrigated farmland, likely corn, was delineated.</p>	
<b>Unusual Changes</b>	

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

**Grazing land to nonirrigated grain:** Five areas of nonirrigated grain production were delineated, totaling approximately 1,700 acres, with the largest addition to the south of Antioch (~1,300 acres). These areas will show up on the Important Farmland Map as Farmland of Local Importance, however, some proportion of the land may have already been mapped as Farmland of Local Importance based on other factors within the County's definition.

**Grazing Land to Other Land:** The Delta Coves project site (~300 acres) on Bethel Island was shifted from Grazing Land to Other Land since the land is disturbed, no structures have been built, and the project is on hold.

**Conversions from Urban and Built-up Land:** Conversions from Urban and Built Up Land were due to the use of detailed digital imagery to delineate more distinct urban boundaries.

#### **Areas of Concern for Future Updates**

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

#### **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	September 27, 2010
Image interpretation, number of days	8
Ground truth dates	November 2-4, 2010
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>