California Department of Conservation Farmland Mapping and Monitoring Program

2004 FIELD REPORT

COUNTY: Fresno

FIELD MAPPER(S): Michael Kisko

IMAGERY:

source: National Agricultural Imagery Program (NAIP)

date: summer 2004 scale: 2 meter film type: true color coverage gaps: none

additional imagery: NASA color infrared imagery

WRITTEN, DIGITAL & ORAL INFORMATION SOURCES: Please list which local governments, interest groups, or individuals submitted comments on the 2002 maps. Also list all phone and in-person contacts made or related GIS data referenced while conducting the 2004 update.

> local review comments - none

cities: county: others:

- > personal contacts: Thad Bettner with Westlands Water District; Staff at the Fresno County Department of Agriculture
- > websites:

Westlands Water District: http://www.westlandswater.org/wwd/default2.asp?cwide=1024
Fresno County Ag. Commissioner: http://www.co.fresno.ca.us/4010/agwelcm.htm

➢ GIS data referenced:

Westlands Nonirrigated Lands: WWDNonIrrLands_albers

Federal refuge/wildlife areas: joint_venture.shp

2002-2004 CHANGES*: Please summarize the most common changes to the maps. List representative locations (quads) of each type of change encountered. Make sure to list and describe particularly large, unusual or notable changes and give estimates of the acreage involved.

> Irrigated Farmland to Urban Land: 64 changes

The overwhelming majority of conversions from irrigated farmland to urban land were due to new home construction, along with additions of schools and shopping centers.

The largest number of conversions took place on the Clovis quad where there were 18 conversions totaling approximately 1,000 acres. The two largest additions of new homes this update both occurred in the Fresno-Clovis area nearby Teague Avenue where large areas of new homes including the "European Quarter, Kings Crossing, Alta Sierra, and Historic Wawona Ranch" home developments were added (~400 acres total). The nearby "Depot" shopping center with a Save Mart supermarket accounted for the conversion of approximately 20 acres. Next, on the eastern edge of Clovis along Bullard, Shaw, and Gettysburg Avenues, four more additions of new homes including the "Fallbrook" and "Hampton Renaissance" developments were added (~200 acres total). In northwestern Fresno, the adjacent "River Bluff Elementary" and "Rio Vista Middle School" (~45 acres) were new additions. A final, notable conversion made in the Fresno-Clovis area was the addition of the new Save Mart Center at Fresno State and its associated parking lots that accounted for the conversion of approximately 40 acres of irrigated farmland.

Although the Fresno-Clovis area experienced the largest conversions of irrigated farmland in Fresno County, significant conversions of irrigated farmland were also made in smaller cities throughout the county. For example, three additions of new homes, including the "Cobblestone Creek" and "Capistrano" home developments along with the new "Liberty Intermediate School" (~120 acres total) were added along the urban fringe of the City of Kerman. In the City of Fowler, approximately 30 acres of new homes were also in evidence. The City of Sanger exhibited new homes in two areas, totaling approximately 45 acres, including the "Mountain View" development. In the City of Selma, three additions of new homes accounted for the conversion of approximately 100 acres of irrigated farmland. The City of Kingsburg had four additions of new homes totaling approximately 60 acres along its fringe. Two additions of new homes (~40 acres) were also made in the City of Reedley.

Lastly, two notable conversions that occurred away from the city areas were the new Coalinga State Hospital (~175 acres) outside Coalinga and the new Southwest Education Support Service Center (~25 acres) added along Highway 41 on the Riverdale quad.

➤ Local, Grazing or Other Land to Urban Land: 75 changes

Conversions in this category were, once again, due primarily to the construction of new homes with many of the conversions taking place in the Fresno-Clovis area. A notable addition in the Fresno-Clovis area was an approximately 70-acre plot of new homes, including the "Town and Country" development in the northern Clovis area along Shepherd Avenue. Another six additions of new homes around the northern Clovis area contributed to the conversion of approximately 100 acres of local, grazing or other land. A few more additions of new homes (~60 acres total) were added on the eastern fringe of Clovis off Temperance Avenue. Just to the south of the previous additions, five additions of new homes along with the new "Freedom Elementary School" were added (~100 acres). Meanwhile, on the southeastern urban fringe of Fresno, another three additions of new homes were in evidence (~100 acres) along with approximately 40 acres of new buildings nearby the Fresno Yosemite International Airport.

New homes were also seen outside the Fresno-Clovis area in places such as Coalinga where approximately 20 acres of new homes were added to the southern urban fringe. In Sanger, approximately 30 acres of new homes were added to the northern

fringe. Meanwhile, the City of Reedley added approximately 20 acres of new homes to its eastern urban fringe. Lastly, an area of water control ponds nearby Mendota was expanded (~30 acres).

➤ Irrigated Farmland to Local or Grazing Land: 302 changes

This category of change primarily involved either farmland that had been fallow for three or more update cycles leaving the irrigated farmland category, the addition of new dairies, or the delineation of areas of nonirrigated cropland.

The largest number of conversions in this category of change involved farmland that had been out of production for three update cycles. These conversions of fallow farmland occurred throughout the county and were generally less than 30 acres in size. However, single conversions of 100 acres or more were seen on the Dos Palos (102 acres), Mendota Dam (134 acres), Chounet Ranch (140 acres), Coit Ranch (345 acres), Cantua Creek (176 acres), Avenal (328 acres), Herndon (123 acres), Round Mountain (121 acres), Wahtoke (204 acres), Caruthers (101 acres), and Conejo (127 acres) quads. The quads that exhibited the most conversions of irrigated farmland were generally in the Fresno-Clovis area or to the east and southeast and included the Sanger (30), Round Mountain (27), Wahtoke (25), Herndon (23), Clovis (17), and Reedley (16) quads.

The addition of new dairies was another significant cause for the conversion of irrigated farmland. In this case, irrigated farmland is converted to farmland of local importance since irrigated crops are no longer being grown on the land. Notable examples of large, new dairies added this update included three new dairies added on the Helm quad totaling approximately 400 acres. On the Five Points quad, three more dairies were added including the Shady Acres #2 and Vintage Dairy (~385 acres total). Further, two dairies (~170 acres) were added on the Burrel quad. Finally, a single dairy on the Raisin quad accounted for the conversion of approximately 115 acres of irrigated farmland.

One last cause for the conversion of irrigated farmland had to do with the identification of areas of nonirrigated cropland. The most significant example of this type of conversion occurred on the Kettleman Plain adjacent to the county line where approximately 4700 acres of nonirrigated cropland was delineated. These areas had been given the benefit of the doubt as to their irrigation status when western Fresno County was added to our survey area in 2000 but had been closely monitored. In recent updates there had been no obvious evidence of irrigation in the aerial imagery and subsequent field checks of the area did not show the presence of any irrigated crops being grown. The evidence gleaned from years of monitoring the site prompted me to contact the Fresno County Agricultural Commissioner's office this update who confirmed that they believed the land in question was, indeed, fallow or used for the production of nonirrigated crops based upon a field check a staff member conducted and information gleaned from pesticide permits that had been filed for the land. Based upon all these factors we decided to change the land use category of the area from that of irrigated farmland to a nonirrigated cropland category (farmland of local importance).

> Irrigated Farmland to Other Land: 153 changes

The delineation of farmsteads and ranchettes accounted for most of the conversions of this type with most conversions encompassing 20 acres or less. These

types of land use conversions were made throughout the county with many of the changes attributable to improved imagery that allowed for the delineation of these land use types.

On the other hand, a notable exception to the above was seen on the San Joaquin quad where approximately 1700 acres of farmland that had been fallow for three update cycles was shifted to the natural vegetation component of the Other Land category. This area looked similar to an adjacent area to the north already categorized as natural vegetation, the area showed up on our federal refuge GIS data as being part of the NRCS Wetlands Reserve Program and signage was observed during the field check of the area.

> Local, Grazing or Other Land to Irrigated Farmland: 81 changes

New additions of irrigated farmland were made throughout the county with most conversions encompassing 30 acres or less. One of only a few large, notable conversions occurred on the Helm quad where approximately 160 acres of center-pivot alfalfa was added. Meanwhile, on the Domengine Ranch quad, new orchards were in evidence alongside I-5 (~140 acres). Finally, on the Riverdale quad, two additions of cornfields accounted for approximately 300 acres of new irrigated farmland.

- ➤ UNUSUAL: Category changes, complications with the Farmland of Local Importance definition, or any other special circumstances in 2004.
- G, L to X: Many areas of ranchettes and farmsteads were delineated throughout the county; these additions were primarily attributable to improved imagery.

D to L: A dairy facility was identified on the CSU, Fresno campus.

PROBLEM AREAS: What locations and map categories need careful checking in 2006? Why?

The next field mapper should carefully check the possible Westlands Water District retired lands to the south of Mendota for nonirrigated cropland. Also, the Kettleman Plain area warrants more scrutiny for further nonirrigated cropland delineation.

LABOR ESTIMATE: Please estimate the amount of time spent on the following tasks.

photo interpretation, start date: June 17, 2005 photo interpretation, number of days: 25 ground truthing dates: June 27-30, 2005 # days for map compilation and clean up: 20

* **Note: Irrigated Farmland** = Prime Farmland, Farmland of Statewide Importance or Unique Farmland; **Local** = Farmland of Local Importance

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

www.consrv.ca.gov/dlrp/fmmp