

Contra Costa County Important Farmland Metadata

Originator: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program

Abstract: Established in 1982, Government Code Section 65570 mandates FMMP to biennially report on the conversion of farmland and grazing land, and to provide maps and data to local government and the public.

Purpose: The Farmland Mapping and Monitoring Program (FMMP) provides data to decision makers for use in planning for the present and future use of California's agricultural land resources. The data is a current inventory of agricultural resources. This data is for general planning purposes and has a minimum mapping unit of ten acres.

Publication Date: Even numbered years, starting in 1984.

Maintenance and Update Frequency: Biennial

Bounding Coordinates:

West Bounding Coordinate: -122.441375056214

East Bounding Coordinate: -121.534285020816

North Bounding Coordinate: 38.1045168599094

South Bounding Coordinate: 37.7184843740432

Keywords:

Farmland
California Farmland
Farmland Monitoring
Urbanization
Land Use
Agriculture
Conservation
Prime Farmland
FMMP
Important Farmland
Contra Costa

Place Keywords:

San Francisco Bay
Contra Costa

Access Constraints: None

Use Constraints: This data does not reflect general plan or zoning designations, city limit lines, changing economic or market conditions, or other factors which may be taken into consideration when land use policies are determined. This data is not designed to be used for parcel specific planning purposes due to its scale and

the size of the minimum mapping unit (10 acres). The Department of Conservation makes no warranties as to the suitability of this data for any particular purpose.

Contact Organization: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program

Contact Position: Staff

Contact Address: 715 P Street MS 1904, Sacramento, California 95814

Contact Voice Telephone: 916-324-0850

Contact Facsimile Telephone: 916-327-3430

Contact Electronic Mail Address: fmmp@conservation.ca.gov

Hours of Service: 8am to 5pm PST

Data Set Credit: A citation for the Farmland Mapping and Monitoring Program on any map products, graphic media, or data analyses based on the data is appreciated.

Native Data Set Environment: Microsoft Windows 10 Enterprise; ESRI ArcGIS Pro 3.3.1

Downloadable Data:

<https://gis.conservation.ca.gov/portal/home/group.html?id=b1494c705cb34d01acf78f4927a75b8f#overview>

Data Quality Information: The Important Farmland survey area is based on Natural Resources Conservation Service (NRCS) modern soil surveys covering most non-governmental lands in California; 51 counties are fully or partially surveyed at this time. Soil surveys specific to National Forests or other government land units are not surveyed. Beginning in 2000, SSURGO digital soil information was incorporated into the Contra Costa County Important Farmland data and the 2016 data began to incorporate the new NRCS Gridded Soil Survey (gSSURGO). Data subsequent to 2000 may have acreage and soil line differences due to incorporation of newer NRCS-SSURGO or gSSURGO editions.

Prior to the availability of SSURGO or gSSURGO, soil information was hand-transferred from the paper soil surveys. Older versions of the data have not been modified. The land use minimum mapping unit of ten acres has not changed, but digital soil units of less than one acre occur in the gSSURGO-enhanced Important Farmland data. The data between 2000 and 2014 incorporates SSURGO and the interaction of land use and soil components resulted in units of less than ten acres for categories such as Other Land (or Nonagricultural and Natural Vegetation). The 2016 data incorporates gSSURGO and will no longer merge resulting polygons less than one acre for any map category. For more information on gSSURGO, contact the USDA-Natural Resources Conservation Service:

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053628

USDA NRCS soil survey CA013 (Contra Costa County).

County Boundaries:

- 1984 to 2006 Important Farmland Series are from the Bureau of Reclamation, California county lines modified by FMMP in 1997 (cty24amod).
- 2008 Important Farmland Series are from the California Department of Forestry and Fire Protection's (Cal Fire) Fire and Resource Assessment Program (FRAP) 2004 version (cnty24k97_1) of California Counties GIS data.
- 2010 to 2016 Important Farmland Series are from the Cal Fire FRAP 2009 version (cnty24k09_1) of California Counties GIS data.
- 2018 to 2020 Important Farmland Series are from the Cal Fire FRAP 2018 version (cnty 18_2) of California Counties GIS data.

[<https://frap.fire.ca.gov/mapping/gis-data/>](https://frap.fire.ca.gov/mapping/gis-data/)

Imagery source by update year:

Update Year; Source; Date; Format; Scale or Resolution; Notes.

- 1984 NASA-Ames Research Center; July 8, 1983; False color infrared; 1:130,000; Flight #83-142.
NASA-Ames Research Center; May 8, 1984; False color infrared; 1:130,000; Flight #84-068.
- 1986 NASA-Ames Research Center; April 30, 1985; False color infrared; 1:130,000; Flight #85-074.
NASA-Ames Research Center; April 21, 1986; False color infrared; 1:130,000; Flight #86-107.
NASA-Ames Research Center; April 22, 1986; False color infrared; 1:130,000; Flight #86-108.
- 1988 NASA-Ames Research Center; May 11, 1988; False color infrared; 1:130,000; Flight #88-065.
Pacific Aerial Surveys; July 15, 1987; Black and White; 1:36,000.
- 1990 NASA-Ames Research Center; April 3, 1990; False color infrared; 1:130,000; Flight #90-076.
Pacific Aerial Surveys; July 10, 1990; True color; 1:36,000; #K-AV-3866.
- 1992 Pacific Aerial Surveys; October 17, 1991; Black and white; 1:63,000.
Pacific Aerial Surveys; April 23, 1992; Black and white; 1:63,000.
- 1994 NASA-Ames Research Center; April 26, 1993; False color infrared; 1:65,000; Flight #93-088.
NASA-Ames Research Center; August 13, 1993; False color infrared; 1:130,000; Flight #93-116.
NASA-Ames Research Center; February 24, 1994; False color infrared; 1:65,000; Flight #94-045.
- 1996 NASA-Ames Research Center; July 13, 1995; False color infrared; 1:130,000; Flight #95-143.
- 1998 NASA-Ames Research Center; July 25, 1997; False color infrared; 1:130,000; Flight #97-131.
- 2000 NASA-Ames Research Center; September 14, 1999; False color infrared; 1:130,000; Flight #99-126.

- 2002 NASA-Ames Research Center; September 7, 2001; False color infrared; 1:130,000; Flight #01-152.
- 2004 NASA-Ames Research Center; August 8, 2003; False color infrared; 1:130,000; Flight #03-951.
- 2006 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2005; True color; 1 meter resolution.
- 2008 Digital Globe Incorporated; April 2007; True color; 1 foot resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
- 2010 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2009; True color; 1 meter resolution.
USGS Landsat 7 Enhanced Thematic Mapper Plus; July 2010; False color infrared; 30 meter resolution; Satellite imagery.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
- 2012 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2012; True color; 1 meter resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
Bing; Various dates; True color; Bing Maps.
- 2014 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2014; True color; 1 meter resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
- 2016 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2016; True color; 1 meter resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
- 2018 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2018; True color; 1 meter resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.
- 2020 USDA Farm Service Agency - National Agricultural Imagery Program (NAIP); Summer 2020; True color; 1 meter resolution.
Google Incorporated; Various dates; True color; Google Maps and Streetview.

Spatial Reference Information:

Map Projection Name: **Albers Conical Equal Area**

Standard Parallel: 34.000000

Standard Parallel: 40.500000

Longitude of Central Meridian: -120.000000

Latitude of Projection Origin: 0.000000

False Easting: 0.000000

False Northing: -4000000.000000

Planar Coordinate Information:

Planar Coordinate Encoding Method: coordinate pair

Coordinate Representation:

Abscissa Resolution: 0.000512

Ordinate Resolution: 0.000512

Planar Distance Units: meters

Geodetic Model:

Update years 1984 to 2012

Horizontal Datum Name: **North American Datum of 1927**

Ellipsoid Name: Clarke 1866

Semi-major Axis: 6378206.400000

Denominator of Flattening Ratio: 294.978698

Update years 2014 and beyond

Horizontal Datum Name: **North American Datum of 1983**

Ellipsoid Name: GRS 1980

Semi-major Axis: 6378137.000000

Denominator of Flattening Ratio: 298.257222

Entity Label: Important Farmland Categories

Definition: Technical ratings of the soils and current land use information are combined to determine the appropriate map category.

Source: Farmland Mapping and Monitoring Program

Attribute: OBJECTID

Definition: Internal feature number.

Source: ESRI

Domain Values: Sequential unique whole numbers that are automatically generated.

Attribute: Shape

Definition: Feature geometry.

Source: ESRI

Domain Values: Coordinates defining the features.

Attribute: POLYGON_TY

Definition: Identifies the mapping categories used by the Farmland Mapping and Monitoring Program.

Source: Definitions were developed by the USDA-NRCS as part of their nationwide Land Inventory and Monitoring (LIM) system and modified for California.

Attribute Domain Values:

Prime Farmland (P): Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to

produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance (S): Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Unique Farmland (U): Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

Farmland of Local Importance (L): The lands within the Tassajara area, extending eastward to the county boundary and bordered on the north by the Black Hills, the Deer, Lone Tree and Briones Valleys, the Antioch area, and the Delta. These lands are typically used for livestock grazing. They are capable of producing dryland grain on a two year summer fallow or longer rotation with volunteer hay and pasture. The farmlands in this category are included in the U.S. Natural Resources Conservation Service's Land Capability Classes I, II, III, and IV, and lack some irrigation water.

Grazing Land (G): Grazing Land is land on which the existing vegetation is suited to the grazing of livestock.

Urban and Built-Up Land (D): Urban and Built-up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

Other Land (X): Other Land is land not included in any other mapping category. Common examples include low density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing, confined livestock, poultry, or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Water (W): Perennial water bodies with an extent of at least 40 acres.

Attribute: POLYGON_AC

Definition: The acreage of the polygon feature.

Source: Computer calculated.

Attribute: COUNTY_NAM

Definition: County name identified by a three-letter abbreviation.

Source: FMMP

Attribute Domain Values: Contra Costa County is abbreviated as "con".

Attribute: UPD_YEAR

Definition: The year the data was captured.

Source: FMMP

Attribute Domain Values: Biennially on even numbered years.

Attribute: SHAPE_LEN

Definition: Perimeter of the polygon feature in meters.

Source: Computer calculated.

Attribute Domain Values: Positive real numbers that are automatically generated.

Attribute: SHAPE_AREA

Definition: Area of feature in meters squared.

Source: Computer calculated.

Attribute Domain Values: Positive real numbers that are automatically generated.