California Department of Conservation Division of Land Resource Protection Farmland Mapping and Monitoring Program (FMMP) Protocol for Removing Agricultural Land on Important Farmland Maps

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 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 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.

These map categories were originally developed by the US Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) as part of their nationwide Land Inventory and Monitoring (LIM) system. The current definitions were modified for use in California, and developed through a memorandum of understanding between USDA-NRCS and the California Department of Conservation.

USDA-NRCS determines soil quality and rates soil as Prime Soils or Soils of Statewide Importance. All other lower quality soils are considered Unique Soils. Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are a combination of land use, irrigation status, and underlying soil quality. FMMP maps the land use and irrigation status of the land using photo interpretation and site visits. If the land use is mapped Irrigated Farmland, and the underlying soil is a Prime Soil, the Important Farmland category is Prime Farmland. Irrigated Farmland on Soils of Statewide Importance is mapped as Farmland of Statewide Importance. Irrigated Farmland on lower quality Unique Soils is mapped as Unique Farmland.

The underlined portion of each map category definition is commonly called the "irrigation qualifier". Land must have been used for irrigated agriculture at some time during the four years prior to the mapping date. This also means the land can be fallow or nonirrigated for up to four years before it doesn't qualify. Farmland can be fallow and still mapped as Irrigated Farmland due to this irrigation qualifier. While the Unique Farmland definition is slightly different, stating cropped instead of irrigated, only nonirrigated orchards or vineyards qualify for Unique Farmland. Aside from those two nonirrigated crops, Unique Farmland is generally handled in the same manner as Prime Farmland and Farmland of Statewide Importance.

FMMP interprets aerial photography to determine and track land use, irrigation status, and periods of land use transition. When FMMP staff note irrigated farmland as fallow or nonirrigated, that is the zero-year mark, and the land continues to be mapped as Irrigated Farmland. The following map update, two years later, if FMMP staff interpret the land as fallow or nonirrigated in the photo, then the note is changed to fallow for a second map update in a row, a two-year period, and continues to be mapped as Irrigated Farmland. The following map update, if FMMP staff interpret the land as fallow or nonirrigated in the photo, then it is fallow/nonirrigated a third update, a four-year period. The four-year period from the irrigation qualifier.

Before making a final land use change, FMMP staff will attempt to make a windshield site visit via a public road. FMMP staff never trespass on private property or private roads. If FMMP staff find new or continuing irrigated agriculture at the site, the land may remain in Irrigated Farmland to prevent a back-and-forth conversion. The tracking note is removed, and another four-year period must occur for the land to be considered for removal again. If FMMP staff determine the land is fallow or nonirrigated during the site visit, the fallow/nonirrigated land use status is further confirmed, and the land can be removed from Irrigated Farmland. If the land is non-accessible, a determination will heavily rely on the photo interpretation, and the land can still be removed from Irrigated Farmland.

When land is removed from Irrigated Farmland, it can be changed to Farmland of Local Importance, Grazing Land, or possibly even Other Land. The size of the change and the components of a county Farmland of Local Importance definition, if there is one, affects this determination.

Below you will find an example of land tracked for fallow or nonirrigated status. For simplicity we will only consider the land in the pink polygon. The site is not accessible via a public road.

2014 photo, interpreted as active irrigated agriculture.



2016 photo, interpreted as fallow or nonirrigated grains or hay. Flag as fallow or nonirrigated one map update (0 years).



2018 photo, interpreted as fallow or nonirrigated grains or hay. Flag as fallow or nonirrigated for two map updates (2-year period - 2016 to 2018).



2020 photo, interpreted as fallow. Fallow or nonirrigated for three map updates (4-year period - 2016 to 2020).



This land has no longer been used for irrigated agricultural production at some time during the four years prior to the mapping date. The map date is 2020 and the four years prior goes back to 2016. The land is not accessible via a public road and a site visit is not feasible. Relying on the photo interpretation, the land is removed from Irrigated Farmland for the 2020 map.

P. Hennessy (02/02/2023)