

SECTION II A. SOILS INFORMATION

4. SOIL INTERPRETATIONS

a. Cropland

This subsection contains information and tables showing soils data that applies primarily to cropland, both irrigated and non-irrigated, and includes orchards and vineyards.

California Revised Storie Index

The Storie Index is a widely known and accepted method of rating soils for agricultural potential in California. Ratings are generated from a wide range of soil profile and landscape characteristics. Ratings are scored as an index ranging from 0 to 100 from lowest to highest in potential for agricultural production.

Revised Storie Index ratings can be obtained through both the Soil Data Mart and the Web Soil Survey. In the Soil Data Mart, The Storie Index Ratings can be obtained for a soil survey area using the “Selected Soil Interpretations” report and details on the Storie Index can be obtained by using the “Selected Survey Area Interpretation Descriptions” report.

In the Web Soil Survey, soil maps and reports showing Storie Index Ratings can be obtained for your defined Area of Interest. The maps and reports can be found under the Soil Data Explorer tab, under the “Suitabilities and Limitations” tab, under the section “Land Classifications”.

Crop Yield Estimates

Crop yield estimates are provided for the major crops found in the soil survey area for each suitable soil mapping unit. In the Soil Data Mart, reports are available for irrigated and non-irrigated crop yields by both soil map unit and soil map unit component. In the Web Soil Survey, tables and maps of crop yields can be generated for your defined Area of Interest. In the Web Soil Survey, crop yields are found under the Soil Data Explorer tab, under “Suitabilities and Limitations”, under the section “Vegetative Productivity”.

Land Capability Classes

Land capability classification is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time.

Land capability classes I through VIII with capability subclasses e, w, s, or c has been assigned to each soil mapping unit in the soil survey area. Class I soils have little or no limitation for cultivated agriculture. Class VIII soils are not suitable for crops and have major limitations. The guide for placing soils in capability classes in California is included in this section. Land Capability Class information is included in the Map Unit Description reports available in both the Soil Data Mart and the Web Soil Survey.

(1) Capability Class

(i) Definition. Capability class is the broadest category in the land capability classification system. Class codes 1, 2, 3, 4, 5, 6, 7, and 8 are used to represent both irrigated and non-irrigated land capability classes.

(ii) Classes and definitions.

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or require very careful management, or both.

Class 5 soils have little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.

Class 6 soils have severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.

Class 7 soils have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.

Class 8 soils and miscellaneous areas have limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or water supply or for esthetic purposes.

(2) Capability Subclass

(i) Definition. Capability subclass is the second category in the land capability classification system. Class codes e, w, s, and c are used for land capability subclasses.

(ii) Subclasses and definitions.

Subclass e is made up of soils for which the susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.

Subclass w is made up of soils for which excess water is the dominant hazard or limitation affecting their use. Poor soil drainage, wetness, a high water table, and overflow are the factors that affect soils in this subclass.

Subclass s is made up of soils that have soil limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

Subclass c is made up of soils for which the climate (the temperature or lack of moisture) is the major hazard or limitation affecting their use.

(iii) Application. The subclass represents the dominant limitation that determines the capability class. Within a capability class, where the kinds of limitations are essentially equal, the subclasses have the following priority: e, w, s, and c. Subclasses are not assigned to soils or miscellaneous areas in capability classes 1 and 8.

Prime and Important Farmlands

Prime Farmland is land best suited for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses (the land could be cropland, pastureland, rangeland, forest land, or other land but not urban built-up land or water). It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

Farmland of Statewide Importance is land other than Prime Farmland that has a good combination of physical and chemical characteristics for producing food, feed, forage, and fiber and oilseed crops and is available for these uses (the land could be cropland, pastureland, rangeland, forest land or other land, but not urban built-up land or water).

Unique Farmland is land other than Prime and Additional Farmland of Statewide Importance that is currently used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to modern farming methods. Examples of such crops are citrus, olives, avocados, fruit and vegetables.

In some local areas there is concern for certain Additional Farmlands for the production of food, feed, fiber, forage and oilseed crops, even though these lands are not identified as having national or statewide importance. Farmland of Local Importance is land of importance to the local economy, as defined by each county's local advisory committee and adopted by its Board of Supervisors. Farmland of Local Importance is either currently producing, or has the capability of production, but does not meet the criteria of Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Authority to adopt or to recommend changes to the category of Farmland of Local Importance rests with the Board of Supervisors in each county.

Specific criteria for Prime and Important Farmland categories in California is contained in California Soils Technical Note CA-20 "Important Farmlands Definitions and Criteria as Applied in California" located in Section I of the eFOTG under "C. Technical Notes" in the "Soils" folder. County listings of Farmland of Local Importance are included in this section. More information on Farmland of Local Importance can be found at the California Department of Conservation's Farmland Mapping and Monitoring Program website <http://www.consrv.ca.gov/dlrp/fmmp/Pages/index.aspx> .

In the Soil Data Mart, Prime and important farmland information is contained in the report titled "Prime and Other Important Farmlands". In the Web Soil Survey, Prime and Important Farmlands reports and maps can be generated for your defined Area of Interest by going to the "Soil Data Explorer" tab, under the tab "Limitations and Suitabilities for Use" there is a section called "Land Classifications" where you will find a section called "Farmland Classification".