1883

Hilgard’s Agricultural Map of California

The origins of the Soil Survey in California trace back beyond the first soil surveys of the US Bureau of Soils in 1899 to the founding of soil science itself. California’s Eugene W. Hilgard at the University of California at Berkeley was a pioneer in many areas of soil science and is referred to as the cofounder of soil science by Hans Jenny and others. Hilgard also developed an original vision for soil surveys in California.

The first soil survey map produced in California depicts the agricultural soil regions of the state. Shown here as “Agricultural Map of California,” this product was “compiled from many sources by R.H. Loughridge, Ph.D., Special Agent, under the direction of Eug. W. Hilgard, Ph.D., Special Agent in charge of cotton production” in 1883. The map was in essence a depiction of major land resource areas (MLRAs) in the state. Hilgard speculated that California’s Great Central Valley would be good for growing cotton and was in charge of helping develop cotton production the state.

This generalized map depicts the marsh and tule lands in the Delta and along rivers in light green. The alluvial lands of the Great Central Valley are shown in medium green. Note the lakes in the southern part of the valley at the time, which no longer exist today. Prominent adobe lands are shown in dark brown, lower Sierra foothills in red, the upper Sierra foothills in light pink, and the Sierra Nevada Mountains in dark pink. The Coast Ranges are in orange-brown with their chief valleys in yellow. The deserts are in light tan. Dark green areas depict redwood forests. The marsh lands around the San Francisco bay are not identified, possibly because they were too small in scale. The map displays remarkable knowledge of the soils and landforms of California for 1883.

Contributed by Terry D. Cook and William R. Reed, Professional Soil Scientists Association of California.

1949

California’s Conservation Surveys from the Early Years of the SCS

The formation of the USDA-Soil Conservation Service (SCS) under the New Deal in 1935 brought many changes to the Soil Survey in California. SCS set up headquarters for California and Nevada in Berkeley, CA and hired Dr. Stanley Cosby from the university to be the Regional Soil Scientist. Leonard Wholetz was hired as his assistant. One of his first assignments was a demonstration project in Santa Paula where erosion was severe. Many similar projects using conservation surveys would be produced through the early 1950s.

The SCS quickly changed to making conservation needs surveys from standard soil surveys. These were quickly done and delivered to the conservationists for immediate use. The surveys were generally small areas with severe erosion problems. Twelve Civilian Conservation Corps camps were set up in California to implement conservation practices. Most were in central and southern California and in coastal areas. Many soil scientists went to work for the SCS. The work of the UC Division of Soils and the Bureau of Chemistry and Soils continued standard soil surveys, but there were fewer areas mapped than in the 1920s. The map shown here is one of the few remaining conservation maps from California. It included the Stanford University property and was made to assist Stanford in management of the lands. Soil depth, slope, erosion level, and capability unit were the extent of the information gathered. It was rapidly assembled and put to use immediately.

From 1935 to 1952 there were likely thousands of these conservation maps made in California alone. They were used extensively to control serious erosion, mostly on private lands. Apparently an order was sent out by SCS around 1960 to dispose of them. Very few conservation maps remain, and the ones that do remain are maps of larger areas like this one at Stanford University. It was bound in a small book, rather than as a loose map, allowing it incidentally to survive on a shelf with other materials.

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