Wetland Inventory to Support WRE in Modoc County, California

Purpose

The NRCS Wetlands Reserve Easement (WRE) team in California, led by Jennifer Cavanaugh, NRCS-CA State office, initiated an onsite investigation of an area of wet meadow and rangeland for a landowner in Modoc County. Additional information was needed to determine whether the area was eligible for the WRE program, which supports voluntary enrollment to protect, restore, and enhance wetland under private ownership.

To be eligible for the program, the existing area of wetland and the surrounding area planned for restoration must have soils that are indicative of wetland conditions (hydric soils). A determination of the presence of hydric soils in the specified area could not be made from soil survey data alone; thus, an onsite investigation by a knowledgeable soil scientist was needed.

Onsite investigations provide more intensive site-specific information at a scale appropriate for the level of management planned. Published soil surveys, aerial photograph interpretations, and National Wetland Inventory data do not provide the detail required for these projects.

Meadow for potential enrollment in the Wetland Reserve Easement program.

Key Outcomes

A detailed assessment of the existing soil survey data revealed information on hydric soils in the area, which was not apparent during the initial assessment. The onsite visit was conducted to verify the presence of hydric soils and determine the extent of the wetland characteristics. A map of the area of interest with appropriate wetland identification labels was created. Maps, documentation from the onsite investigation, photographs, and spatial data (points and polygons) were delivered to the WRE team and the local NRCS field office in Alturas, California.

The WRE team, soil scientists, and the landowner discussed the specific hydrologic dynamics on the property, the management history of the area, the interaction of soils and hydrology in the meadow, and the current factors influencing wetland communities. With the existing soil survey data, the data from the onsite investigation, and the information gathered from discussions with the landowner, the application for inclusion of the area in the WRE program could be considered. The data also can be used in creating and implementing a wetland restoration plan.

Wetlands in the western states provide many ecosystem services, including habitat for threatened and endangered species, filter of excess nutrients or other environmentally detrimental components from freshwater streams, and conservation of water for year-round use by plants.