

SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

Northwest Soil Survey Region



Pueblo MLRA Soil Survey Office

Dynamic Soil Property Reference-Baseline and Repeated-Measures Studies in Southeast Colorado in 2020 and 2021

The Pueblo MLRA Office collected soil samples from two locations along the Cucharas River in Huerfano County, Colorado. The samples were collected for lab characterization, to assess dynamic soil properties (DSP), and for field bulk density tests. The area has been affected by flooding since the 2018 Spring Creek Fire. The samples were collected from pastures on different landforms having different flooding frequencies. The data will be used to determine a regional baseline reference of soil health and function. The baseline will assist landowners in assessing land and pasture conditions and in making land management decisions. The test results will also be used in a repeated-measures study after a soil health and pasture improvement plan is implemented.

Similarly, the Pueblo MLRA Office, the Fort Morgan MLRA Office, the El Paso County NRCS Field Office, the Region 4 Denver MLRA Office, the NRCS Area Resource Soil Scientist, and the Elbert County NRCS Field Office collected soil samples in Elbert County, Colorado. These samples were also collected for lab characterization, to assess dynamic soil properties (DSP), and for field bulk density tests. These samples were collected from two fields enrolled in the Conservation Reserve Program (CRP). These samples were from two different map units. After 30 years in CRP, the fields are being converted to grazing land. The data will be used to determine a regional baseline reference of soil health and function. The baseline will assist landowners in making grazing-land management decisions. Samples will be collected from these fields again in 5 years as part of a repeated-measures study. The study will compare the soil health of these CRP fields to the soil health of fields managed under a prescribed grazing plan.



Personnel from the NRCS Pueblo MLRA Office collecting DSP samples in Huerfano County, Colorado.