Date: March 22, 2021

Title: Soil Moisture

Soil health plays an important role in the success of any agricultural operation. This is especially true of soil moisture. Soil acts as a major storage reservoir for moisture. According to NRCS, soil with just 1% of organic matter in the top 6 inches of soil can hold approximately 27,000 gallons of water per acre. This is a substantial amount of water that could be available to support plant growth and ultimately grazing livestock. With Rio Blanco County in exceptional to extreme drought, soil health will play a critical role in this year's grass production.

Soil moisture levels are affected by several factors, both inherent (non-changing) and dynamic (changing). Examples of these are soil texture, soil depth, organic matter, and salt concentrations. Ground- management practices can affect the soil's moisture holding capacity (compaction). Producers can increase their soil moisture retention levels by avoiding driving equipment on wet soils, preventing livestock from creating loafing areas or heavy-use trails on productive land, increasing residual cover through cover crops, and implementing no-till or low-till systems.

The current soil moisture deficit in Western Colorado is significant and spring rains are going to be critical for grass production. With such a soil moisture deficit, little runoff is expected from snow or rain. The land needs a big drink! Preferably over a several week/month period.

Available soil moisture is a dynamic soil health indicator. Because there are so many factors that influence soil health, it is difficult to categorize on large landscapes. Physical testing of soil can determine the moisture content of a specific location for crops. Local resources for more information include the Natural Resources Conservation Service (NRCS) and CSU Extension. You may also find more information on the Soil Health Tab of the White River and Douglas Creek Conservation Districts at www.whiterivercd.com.

ZapCode: https://www.whiterivercd.com/soil-health.html