

Natural Resources Conservation Service

## Soil Science Division

Rocky Mountain Soil Survey Region



#### Price, UT, MLRA Soil Survey Office

# MLRA Office Staff Member of Price, Utah, Assists Utah Division of Oil, Gas, and Mining

### **Purpose**

At the request of Bart Kettle, operations manager for the Utah Division of Oil, Gas, and Mining, Jedd Bodily gave a soils presentation to the staff in their office at Price, Utah, on June 19, 2018. Jedd talked about the fundamentals of soils, soil science, and salt movement in soils. He taught the group about soil properties, including soil horizonation, topsoil versus subsoil, particle-size class, and soil texture. He also taught them how to use the textural triangle and about the principles of water-holding capacity and the five soil-forming factors. The presentation covered Soil Taxonomy, how soil surveys are made, classification of salt-affected soils, salt movement in natural systems, and the interplay of sodium adsorption ratio (SAR) and electrical conductivity (EC) with flocculated and dispersed soils. Jedd also gave a live demonstration on how to use Web Soil Survey.



Jedd and staff of Utah Division of Oil, Gas, and Mining take a break for lunch.





### **Key Outcomes**

The staff received the information with enthusiasm. Multiple discussions were generated by the topics presented. The live demonstration of Web Soil Survey was received particularly well. The group immediately saw the value of this resource as a baseline for reclamation work. They were excited to realize that information regarding soil thickness and texture and lists of plant species can be useful in reclaiming sites after exploration and production. Because of the nature of drilling fluids and settling pond residue, they were also very interested in the movement of salt through soils and the dispersion of clay in soils.



Jedd discussing matric potential in natural systems.