

# Mud Creek Water Quality 319 Project - 2022

*Client:* Trout Unlimited

*Owner:* Carbon Water Conservancy District

*Project Location:* Mud Creek, Scofield, Utah

*Name of Project Manager/Engineer:* Alex Heller, PE

*Brief Description of Project:* The project is a cooperative effort between Trout Unlimited and the Utah Division of Wildlife Resources to reduce phosphorus loading to Scofield Reservoir, which is currently on the Utah Division of Water Quality Section 303(d) list of impaired water bodies due to dissolved oxygen and total phosphorus loading.

Mud Creek serves as the reservoir's primary inlet channel and has been subjected to heavy bank erosion caused by over-steep banks, lack of vegetation due to historic livestock grazing, bank saturation due to irrigation practices, and high sinuosity ( $S=2.6$ ) in the project reach just upstream of the reservoir's inlet. RiverRestoration assisted in the design and construction of over 85 beaver dam analogs and 50 post-assisted log structures, and live willow staking along 1.5 miles of stream. Construction was completed in the fall of 2022.

