

Natural Resources Conservation Service

Soil Science Division

Soil Survey Region 4

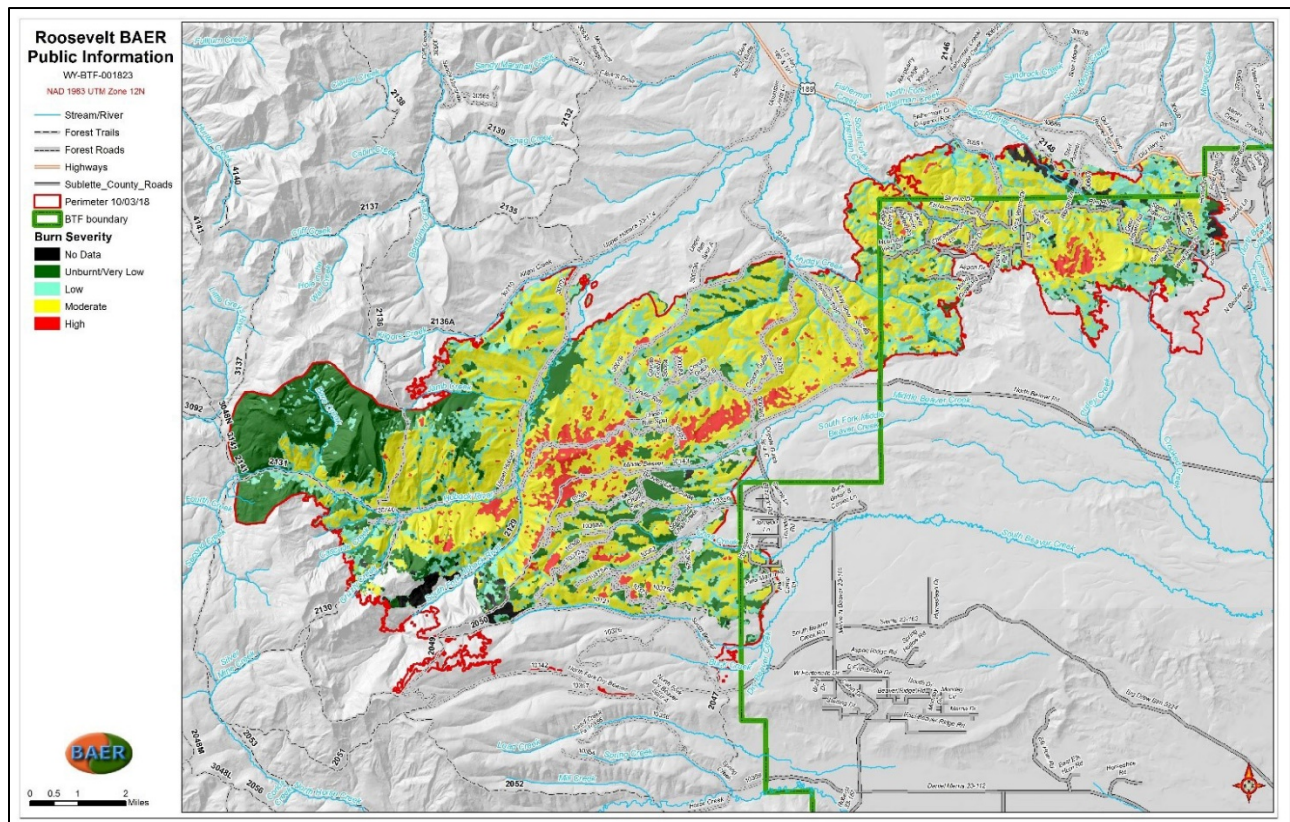


Pinedale, Wyoming, MLRA Soil Survey Office

Roosevelt Fire Recovery

Purpose

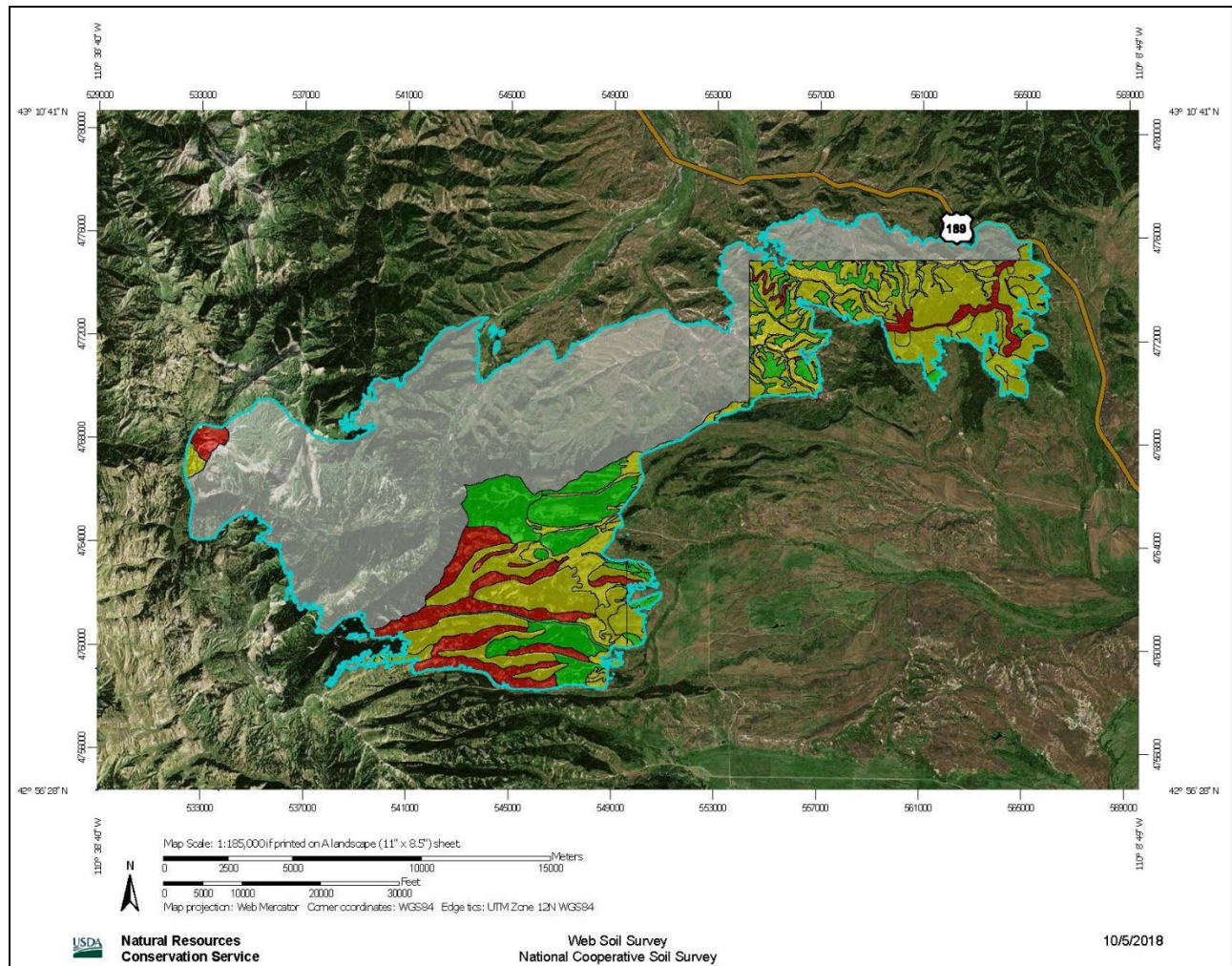
The human-caused Roosevelt Fire started September 15, 2018, in the Roosevelt Meadows area outside of Bondurant, Wyoming, in Bridger Teton National Forest. The fire burned fast since it was started after 14 red flag days and months without precipitation. By the time the fire was contained, it had burned 61,500 acres and 55 homes in the Hoback Ranches subdivision. The local NRCS field office staff and the Forest Service Burned Area Emergency Response (BAER) team reviewed the damage to prepare for assistance once homeowners were allowed back into the area. The BAER team evaluates postfire hazards and burn severity across the path of fires.



BAER team burn severity map of the Roosevelt Fire.



The severity of the burn was highly variable in the area affected by the fire. The terrain includes steep areas of conifer forests and areas of sagebrush rangeland and lush grassland. The BAER team used Infrared Landsat imagery along with ground truthing to create a burn severity map for recovery efforts. The fire burned portions of four soil survey areas—WY661-Teton National Forest (unpublished), WY662-Bridger National Forest East (published), WY663-Bridger Teton National Forest West (published), and WY635-Sublette County (initial). NRCS staff used the published and draft data from the soil survey areas of WY635, WY662, and WY663 to create a fire damage susceptibility map to help in evaluating the burn severity in these areas. The areas of intense burn activity and high susceptibility to fire damage were similar on both the predicted fire damage susceptibility map and the measured burn severity map.



Fire damage susceptibility map of the Roosevelt Fire.

Key Outcomes

Unfortunately, funding from the Emergency Watershed Protection (EWP) program currently is not available for recovery efforts because the fire was human caused. Federal, State, and county agencies provided technical assistance to landowners affected by the fire. The Sublette County Conservation District organized a recovery team that included staff from the local offices of the NRCS, Wyoming Game and Fish Department, Forest Service, Sublette County Weed and Pest District, and Sublette County Fire Department. The team hosted a public meeting in Bondurant, Wyoming, for all landowners affected by the



Public meeting organized by the Sublette County Conservation District for landowners affected by the Roosevelt Fire.



Karen Clause, rangeland management specialist, talks with a landowner affected by the Roosevelt Fire.

after a neighboring fire 2 years ago. Others are concerned about soil stability and the best practices to prepare for revegetation and rebuilding homes. Most of the homes affected by the fire were mapped in the soil survey area of WY635-Sublette County. The field mapping for this survey was completed in the summer of 2018.

The meeting resulted in multiple requests for visits to specific sites. The staff of the Pinedale soil survey office will begin making these onsite visits this fall and continue through spring as more requests are received. The entire recovery team is scheduled to meet again this fall to work through the signups and schedule assistance to landowners who expressed a need during the initial meeting.

Roosevelt Fire to learn about assistance available from the supporting agencies. More than 40 landowners attended the meeting.

NRCS hosted three booths that focused on revegetation, purchase of trees and shrubs through the Sublette County Conservation District, and soil recovery. The revegetation booth focused on best management practices for fire recovery, including creation of custom seed mixes based on the types of soil and stabilization mats. Karen Clause, rangeland management specialist from the NRCS Pinedale MLRA Soil Survey Office, ran this booth. Jennifer Hayward, district conservationist from the Pinedale office, ran the tree and shrub booth. She helped landowners schedule the purchase of trees and shrubs for revegetation through the Sublette County Conservation District.

Dan Perkins, Pinedale office leader, ran the soil recovery booth. He focused on recovery practices for hydrophobic soils, stabilization of slopes postfire, preparation of soils for revegetation, use of soil survey data for revegetation, and education in the use of Web Soil Survey. The Gros Ventre and Wyoming Ranges naturally are highly susceptible to landslides and slumps because of the geology and slope. Many private landowners are concerned about landslides and slumps because some were affected by a landslide



Dan Perkins, soil survey office leader, talks with landowners affected by the Roosevelt Fire.