Post-Fire BAER Assessment

Burned Area Emergency Response (BAER) Information Brief





KEY ELEMENTS OF THE BAER ASSESSMENT

Forest Service BAER assessment teams are established by Forest Supervisors before wildfires are fully contained. The teams coordinate and work with the USDA Natural Resources Conservation Service (NRCS), Bureau of Land Management (BLM), Fish & Wildlife Service (FWS), National Weather Service (NWS), local counties, State Department of Transportation, and other federal, state, and local agencies to strategically assess potential post-fire impacts to the watersheds burned from wildland fires.

- The **BAER** assessment teams are evaluating watershed conditions to determine the level of potential risks to human life, safety, property, critical natural and cultural-heritage resources, and determine if there are appropriate and effective emergency stabilization measures that can be implemented on federal lands in a timely manner to reduce unacceptable risks from potential flooding and debris flow threats.
- The BAER assessment team conducts field surveys and uses science-based models to rapidly evaluate and assess
 the burned area.
- **BAER** assessment teams are staffed by specially trained professionals that may include: hydrologists, soil scientists, engineers, geologists, biologists, botanists, archeologists, geographic information system mapping specialists, recreation and trails specialists, and others who evaluate the burned area and prescribe emergency response actions to protect the land quickly and effectively.
- BAER assessments usually begin before a wildfire has been fully contained.
- The **BAER** assessment team generates a "**Soil Burn Severity**" map by using satellite imagery which is then validated and adjusted by **BAER** team field surveys to assess watershed conditions and watershed response to the wildfire. The map identifies areas of soil burn severity by categories of low/unburned, moderate, and high which corresponds to a projected increase in watershed response.
- The **BAER** team presents these findings and treatment recommendations to the **Forest Supervisor** in an assessment report that identifies immediate and emergency stabilization actions needed to address potential post-fire risks to human life and safety, property, cultural-heritage and critical natural resources on National Forest System lands.
- The BAER report describes watershed pre- and post-fire response information, areas of concern for human life, safety and property, and recommended short-term emergency stabilization actions for federal lands that burned.
- In most cases, only a portion of the burned area is actually treated.
- If the BAER assessment team determines there may be potential emergency situations, the short-term goal is to have flood and erosion control protection measures completed before the first large, damaging rain events occur.
- Timely implementation is critical if BAER emergency response actions are to be effective.
- The BAER assessment team coordinates with other federal and local agencies, and counties that assist private landowners in preparing for increased run-off and potential flooding.
- Federal assistance to private landowners regarding post-fire potential impacts is the primary responsibility of the NRCS through the Emergency Watershed Protection (EWP) program (https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/).
- NRCS in coordination with additional state, local and federal agencies conduct damage survey reports for the private land adjacent to and downstream from the burned areas. NRCS uses these reports, along with the BAER team's assessment report, to develop recommended emergency measures for businesses and private home and landowners to reduce the impacts to their property from potential increased water and debris flows.

