

While many wildfires cause little damage to the land and pose few threats to fish, wildlife and people downstream, some fires create situations that require special efforts to prevent further catastrophic damage after the fire. Loss of vegetation exposes soil to erosion; runoff may increase and cause flash flooding; sediments may move downstream and damage houses or fill reservoirs and put endangered species and community water supplies at risk.

Burned Area Emergency Response (BAER) is an emergency program aimed at managing imminent unacceptable risks to human life and safety, property, or critical natural and cultural resources from post-wildfire damaging events. The BAER Team is sent to fires to determine the need for and to prescribe and implement EMERGENCY treatments to minimize threats to life or property and to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of the fire. Teams identify values at risk from the effects of the fire.

The purpose of the BAER program is to assess and prevent damage from rain events on burned areas, not repair damage from either flames or flood after it occurs.

The BAER team's role will be to assess watersheds on all lands, then inventory values at risk and determine the need for emergency measures and treatments on National Forest lands. The team will assess the watersheds for post-fire rain related impacts such as increased flooding, debris flow potential, and increased soil erosion.

The US Forest Service team includes the following specialists: wildlife biologists, archeologists, engineers, botanists, wildlife biologists, trails specialists, soil scientists, hydrologists, and recreation personnel.

### **Critical Values to be considered during Burned-Area Emergency Response**

- Human life and safety on or in close proximity to burned National Forest System Lands (NFS).
- Buildings, water systems, utility systems, road and trail prisms, dams, wells or other significant investments on or in close proximity to the burned NFS lands.
- Water used for municipal, domestic, hydropower, or agricultural supply or waters with special state or federal designations on or in close proximity to the burned NFS lands.
- Soil productivity and hydrologic function on burned NFS lands.
- Critical habitat or suitable occupied habitat for federally listed threatened or endangered terrestrial, aquatic animal or plant species on or in close proximity to the burned NFS lands.
- Native or naturalized communities on NFS lands where invasive species or noxious weeds are absent or present in only minor amounts.
- Cultural resources on NFS lands which are listed on or potentially eligible for the National Register of Historic Places.

- In short, the purpose of the BAER program is to prevent damage, not repair damage after it occurs.

#### **Mission of Whittier BAER Assessment:**

An analysis will be completed for the moderate and smaller scale watersheds. The BAER team will provide these analyses to the CAL FIRE State Post Fire Watershed Emergency Response Team, local agencies and landowners to help them finish the analysis themselves. The BAER team will include technical specialists from Federal, State, County cooperating agencies.

- BAER products will include a Soil Burn Severity map and hydrologic, soils, and debris flow analysis. This requires a cooperative effort since almost all of the values at risk are located outside of the national forest with the Forest Service managing some of the upper watersheds. We will assess the moderate watersheds, or in some areas with many values at risk, smaller watersheds for post-fire rain related impacts such as increased peak flow, debris flow potential, increased soil erosion.
- The Whittier BAER team will produce and share these key products: Soil Burn Severity Map; Debris Flow Probability Map; and a Watershed Response Map. Other data shared will include calculations of increased peak flow in the evaluated watersheds; calculations of increased soil erosion; and a preliminary list of values at risk based on map and cursory ground surveys.

#### **What happens with the Interagency BAER Assessment:**

The Interagency BAER large scale analysis will be used by the State Post Fire Watershed Emergency Response team for further refinement at a smaller scale. Natural Resources Conservation Service (NRCS) will use the information for refining post fire flood mitigation treatments and providing assistance to qualifying private landowners and to the Forest Service for use on mitigating the effects of post fire flooding to National Forest lands and to OES for sharing information with the public.