WRIGHT WATER ENGINEERS, INC.

Cerro Grande Wildfire, Los Alamos, New Mexico

In May 2000, a controlled burn at Bandelier National Monument in New Mexico escaped its boundaries and started the Cerro Grande Wildfire. The fire burned extensive parts of watersheds above the Los Alamos National Laboratory (LANL). LANL is the site of nuclear testing facilities and known environmental contamination. An understanding of the changes in hydrology associated with the Cerro Grande Wildfire was of great importance for the safety of the laboratory, downstream communities and the Rio Grande.

WWE worked as a part of the LANL modeling team to quickly assess changes in hydrology, hydraulics, floodplain extents and sediment transport following the fire. WWE used the HEC-RAS model for hydrologic analysis, relying heavily on Geographic Information System (GIS) data for input. The model for the extensive network of canyons, encompassing more than 20 square miles of watershed, covered burned areas, watershed sizes, flow path lengths, etc. Based on these hydraulic analyses, WWE was able to identify best management practices (BMPs) to control runoff and debris flows from future precipitation events at LANL.

Denver Office
2490 W. 26th Ave., Suite 100A
Denver, CO 80211
303-480-1700
Fax: 303-480-1020
Email: wwe@wrightwater.com

Glenwood Office
818 Colorado Ave., Suite 307
P.O. Box 219
Glenwood Springs, CO 81602
970-945-7755
Fax: 970-945-9210
Email: gws@wrightwater.com

Durango Office
1666 N. Main Ave., Suite C
Durango, CO 81301
970-259-7411
Fax: 970-259-8758
Email: dgo@wrightwater.com