



August 2013

In response to a collaborative approach to impacts from the West Fork Complex fire, the Rio Grande Watershed Emergency Action Coordination Team (RWEACT) formally met on July 3, 2013 – two days after a community meeting identifying the need for such a consortium. Rio Grande National Forest Supervisor Dan Dallas welcomed the group with “we all should consider the jurisdiction, authority, knowledge, or experience we bring to the table as leverage not a constraint. If one of us can't do it, another of us likely can.”

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RWEACT brings together local, state and federal agencies, organizations, and individuals to facilitate an effective, coordinated approach for immediate actions addressing fire-caused hazards resulting in the protection of human life, property, and the natural health of the Rio Grande watershed and its environment.



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City of Creede Town of Del Norte City of South Fork Town of Lake City



Black Creek Hydrology



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Background

On June 5, 2013, a lightning strike on USDA Forest Service lands northeast of Pagosa Springs, Colorado, ignited the “West Fork fire.” The fire initiated on the San Juan National Forest and quickly spread over the Continental divide to the Northeast and onto the Rio Grande National Forest. A separate wildfire started during another lightning storm near the headwaters of the Rio Grande River and became known as the “Papoose fire.” A spot from the “West Fork fire” created the “Windy Pass fire.” The three wildfire events together - due to proximity and ease of management - are now identified as the “West Fork Complex fire.” As of Friday, July 12, 2013, the West Fork Complex fire had grown to approximately 109,500 acres in size. Of that, more than 90,000 acres of the fire exists on the Rio Grande National Forest. The Rio Grande portion of the West Fork fire has threatened the public safety and personal property of residents near the towns of Creede, South Fork and Del Norte primarily in Hinsdale and Mineral Counties. In addition to the public safety and private property concerns, the fire is situated at the headwaters and along the watershed of the main stem of the Rio Grande and many of its tributaries. The primary economic industry of the communities of Creede, South Fork, and Lake City and Rio Grande, Hinsdale, and Mineral counties are tourist-dependent. These counties boast a high percentage (Hinsdale – 96%, Mineral – 95%, Rio Grande – 60%) of public lands and the outdoor recreation industry is heavily influenced by wilderness access, roads and trails, fishing, hunting, and scenic values.

Downstream and downslope of the West Fork Complex fire is the San Luis Valley – 8,000 square miles of a high-desert, irrigated valley whose farms produce potatoes, barley, quinoa (for the first time since 1982 it was grown outside of South America in the San Luis Valley), cabbage, head lettuce, alfalfa, and native hay and whose ranches raise beef, sheep, hogs, goats, and buffalo (there’s even an alligator farm). The water quality impacts of a wildland fire in the Upper Rio Grande Valley and its tributaries and headwaters may prove to be devastating on the private, neighboring lands.

The intensity of the West Fork Complex fire has been fueled primarily by the vast acreages of “beetle-killed” spruce trees and the fine fuels of the dead branches, hot and dry winds, lack of precipitation, steep drainages, and minimal road access due to inaccessible landscapes ... this has resulted in extreme wildfire behavior. The initial BARC (Burned Area Reflective Classification) map reviewed on July 5th indicated that as much as 60% to 70% of the watersheds within the current West Fork Complex fire perimeter may be “severely” burned. The subsequent and significant impacts on environments through flooding and debris flow as burned soils may repel water like pavement. New research indicates perhaps that this hydrophobic tendency of burned soils is less impactful on water movement. Massive impacts to the environment and natural resources have occurred that greatly increase the need to take emergent and immediate, proactive measures to prevent loss of human life and property in the event of an inevitable flash flood. In addition, an inevitable reality is that the Rio Grande watershed including those tributaries affected by the fire, will sustain high volumes of ash, debris and sediment moving into the streams and rivers causing a significant degradation in water quality that will effect river health and wildlife at all levels.

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Dan Dallas of the Rio Grande National Forest requested a BAER (Burned Area Emergency Response) team “to identify imminent post-wildfire threats to human life and safety, property, and critical natural or cultural resources on National Forest System lands and take immediate actions, as appropriate, to manage unacceptable risks.” The purpose of a BAER Team assessment is to determine critical values and threats, risk evaluation and emergency determination, response action prescription and proposals, and documentation and funding requests.

It is Forest Service Policy that the BAER Team should be assembled during the time the fire is active but will not be deployed until the fire is at a minimum level of 50% containment. The BAER Team process is statutorily authorized and mandated to function for no longer than 3 years. As of July 12, 2013, the Rio Grande NF portion of the West Fork fire was determined to still be no more than 25% contained preventing the deployment of the BAER Team until later in the month when fire conditions are appropriate. The purpose of the emergency and immediate action is to provide mobilization ahead of the BAER Team arrival.

The report prepared by a BAER team is an emergency stabilization document that specifies treatments created by an interdisciplinary team of specialists during or immediately after the containment of a wildfire event. Specialists such as hydrologists, rangeland management specialists, biologists, archaeologists, and soil scientists as well as other potential professionals are assigned to prepare a BAER report. The effectiveness of the implementation of a BAER report relies on USDA Forest Service access to funding and to community involvement and leverage of additional funds and support.

Rio Grande Watershed Emergency Action Coordination Team (RWEACT)

Through an intentional collaboration and cooperation with the USDA Forest Service and all entities involved in the fire suppression efforts and public safety interests associated with the West Fork Complex fire, a “pre-BAER” team assembled to address the immediate and obvious threats being observed. An initial community meeting was held on July 1, 2013, and the Rio Grande Watershed Emergency Action Coordination Team (RWEACT) assembled for the first time on July 3, 2013 in South Fork at the South Fork Firehouse. The team was formed at the urging and with the cooperative efforts of the San Luis Valley Irrigation District and Forest Supervisor’s Office for the Rio Grande National Forest and in full support and cooperation of the Boards of County Commissioners from Hinsdale, Mineral and Rio Grande Counties and the Colorado Water Conservation Board. To help the RWEACT function in an expedited manner, Hinsdale County is serving as the Fiscal Agent for the RWEACT.

Organizations and partnership continue to join the efforts so this list is not exhaustive but includes the San Luis Valley Irrigation District; San Luis Valley Water Conservation District; USDA Forest Service; Rio Grande National Forest; private landowners (4UR Ranch, Broad Acres, Broken Arrow Ranch); RiGHT Rio Grande Headwaters Land Trust; Natural Resource Conservation Service; Hinsdale County Board of County Commissioners, Emergency Management and Sheriff; Mineral County Board of County Commissioners, Public Health, Public Information and Sheriff; Rio Grande County Board of County Commissioners, Emergency Management and Sheriff; Colorado Office of Emergency Management; Trout

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Unlimited; Federal Emergency Management Association; Colorado State Division of Water Resources; Colorado Parks and Wildlife; DiNatale Water Consultants; Colorado Department of Local Affairs; the Towns/Cities of Creede, South Fork, Lake City, and Del Norte; San Luis Valley Rural Electric Association; Colorado Department of Transportation; Team Murphy Realty; Colorado Division of Fire Prevention and Control; Rue Logging; Division of Homeland Security and Emergency Management; State Senator Larry Crowder and State Representative Edward Vigil; Rio Grande Headwaters Restoration; Rio Grande Water Users; Black Creek Hydrology; Division of Water Resources, and many more.

The primary purpose of RWEACT is to bring together local, state and federal partners to develop an effective, coordinated approach for immediate actions to directly address fire-caused natural hazards resulting in the need for the emergent protection of human life and property and the natural health of the Rio Grande River watershed and its environment. This includes immediate implementation of monitoring efforts to determine risk and a subsequent public information campaign for safety relating to flash floods and debris flows. Secondary purposes of RWEACT include the increased collaboration and leverage with mission-aligned agencies for fire recovery efforts and the identification of economic impacts and potential recovery opportunities. Sub-committee work groups for RWEACT include Hydrological, Emergency Management, Natural Resources, Economic Recovery, and Communications.

It is critical for the RWEACT to work as a transition mechanism to and in conjunction with the USDA Forest Service BAER Team to determine on-going or new emergent public safety hazards and strategies for detection and notification in the interest of public safety. In addition, RWEACT will cooperate with the BAER Team in the development of strategies for watershed protection (identifying short-term goals) and watershed restoration (which includes both short-term and long-term goals and objectives) and assist with implementation plans to address the areas of the Rio Grande Basin being impacted by the recent fires in the headwaters region. Watershed protection and restoration will take into account all natural resource attributes of the watershed including consumptive and non-consumptive elements (land, plants, water and wildlife). Long-term watershed health and the identification and analysis of methods and projects to achieve this health are vital to the ability to meet both future consumptive and non-consumptive basin needs and will be a focus of this effort. Additional and peripheral goals include the initial development of a planned economic recovery of the region.

- Strategy #1: Establish RWEACT structure and function
- Strategy #2: Install instruments for monitoring
- Strategy #3: Implement early warning protocol
- Strategy #4: Analyze and improve natural resource field conditions
- Strategy #5: Communicate key messages
- Strategy #6: Identify and implement economic recovery action

Strategy #1: Establish the RWEACT structure and function

Goal: To create an emergency action team composed of the multi-jurisdictional experts necessary to carry out the vision of RWEACT. The team will protect human life and property from natural hazards associated with the West Fork Complex fire. It will also protect the integrity of the upper Rio Grande watershed from the environmental hazards associated with the fire.



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Outcomes:

- Create a functioning body to work closely with all agencies and organizations and specifically with the USDA Forest Service and the FS BAER Team and Implementation.
- Develop and coordinate appropriate Scope of Work and Budgets for submission to CWCB in Phase I (Emergency) and Phase II (Restoration).
- Hold meetings; establish work groups and open and maintain lines of communication and cooperation between work groups and with the various federal, state and local governments as well as the non-governmental groups and interested members of the public.
- Coordinate with the USDA Forest Service safety personnel for burned area access to make field assessment efforts needed and the deployment of equipment. This includes access by vehicle and helicopter and throughout all phases of partnership.
- Conduct presentations for stakeholder outreach efforts to inform various entities of the efforts and progress of RWEACT.
- Coordinate purchasing of equipment through the Fiscal Agent (Hinsdale County).
- Develop and deliver reports as needed for the RWEACT effort.

RWEACT Coordinator:
Tom Spezze (DiNatale Water Consulting)

Strategy #2: Install instruments for monitoring

Goal:

To establish a “pre-BAER” effort focused on the emergent and early detection and public warning system for flash-flood and other natural resource-related events expected to occur within the Rio Grande watershed as a result of the severely burned areas associated with the West Fork Complex Fire.

Outcomes:

- Provide support for the BAER team in the review of BARC (Burned Area Reflective Classification) map to determine areas of relative burn severity.
- Coordinate to make field assessments of the burned areas to determine the highest priorities for hydrologic detection equipment.
- Establish a list of watershed priority areas (including high hazard dams) for the installation of rain fall or water flow gauging systems to serve in the early detection of flash flood or debris flow events associated with heavy rainfall events.
- Determine the most efficient and accurate equipment for determining water level changes in streams that might be associated with potential flash flood events.

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- Determine the appropriate communication method for collecting and distributing water flow data for emergency warnings to the appropriate authorities for public notification.
- Receive, assemble, deploy and install rain gauge and stream gauge equipment into the high priority watershed areas defined by the team.
- Retain the responsibility for monitoring and operation and maintenance of these gauging stations to ensure functionality throughout Phase I.
- Research and employ appropriate methods for temporary improvements to National Weather Service tracking, including a temporary Doppler system.

Hydrological Committee Lead:
Steve Belz (Black Creek Hydrology)

Strategy #3: Implement early warning protocol

Goal: Protection of life and safety in areas affected by the West Fork Complex fire.

Outcomes:

- Determine trigger points for early notification and warning systems utilizing implemented instrumentation.
- Develop Flood Plan & Protocol Procedures and coordinate with partners for implementation.

Emergency Management Committee Lead:
Jerry Dennis (Rio Grande County Emergency Manager)

Strategy #4: Analyze and improve natural resource field conditions

Goals: To establish and verify field conditions including high-risk watershed areas and recommend best practices for improvements. To provide additional efforts for monitoring field conditions, mapping and modeling. To seek assistance for innovative restoration efforts.

Outcomes:

- Identify key natural and cultural resources in and around the burned area.
- Work with the BAER team to incorporate resources of concern in their assessment.
- Work cooperatively with the USFS, using resource data and the BAER report, to develop priority projects within key watersheds.
- Assist in data collection, including water quality and debris flow studies, within the watershed to document the effects of the fire.
- Secure funding for and implement priority projects.

Natural Resources Committee Lead:
Heather Dutton (Rio Grande Headwaters Restoration Project)

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Strategy #5: Communicate key messages

Goals:

To develop and distribute materials based on the Communications Plan which includes Background, Management Objectives, Communications Goals & Objectives, Key Messages, Target Audiences, and a Strategic Action Plan. The purpose is to provide emergency information to residents and the public of Hinsdale, Mineral, and Rio Grande counties to potential hazards following the West Fork Complex wildfire event.

To provide information about environmental restoration efforts for wildfire recovery.

Outcomes:

- To provide public information ahead of a potential event
- To increase public safety during rain events through preparedness
- To increase access to monitoring information
- To provide public information about forest restoration, water quality, hydrological function, and watershed health
- To provide public information about fire severity, values at risk, and mitigating efforts

Deliverables:

- Form a Communications work group to finalize Communications Plan and Implementation Strategy (Members: USDA Forest Service, Hinsdale / Mineral / Rio Grande counties, Office of Emergency Management, Rio Grande Restoration Project, Rio Grande Conservation Education & Watershed)
- Identify Key Messages for information distribution.
- Create identified public information pieces – text development and fabrication.
- Develop logo and design elements.
- Purchase classified and display advertising in regional and local newspapers.
- Purchase and distribute electronic public outreach including a website and electronic newsletters.
- Fabricate and purchase signs for Move Up Not Out signage.
- Develop additional outreach and marketing deliverables including coasters for mass distribution, tabletop displays for key locations, media tours, posters, powerpoint presentations, reports, and other tactics identified.
- Work in conjunction with BAER Team and public outreach for leveraged messages.

Communication Committee Lead:
Kristine Borchers (RWEACT, Hinsdale County)



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Strategy #6: Identify and implement economic recovery action

Goal: To provide an intentional collaboration forum for organizations seeking to recover economic impacts (both short-term and long-term) from the wildfire event.

Outcomes:

- Support the efforts of the Alamosa and Rio Grande counties “Stronger Than the Fire”
- Participate with the Colorado Tourism Office as appropriate
- Assist the Small Business Agency (SBA) with business loans related to the disaster designation
- Develop and support a “Buy Local” program identifying the micro-economic benefit of dollar distribution throughout a community
- Develop long-term strategies for impacts on outdoor recreation (fishing and hunting) and scenic assets.
- Support local groups developing around relief efforts.
- Work with the USDA Forest Service and Colorado State Forest Service for additional wood utilization efforts and professional development workshops, including assistance from FEMA and the CWCBC for Flood Insurance Workshops and other events.
- Work with USDA Forest Service to replace economic impacts of previously sold Timber Sale areas for new areas or replacement areas.

Economic Recovery Committee Lead
Karla Shriver (Rio Grande County Commissioner)

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