SAN MIGUEL RIVER RANGER REPORT 2010

The eighteenth season of the River Ranger Program once again focused on watershed resource and recreation monitoring, and environmental education. The river ranger works to monitor and mitigate impacts on variously owned and managed lands in the watershed. 2010 funding was provided by USFS, BLM, EPA, San Miguel County, Towns of Telluride, Mountain Village, and Ophir, The Nature Conservancy, Telluride Foundation, Southwestern Water Conservation District and private donations.

Resource monitoring and protection efforts continued. The river ranger again secured funding to collect surface water samples monthly May through October to continue to follow up previous summers of air quality monitoring. Surface water sampling helps determine how air pollution documented previously is affecting water quality in Waterfall creek.

Monitoring of previously restored sites continues. Some native grasses and spruce trees have survived in revegetation areas. Restriction of motorized access reduces garbage and resource impacts, while areas with motorized access or bordering the highway continue to be relentlessly trashed. BLM facilities in the river corridor consolidate recreation impacts, and provide additional toilets and boat ramps. Use at these areas has increased in the seasons since construction was completed.

River patrols documented commercial and private use patterns, sediment release, water levels, weather patterns, spreading of invasive plants and wildlife sightings. In addition coordination of strainer removal by BLM rangers and local river guides was performed. Efforts were made to alert boaters to hazards via the local radio station and the email list of the local whitewater group.

Monthly monitoring of upper watershed tributary water quality and quantity was continued. Water quality measurements were taken monthly during summer at approximately 30 locations, where tributaries meet the San Miguel River. The database was updated. Information is shared with local government and other interested agencies. Additional monitoring funding from SWCD allowed continuation and expansion of the alpine water quality monitoring program. Many watershed tributaries and high alpine lakes were measured near and above timberline. A GPS unit was used to document exact locations of measurements. The photo documentation program was continued, with ongoing emphasis on upstream tributaries, high country mining effects, and in channel river conditions. Photos were used in watershed photo cards.

Recreation use monitoring continued, with a focus on documenting commercial and private river use for BLM, and trail and high country use. River patrols were performed specifically to monitor weekend recreational and commercial use of popular stretches of river. In addition, extensive vehicle and hiking patrols emphasized educational contacts and distribution of the Leave No Trace/ San Miguel Watershed map/brochures. Watershed brochure boxes were

maintained at many public access recreation sites, and brochures provided to businesses, outfitters, and visitor information centers throughout the watershed.

Efforts continued to facilitate interagency cooperation in watershed management. The river ranger remained involved in watershed coalition activities. Educational efforts continued, with a watershed newsletter produced in June, serving as the report card update. The newsletter is designed to help keep citizens, government agencies, and private groups informed about current watershed issues. It is distributed throughout the watershed, and beyond to partner agencies. It is mailed to approximately 1000 watershed citizens. It will be posted on the watershed website at www.sanmiguelwatershed.org. Previous watershed newsletters, river reports, and scientific data are also posted there. The Riverwatch program continued. This statewide program, sponsored by CDOW, provides metals lab testing to watershed groups and schools. Since 2007, the river ranger has been sampling 4-6 locations on the Howard Fork of the San Miguel to provide more information about mining impacts on water quality, especially pertaining to current tailings cleanup by the USFS. State labs test for metals and nutrients, and data is entered into a statewide database, available to the public at riverwatch@state.co.us.

The monthly isotope sampling of the Carbonero adit was completed in June 2010. This project, funded by EPA, uses "molecular fingerprinting" to determine the age of water, as part of ongoing research towards understanding where the water originates. This project is the latest in a number of cooperative projects aimed towards eventual Howard Fork cleanup. The next step, drilling wells above the adit, is scheduled to occur later in September.

In summary, progress continues toward better recreation and resource management. The cooperative funding provided for the last EIGHTEEN seasons allows the river ranger to work with watershed partners to better manage and protect the San Miguel Watershed, preserve its riparian ecosystems, promote responsible recreation, and monitor resource conditions. The funding is greatly appreciated, and the river ranger hopes to continue to work for our watershed in the future.