

STATE OF THE SAN MIGUEL ANNUAL REPORT 2011 OVERVIEW

During the 2010/11 winter the headwaters of the San Miguel received close to average precipitation. Quite a bit of snow fell during April and May, and temperatures stayed cool, bringing us from below to above average snowpack. The upper and lower San Miguel reached flows over 1700 during early June, causing some out-of bank flooding and moving lots of wood and obstacles in the upper river. After this peak, the river maintained boatable flows until early August. The later part of July was quite wet, with several significant mudslides. The GMUG National Forest worked on a Watershed Vulnerability Assessment during 2011 to develop methods for determining relative vulnerability to predicted climate changes. The USFS also worked on a Watershed Condition Framework, designed to help identify priority sub-watersheds for protection or restoration.

HEADWATERS AREAS

The headwaters of the San Miguel consist of the Wilson, Sneffels, and Trout Lake/Ophir ranges. Wilderness designation protects portions of the Lizard Head and Mt. Sneffels ranges. A proposal for designating additional wilderness in the watershed has gained local support and is again receiving attention from Colorado senators and Congressmen. High elevation lakes and streams were monitored throughout the watershed for water quality parameters during 2011 by the watershed ranger, with funding received for the fourth year from Southwestern Water Conservation District. Data is currently being loaded onto the new Coalition website at sanmiguelwatershed.org.

Below the peaks, the mesas surrounding Telluride continue to be developed, especially Turkey Creek, Deep Creek, Hastings, Specie, and Wilson Mesas. The mesas traditionally have provided wildlife habitat and migration corridors, and an arena for agriculture and ranching. Efforts continue to protect wildlife habitat and migration corridors, as development continues. SADS-sudden aspen death syndrome, has appeared throughout the watershed. The disease attacks aspen trees most commonly on south facing hillsides at lower elevations. Drought tends to weaken the trees. The spruce budworm has also become more prevalent in the upper watershed, preying on spruce and Douglas and sub-alpine fir. Educational tree tours about forest health sponsored by TNCC were held again.

HOWARDS FORK

This tributary drainage is a narrow steep valley, which holds the town of Ophir. Heavy impacts from mining contaminate the stream to the point that few fish survive. The town has worked for many years to preserve open space in the valley and its main side canyons, Waterfall and Swamp, with assistance from the San Miguel Conservation Foundation. Efforts by the TPL to purchase Pauls claims in the Ophir high country with Land and Water Conservation Funds, and then transfer ownership to the USFS will continue into the future. The EPA has continued to support monitoring work in the Howard Fork valley, partnering with the State of Colorado, USFS, TLR, and SMWC to collect further water quality data to work towards additional future mine cleanup efforts. In fall 2009, the EPA performed a remediation project on the Northstar Millsite, a privately owned mining claim where the mill that processed the Carbonero tailings is located. During late September 2011, the EPA and State of Colorado partnered to attempt to drill wells above the Carbonero adit, in an effort to further research the source of the adit water, which erodes the hillside so strongly. Unfortunately, the drilling attempts missed the mine workings. In addition, the EPA, State, and USFS met to look at options for a remediation project to address the Carribeau adit. The town of Ophir is currently changing the source of drinking water to surface water in Waterfall Creek, with funding from Department of Local Affairs, and a loan from the Federal Reinvestment and Recovery Act. A cleanup of the Carbonero tailings by the USFS was completed during summer 2010. SMCF holds a conservation easement on the Ferric Oxide Placer to protect rare wetlands-and iron bog and fens. Tailings were pulled back from the Howard Fork, recontoured, and covered with a geomembrane layer, and rock over that. Stabilizing rip-rap supports the pile, and drainage is diverted away from wetlands. A diversion just above the Ophir Post Office feeds water to the Ames hydroelectric plant. Work occurred on the leaching pond below the Silverbelle tailings, below the highway to reduce metals leaching into the Howard Fork. Additional tailings cleanup is ongoing at the site. Currently, Sheep Mountain Alliance is suing the property owner, PacificCorp over violations of the Clean Water Act.

LAKE FORK

The dams on Hope Lake and Trout Lake were created to feed the Ames power plant. Currently, residential development continues in the Trout Lake and San Bernardo areas. Acid mine leaching may be occurring from the Matterhorn, San Bernardo, and Butterfly mine sites. A large, unstable landslide area overhangs the river just below the confluence of the Lake Fork with Wilson Creek. Directly across the river from that confluence a gravel pit sits on private property along the old railroad grade. Immediately below the Lake Fork drops over two waterfalls and into the Ames end of the Ilium valley. A flow bypass pipe is being installed off the existing outlet below Trout Lake Dam by Public Service to accurately measure and release the required minimum streamflow discharged into the Lake Fork, as part of the issuance of the new FERC permit for the Ames Power Plant.

SOUTH FORK

Just below the small subdivision of Ames, and the confluence of the Lake Fork and Howard Fork, the river goes through a relatively pristine area, consisting of a mix of USFS lands, private lands, and a preserve protected by the Nature Conservancy. Good wildlife habitat, with spectacular view of the Ophir Needles and Ames wall, is relatively free from recreation and mining impacts. A new stream gauge has been installed on the Nature Conservancy preserve to measure South Fork river flow levels, as a part of the settlement and reissuance of the FERC permit for the Ames hydro plant.

Further downstream former USFS camping areas have been converted to day use areas, to mitigate former grazing and recreation impacts. Road closures and revegetation efforts are allowing riparian vegetation to start healing from heavy impacts in the past.

A mudslide draining from Turkey Creek sometimes overflows in the river, and can create sedimentation problems. Extensive beaver dams have thrived in the area. Further downstream, cottonwoods in the old Mary E and Sheep Corrals camping areas have been damaged by fluctuating/decreasing water table levels, possibly caused by gravel mining in the confluence area. The Mary E campground is closed until further notice. Gravel mining near the confluence of the South Fork and the mainstem caused stream channel undercutting to move both upstream and downstream from the confluence. Revegetation efforts of formerly mined areas at the confluence, funded by grant money from the National Fish and Wildlife Foundation and USFS seem to be getting more native plants established.

Also of note in the South Fork are ice flows, which were taken into consideration in the FERC license renewal process of the Ames Power Plant. The ice flows may be affected by water temperatures influenced by the release of flows from the Trout Lake Dam. During winter 10/11, water column mixers were again installed near the lake's outflow to cool lake-bottom temperatures. Flow release modifications for power peaking from the power plant outlet combined with the cooler lake-bottom temperatures were designed to encourage the formation of a stable ice cover on the South Fork and mainstem. Studies continue. The new license for the Ames Hydropower plant was negotiated by representatives of USFS, Co. Dept. of Natural Resources, and Public Service of Colorado, and defines changes to power plant operations affecting flows in the South Fork. In addition, Public Service was given a period of six years to reconstruct Priest Lake, which will be owned and operated by USFS as a storage facility used primarily for recreation and fisheries purposes.

MAINSTEM

The mainstem of the San Miguel is formed by Bridalveil and Ingram falls. The Bridalveil hydropower plant continues to generate electricity at Bridalveil falls. The Idarado mine site, at the head of the valley, is currently in the post-construction monitoring phase of a Superfund cleanup project, administered by the State of Colorado, and designed to reduce impacts created by high country mining and tailings located along the main stem. The long-term goal is to improve and maintain water quality to zinc levels that allow brown trout to survive. The Town of Telluride continues work towards adding surface water from Blue Lake in Bridalveil basin to the town's water supply. During 2011 work began on a new water delivery pipeline following the Bridalveil switchbacks, and will continue during 2012. Bear Creek was purchased many years ago by the San Miguel Conservation Foundation, and is managed by the Town of Telluride, to protect resource values. Extensive development in and around the town of Telluride continues to impact the main stem through town. In recent years, the Town of Telluride received Natural Resource Damages funding, matching with other grant funds, to do two river restoration projects within the town limits. These projects worked to restore a more natural channel, and regenerate more native vegetation. Extensive storm water management work within the Town helps reduce impacts to water

quality from storm water runoff. The Town of Telluride continues to work to mitigate potential flood impacts of Cornet Creek. Water diversions for snowmaking and golf course watering deplete watershed stream flows on an annual basis. Tailings and channel diversions remain on the valley floor. During 2011, the Town of Telluride continued to work to implement a management plan for the Valley Floor. In February 2011, the Telluride Town Council approved the Valley Floor Trails/Conceptual River Restoration Plan. Work continued to develop a strategic approach for funding, permitting and implementation of the first phase of restoration of the San Miguel River on the valley floor. Remediation work in the Prospect Creek area of the valley floor has been completed by Telluride Ski and Golf. Tailings near Lawson Hill were constructed into a ball field. Remediation work for tailings on the valley floor near Boomerang is being negotiated by Idarado and the USFS. An access agreement for reclamation of the Society Turn tailings on the valley floor is being negotiated between Town of Telluride, Idarado, and State of Colorado. Keystone Gorge remains relatively pristine, providing an important wildlife migration corridor and riparian vegetation. A parcel containing the riparian corridor of the Keystone Gorge was acquired by the Nature Conservancy, which will protect riparian values long-term! This parcel was transferred to county ownership, after trail improvements and installation of two new bridges provided for public access.

MAINSTEM BELOW CONFLUENCE WITH SOUTH FORK

Impacts from recreation, mining, grazing, and development threaten the mainstem of the San Miguel as it winds its way through San Miguel and Norwood canyons, and eventually to its confluence with the Dolores. BLM continued the process of updating their land use plan for our watershed in 2011. BLM manages much of the river corridor, with both ACEC-Area of Critical Environmental Concern, and SRMA-Special Recreation Management Area designations in the canyon. During 2011, several sections of the San Miguel were found suitable for Wild and Scenic protective designation. During 2011, the USFS and CDOW continued work at Woods Lake on a native cutthroat trout restoration project. The vanadium cleanup project in the Silverpick area was completed late in 2010.

NORWOOD AREA

The "fish ladder" planned for many years was constructed during fall 2011 at the diversion dam for the CCC ditch, just a short ways below Horsefly Creek in Norwood Canyon. Grant funding from CDOW and Colorado Water Trust and many years of extensive partnership facilitated this project.

UNCOMPAGRE PLATEAU

The Uncompahgre Plateau Collaborative Restoration Project was one of only 10 communities in the US to be awarded a 10 year grant through the USDA's Collaborative Forest Landscape Restoration Program. The goal of the project is to enhance the resiliency, diversity and productivity of the native ecosystem on the Plateau using best available science and collaboration.

WEST END

Tamarisk eradication work in the lower end of the SM watershed has been completed. Ongoing work continues in the lower Dolores watershed. Maintenance will continue into the future.

A uranium mill is being proposed by Energy Fuels for the Paradox valley. The project's financial feasibility is contingent on the price of uranium. During 2011, CDPHE permitted this new uranium mill. Recently, EPA approved the mill's tailings impoundment and evaporation pond facilities, with several conditions, including submittal of a comprehensive surface and ground water monitoring plan to the EPA. The towns of Telluride and Ophir, and San Miguel County are collaborating on a baseline radionuclide study, designed to provide information on the current concentrations of trace metals and radionuclides associated with uranium ore in water and particulates before mining and milling operations commence. Monitoring will be designed to answer the questions of what are baseline levels of radioactive material and radiation in drinking water, groundwater, and snow accumulation in eastern San Miguel County.

Phase III of the Uravan Natural Resource Damage project, diverting intermittent drainages away from inactive uranium mines occurred during 2011.

CWCB decided to support an instream flow recommendation by CDOW and BLM seeking flows from Calamity Draw to the Dolores Confluence in September 2011. The instream flow is being recommended because of three fish species of concern-falnnel mouth sucker, bluehead sucker, and roundtail chub. Also, the San Miguel provided habitat for globally imperiled and other important riparian communities with its' free flowing river hydrology.