

River Protection Workgroup



Involving the public in protecting the natural values of selected streams while allowing water development to continue

River Protection Workgroup Information Sheet for the Animas River

<http://ocs.fortlewis.edu/riverprotection> (click on "RPW for the Animas River" on the left buttons)

This *Information Sheet* is prepared to support the discussions of participants involved in the **River Protection Workgroup for the Animas River** ("Workgroup"). Please refer to the Glossary of Terms and the Glossary of Agencies handouts for clarification on any terms used or agencies/entities mentioned (available on the Web site and at meetings).

Area of Focus (Area)

The Animas River helps define a region as a commerce corridor, source of a uniting sense of place, defining feature to both Silverton and Durango, and by tying together a region whose identity is intertwined with mining, both past and present.

This Information Sheet provides information about the whole watershed of the Animas River upstream of Baker's Bridge, so as to provide a broad context for the Workgroup's discussions. The area drained by the Animas River at Baker's Bridge falls in La Plata and San Juan Counties. Throughout the document this area will be referred to as the Area of Focus. However, it is important to recognize that the Workgroup may elect to direct its discussions, conclusions and/or recommendations at the whole Area of Focus, or at much more limited areas within that larger watershed boundary. There is no foregone conclusion that the Workgroup will take a broad watershed approach, although it might choose to do so.

About 42% of La Plata County is public land. In San Juan County, public federal lands account for about 86% of the county.

The *San Juan Public Lands (USFS/BLM) 2007 Draft Land Management Plan* (<http://ocs.fortlewis.edu/forestPlan/DEIS/>) found three (3) river segments totaling 43.25 miles in the Animas River Watershed above Baker's Bridge to be "Preliminarily Suitable" for the Wild and Scenic River (WSR) status. More details and information are provided below.

Values

The word “values” means what is special or important about the river and the watershed. All values are considered to be of equal priority and weight. The following is a list of values identified by the Workgroup in August, 2011. They are listed here as they were written on the flip chart during the meeting:

- desire to keep things as they are
- private land and water rights
- fewer regulations
- the terrain
- freedom
- tourism
- ability to make a livelihood in this community
- the train
- fall colors changing (scenery)
- mines, mining, mineral development (economic angle)
- equal access for motorized
- cultural tours
- picnicking in cars
- camping
- hunting
- wilderness – wild places where man leaves no influence and no human influence is evident
- general winter activities: ice skating, sledding, ice climbing, snowball throwing, snowshoeing
- motorized rec. – backcountry loop
- scenic byway
- sheep grazing
- four wheeling with all types of vehicles
- outfitting
- heritage tourism
- alternative energies
- historical sites
- clean water
- horseback riding
- water sports: boating, tubing
- building vibrant community for those who live here
- preserving special community for grandchildren
- develop capacity to deal with very hard community issues (presented as the term “black swans”)
- value of community being responsive to unexpected community problems
- timber harvesting
- educational opportunities
- outdoor education, research & tourism (the links between these)
- unusual things such as the iron fens
- community sustainability
- wildlife
- health and safety
- public lands access
- transportation
- rallies/competitions/iron horse/jamboree/community events/hard rock 100 (events that capitalize on the uniqueness of the area)
- healthy forest management
- transportation and future transportation – US Hwy 550, county roads need thought and protection
- federal/state cooperation to help with livelihoods & cooperative federal/state participation in general
- access to forests for fire protection

A comprehensive Values Statement was approved by consensus on December 19, 2011. This statement can be viewed at http://ocs.fortlewis.edu/riverprotection/animas/pdf/ANIMAS-VALUES-STATEMENT_2012.pdf.

- rescue services including ambulance
- invasive species knowledge and protection against
- healthy ecosystems
- rock climbing
- mountain biking
- water for sustaining life along the river for human and other, flows still driven by snow melt
- value local revenues to pay for services (i.e., retain adequate mill levy)
- the Animas as an undammed river
- local decision-making
- San Juan County is truly unique from any other county in state
- sense of place unique
- water and various uses of it (including produced water from mineral development)
- value for understanding that water contamination is complex and can be from natural sources

Next, this list of values below, which is in alphabetical order, was brainstormed by the RPW Steering Committee and added to by the Workgroup at the first two meetings. These areas may be duplicative with the list above:

Economic: Mining, private lands use and development, agricultural, domestic and municipal water supplies, commercial skiing, motorized and non-motorized recreation, and outfitting businesses (off-road tours, water-related recreation, hunting, fishing, etc.) form the economic foundation within the Area of Focus and downstream as well.

Fish: Rainbow, brown, brook, and cutthroat trout (both hybridized and non-hybridized fish) occupy the Animas River upstream of Baker's Bridge. Native mottled sculpin, bluehead sucker, and flannelmouth sucker occupy areas in and around Baker's Bridge, but probably are not present too much further upstream than the confluence with Cascade Creek. There are two Conservation Populations of Colorado cutthroat trout, each on creeks named Bear Creek (a Conservation Population of cutthroat trout is generally defined as being 90% or more genetically pure). The first is a tributary to the Animas River located upstream of Baker's Bridge and the other is a small tributary to Mineral Creek near Silverton. Grasshopper Creek also contains pure Colorado Cutthroats.

Above the confluence with Cement Creek, the Animas River and a few of the tributaries such as Cunningham, Minnie, and Maggie gulches show improving fish populations from historic surveys. The improvements are most likely associated with better water quality coming from the mine reclamation efforts completed by the Animas River Stakeholders Group. On the flipside, the water quality is so impaired in Mineral Creek near Silverton that no fish occupy that reach. Mineral Creek acts as a "chemical" fish barrier, protecting the Colorado cutthroat trout in Bear Creek from non-native salmonids. Some of the high lakes may act as a refuge for Colorado cutthroat trout.

The Animas River is split into a number of management reaches by the CPW (Colorado Parks and Wildlife). From Baker's Bridge to Mineral Creek is Animas #3 and from Mineral Creek to the headwaters is Animas #4. Both are managed as a "coldwater stocked stream." Standard regulations apply in the mainstem of the Animas. In addition to the four (4) trout per day bag limit, an additional 10 brook trout can be harvested if they are less than eight inches. Most tributary streams to the Animas #1 and #2 are classified and managed as "salmonid recreation streams 302" where stocking is only done to restore a native or wild fishery. Exceptions are the S. Fork of Mineral Creek where catchable rainbows are stocked. Most of the high lakes are stocked with fingerling Colorado cutthroat trout (except Balsam Lake which is naturally high in heavy metals and does not support fish), as are the drive-to lakes like Big and Little Molas, and Andrews Lakes. The CDOW does not stock Electra Lake but it is routinely stocked with rainbow and cutthroat trout by the homeowners association. (Source: Jim White, fish biologist, CPW.)

Forest Resources and Forest Health: Since its early days, the towns and industry in the Area of Focus have benefited from the wealth of timber in the surrounding landscape. Local logging supplied the lumber for mining structures, as well as homes, commercial buildings, and the railroad. There have been numerous sawmills set up in different parts of the Area, including an early one on the southwest side of Silverton. Many of the mountains were logged in the past, and this can be seen in repeated photography at various locations. While there is little timber production occurring in the Area of Focus today, the health of the spruce fir, aspen, mixed conifer and ponderosa pine forests continues to be valued.

Healthy Natural Landscape: The Animas Watershed above Baker's Bridge is valuable because it provides large areas of natural habitat encompassing a diversity of life zones, from ponderosa pine up to alpine, with abundant stream and natural lake habitat. There are extensive healthy and relatively intact areas providing wildlife movement corridors that maintain a wild quality. The Weminuche Wilderness is the largest Wilderness area in Colorado, and makes up about 25% of the Area of Focus.

Human Values: Residents of Silverton and San Juan County as well as those living in communities downstream value their ability to continue to live in the area and make a sustainable living through employment based on the plentiful natural resources of the area. Residents value the ability to make and influence decisions about how the public lands in the area are used and managed.

Minerals: Since 1873, the wealth of minerals in the mountains around Silverton has drawn prospectors, miners and the mining industry to the area. Mining families came from all over the United States as well as Europe to live and work in San Juan County. Silver, gold, copper, lead and zinc extracted by the hard and dangerous work of local miners, were the products that helped create a thriving town and community around the turn of the century. Copper and lead were economically important prior to 1910 and zinc after 1914. In the 1940 - 1970 periods, lead and zinc were the primary economic metals. While interest in extracting silver and gold remains, some new interest focuses on rare earth metals that are integral to today's high tech, green and defense industries, and for which the area holds potential.

Recreation: The area is part of a highly-used regional recreation center in close proximity to Durango and other Southwestern Colorado communities. It is used for a variety of recreational activities including:

- Backcountry skiing
- Backpacking
- Camping
- Whitewater boating
- Snowmobiling
- Hiking
- Fishing
- Horseback riding and horse packing
- Hunting
- Mountaineering
- OHV use (Off Highway Vehicle)
- Mountain biking
- Rock climbing
- Commercial skiing
- Durango and Silverton Narrow Gauge Railroad

Regional Identity: The Animas River helps define the region as a commerce corridor, a source of a uniting sense of place, and as a defining feature to both Silverton and Durango. It ties together a region whose identity is intertwined with mining, both past and present.

Scenery: The area affords dramatic mountain vistas to travelers passing through the upper Animas Valley on the San Juan Skyway. Stunning views can be seen from the historic Durango Silverton Narrow-Gauge Railroad or by traveling the 4-wheel drive route known as the Alpine Loop, and/or by hiking on the Colorado Trail or the Continental Divide trail.

Sensitive Plants and Plant Communities: The Colorado Bureau of Land Management (BLM) State Director and the United States Forest Service (USFS) Region 2 Forester both identify lists of Sensitive Species of animals and plants for which population viability is a concern based on significant current or predicted downward trends in populations and/or habitat (find them at: http://www.blm.gov/co/st/en/BLM_Programs/botany/Sensitive_Species_List_.html and <http://www.fs.fed.us/r2/projects/scp/sensitivespecies/>). Also, refer to the handout entitled: *Checklist of sensitive plant species known to occur, or with potential to occur, in the Animas River drainage above the San Juan National Forest boundary*. There are no occurrences of plant species listed under the federal Endangered Species Act. For plants, the Endangered Species Act protections only apply to federal lands and actions, not to private lands.

Plant communities are associations of plant species that tend to occur together on the landscape. Several globally rare and sensitive plant communities occur within the Area of Focus. An iron fen is a wetland plant community supported by unusual geologic and hydrologic conditions and composed of very rare plants. Currently there are only 13 iron fens known globally, four of which occur in San Juan County on Cement Creek and Mineral Creek. A rare plant community supporting Altai cottongrass and clustered sedge grows near the stream in Maggie Gulch. The cottongrass is vulnerable in the state of Colorado and the clustered sedge is considered globally vulnerable. Altai cottongrass and thicketleaf whitlow grass communities, considered vulnerable in Colorado, grow along Cinnamon Creek and Maggie Gulch.

Terrestrial wildlife: Some of the wildlife species common in the area include: elk, mule deer, big horn sheep, black bear, coyote, bobcat, mountain lion, beaver, pika and snowshoe hare. Mountain goats and moose also use the area. The CPW reintroduced Canada lynx to the area in 1999.

The CPW *State Wildlife Action Plan* (SWAP) identifies species most in need of proactive conservation measures. The SWAP identifies a 2-tiered list of *Species of Greatest Conservation Need*, with Tier I species having the most urgent need. Some of these species are also listed on the *State Threatened & Endangered Species List*. The USFS and BLM each identify lists of Sensitive Species, some of which are known or likely to occur in the area. Finally, the US Fish and Wildlife Service maintain a list of species identified as threatened or endangered under the Endangered Species Act. The only ESA listed species likely to occur in the Area of Focus are the lynx and the southwestern willow flycatcher. A separate handout is available summarizing this information for the Area of Focus.

USFS-Identified Outstandingly Remarkable Values or “ORVs”: As part of its mandated evaluation of rivers under the Wild and Scenic River (WSR) Act, the USFS analyzes rivers for any river-related values that are unique, rare, or exemplary, and that are significant on a regional or national scale. These features are identified as “Outstandingly Remarkable Values” (ORVs). The chart below provides a description of the ORVs identified for the three (3) segments found to be preliminarily suitable for designation under the WSR Act in the *San Juan Public Lands 2007 Draft Land Management Plan*. For more detail, refer to Appendix D, pages D-80 to 88 of the Plan for a complete description of the values associated with each of the segments and the WSR Suitability Analysis, including: 1) characteristics of the river, 2) current status of land ownership and use, and 3) potential uses and effects of WSR status on those uses (find it at: <http://ocs.fortlewis.edu/forestPlan/DEIS/>).

ORVs for River Segments found to be “Preliminarily Suitable” for WSR:

Animas River – Baker’s Bridge to Silverton

Recreation and Scenery: The Durango-Silverton Narrow Gauge Railroad runs along the river through this segment. The railroad draws more than 146,000 visitors annually from all over the world to see the canyon and scenery associated with the river. The Upper Animas provides the highest commercial put-in points in Colorado, and the Class V whitewater is one of just a few rivers in Colorado that provides this extreme experience for commercial rafters.

Cultural/Historical: The Animas Canyon wagon road was the first transportation route to connect Silverton to Animas City and Durango.

Mineral Creek

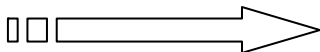
Recreation and scenery: Mineral Creek is along the San Juan Skyway, designated as an All-American Road and a National Scenic Byway. The Skyway attracts national and international visitors. Scenic values include wetlands and colorful geology from exposed mineral/ore deposits. The creek runs through a U-shaped glacial valley marked by avalanche runs where aspen grows.

Ecology: The Chattanooga iron fen borders Mineral Creek and supports a rare moss, sphagnum balticum that has not been documented anywhere else in the continental United States. Currently, there are only 13 iron fens known globally, four of which occur in San Juan County.

South Fork Mineral Creek (and portions of Cataract Creek, Porcupine Creek and unnamed tributaries)

Ecology: There is an iron fen/wetland complex at the mouth of South Fork Mineral Creek. Again, currently there are only 13 iron fens known globally, four of which occur in San Juan County.

Wildlife: Four breeding colonies of black swifts (a bird type) occur at waterfalls within South Fork Mineral Creek corridor, on Porcupine Creek, Cataract Creek and unnamed tributaries. The species nests behind or adjacent to waterfalls, where the mists water the mosses that make up the nest. The San Juan Planning area provides a significant contribution to the species’ worldwide breeding distribution, which is limited to a narrow portion of the Rocky Mountains from Mexico to British Columbia and a narrow band along sea cliffs from California to Alaska.



Maps Available on the Web site.....

[Animas River Map for the Workgroup - done by the Colorado Division of Water Resources](#)

[Additional protections map provided by the San Juan Public Lands Center](#)

[Map of San Juan County Roads](#)

Link: <http://ocs.fortlewis.edu/riverprotection/animas/animasMaps.htm>

Land and Water Protections Currently in Place

County Level:

County Land Use Codes provide some protections. In San Juan County, Boulder Gulch and Bear Creek are sources of water for the Town of Silverton. They have been withdrawn from disturbance by the county land-use code. Also, San Juan County Land Use Code specifies view corridors in a “scenic overlay” where the county does require mitigation for activities. These corridors do not remove the mining “use by right,” but can affect the way land uses are carried out. The San Juan County Land Use Code specifies a 200ft building setback from the river.

La Plata County also has various protections in its Land Use Code (http://co.laplata.co.us/departments_officials/planning). Current protections for the Animas River in La Plata County’s code include: a 50 foot setback from rivers and streams; residential use allowed on privately owned land at a density of one unit per 15 acres within the Animas Valley Land Use Planning Area; and residential use allowed on privately owned land at a density of one unit per 3 acres within the North County Land Use District.

Federal Level:

In the Workgroup meetings, members discussed that an array of laws that affect both land and water and other related issues in the Area of Focus can be considered protections. What follows is an inventory of the laws the Workgroup mentioned. They are covered only briefly with available links for obtaining more information.

-Federal Energy Regulatory Commission (FERC):

The FERC is an agency that regulates the interstate transmission of electricity, natural gas, and oil. The FERC reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines, as well as licensing hydropower projects. Some additional responsibilities include:

- Regulating the transmission and wholesale sales of electricity in interstate commerce;
- Regulating the transmission and sale of natural gas for resale in interstate commerce;
- Regulating the transportation of oil by pipeline in interstate commerce;
- Approving siting and abandonment of interstate natural gas pipelines and storage facilities;
- Reviewing siting application for electric transmission projects under limited circumstances;
- Licensing and inspects private, municipal, and state hydroelectric projects;
- Protecting the reliability of the high voltage interstate transmission system through mandatory reliability standards; and
- Overseeing environmental matters related to natural gas and hydroelectricity projects and other matters.

-Heritage Resource Laws:

Heritage resources are protected by the Antiquities Act of 1906; the National Historic Preservation Act (NHPA) of 1966; and other legislation including NEPA (National Environmental Policy Act). Other relevant laws include the Archaeological and Historical Conservation Act of 1974; the Archaeological Resources Protection Act of 1979 and its regulations; the American Indian Religious Freedom Act; and the Native American Graves Protection and Repatriation Act of 1990. The 1971 Executive Order No. 11593 also requires that cultural resources be protected. Find out more at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Wildlife Laws:

Threatened and endangered flora and fauna are protected under the Endangered Species Act of 1973 (ESA). The Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act protect other sensitive wildlife species. Find out more at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Clean Air Act:

The 1970 Clean Air Act, as amended (1990), establishes national ambient air quality standards to control air pollution. In Colorado, the state oversees air quality regulations and standards for stationary sources of air pollution. Impacts to air quality are managed through a case-by-case process. Find out more at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Clean Water Act:

The Federal Water Pollution Control Act (AKA “the Clean Water Act”), protects surface water resources from pollution. Section 402 of the Clean Water Act directs the U.S. Environmental Protection Agency (EPA) to develop a phased approach to regulate stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) program. Land disturbing activities may require permit coverage through a NPDES storm water discharge, depending on the acreage disturbed. Additionally, a U.S. Army Corps of Engineers (USACE) Section 404 Permit for the discharge of dredge and fill materials may also be required. Necessary permits and approvals may be required prior to any disturbance activities. Find out more at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Environmental Justice Executive Order:

Executive Order 12898 of 1994, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires federal agencies to ensure that proposed projects under their jurisdictions do not cause a disproportionate environmental impact that would affect any group of people because of a lack of political or economic strength. Environmental justice requires, "...the fair treatment of people of all races, cultures, incomes, and educational levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." Find out more at:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Federal Land Policy and Management Act of 1976 (FLPMA):

FLPMA specifies that: “. . . the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use . . .”

Through FLPMA, Congress directed that public lands will be retained in Federal ownership unless disposal of a particular parcel serves the national interest. The Act specifies that the

United States receive fair market value for the use of the public lands and their resources unless otherwise provided for by statute. FLPMA requires the BLM to: "...use and observe the principles of multiple use and sustained yield" in developing land use plans for public lands. Multiple use involves: "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources..." (FLPMA, Section 103). Sustained yield is: "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use" (FLPMA, Section 103). Find out more at: http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Locatable Minerals:

Locatable minerals are managed under the *General Mining Law of 1872*. Federal mineral estate in areas not under withdrawal will be open to entry and location under the general mining laws. Plans of operation will be required for proposed locatable mineral activity on the following lands: 1) lands under wilderness review, 2) lands closed to OHV travel, and 3) lands within designated Areas of Critical Environmental Concern (ACECs). Link:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

The *Multiple Use Mining Act of 1955* details the classification of locatable minerals and establishes that unpatented mining claims may not be used for any purpose other than prospecting, mining, or processing operations upon the land. Link:

http://www.fs.usda.gov/wps/portal/fsinternet/lut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwtDDw9_Al8zPyhQoYAOUjMeXDFoDy-HWHg-zDrx8kb4ADOBro-3nk56bqF-RGGGSZOCcAPI8eX8l/dl3/d3/L2dJOSEvUUt3OS9ZOnZ3LzZfMjAwMDAwMDBBODBPSEhWTjJNMDAwMDAwMDAl/?navtype=BROWSEBYSUBJECT&cid=stelprdb5167636&navid=1601200000000000&pnavid=1600000000000000&ss=1102&position=Not%2520Yet%2520Determined.Html&ttype=detail&pname=Region%2520-%2520Resource%2520Management

In addition to the laws listed above, the following are federal protections for land or water.

-Roadless Area:

Portions of the East Animas (16,864 acres), Weminuche Adjacent (38,410 acres), and all of the West Needles (4,497 acres) 2006 Inventoried Roadless Areas fall within the Area of Focus. The 2001 Roadless Area Conservation Rule prohibits road construction and timber harvest, with limited exceptions, in Inventoried Roadless Areas. The 2001 rule is currently in litigation with different courts issuing conflicting decisions. It seems likely that some version of a roadless rule – although it is not clear which one (the Colorado Rule or the Federal Rule) – will be in place in the future, restricting road construction and timber harvest.

-Wilderness:

Wilderness is defined by the Wilderness Act of 1964 as: "an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain..." Wilderness areas are managed to protect opportunities for solitude and unconfined, primitive recreation, and to remain without permanent improvements or human habitation. The Animas River drainage above Baker's Bridge includes 68,745 acres of the Weminuche Wilderness. Possession of motorized equipment and

mechanized means of transport is not permitted within the wilderness area. Use of aircraft to land or drop people or materials is prohibited, with the exception of agency-approved administrative use or emergency search-and-rescue operations.

-Wilderness Study Areas:

Four BLM Wilderness Study Areas, Handies Peak (1,061 acres), Weminuche Contiguous (1,619 acres), Whitehead Gulch (1,764 acres) and West Needles Contiguous (958 acres) totaling 5,402 acres fall entirely within the drainage. WSAs are managed to protect their wilderness character until Congress designates them as Wilderness Areas or releases them for multiple-use. The general standard for management of WSAs is to not allow actions or impacts that will preclude Congress's prerogatives in either designating the areas as wilderness or releasing them for other non-wilderness uses.

Some uses prohibited in a designated wilderness may be permitted in a WSA if they are temporary, do not create surface disturbance, or do not involve placement of permanent structures. The website:

http://www.blm.gov/wo/st/en/prog/blm_special_areas/NLCS/wilderness_study_areas/Wilderness_Study_Areas.html

provides information on the management of WSAs. The following identifies some of the specific management of WSAs.

- *Fire Management* – Natural and prescribed fires may be allowed to burn under certain conditions. In all cases, the equipment and tactics used to manage fires is designed to minimize the impact to wilderness values. When fire threatens human life or property, motorized equipment may be used to eliminate or minimize the threat.
- *Landowner Access* – Landowners have the right to access their property. In addition, owners of in-holdings may continue to use them for a wide variety of purposes.
- *Land Transactions* – Generally, public lands within WSAs may not be sold, leased, or exchanged.
- *Livestock Grazing* – The vast majority of WSAs are grazed by domestic livestock. Livestock grazing may continue in the same manner and degree as it took place in 1976. Developments such as fences, wells, and pipelines may be maintained. New livestock facilities may be constructed if they are temporary, or if they benefit overall management of wilderness values.
- *Mining* – Mineral activities that occurred in WSAs before 1976 may continue. Miners with valid claims may develop those claims even if wilderness characteristics are impaired. New mining claims can be located in WSAs. Activity on new claims must meet the non-impairment criteria and essentially avoid creating surface disturbance. Miners must contact the nearest BLM office before starting mineral development that has not been authorized. Plans of Operations are required for mining operations in WSAs.
- *Mineral Leasing* – Leases for such resources as oil, gas, and potash may operate according to the terms and conditions of the lease. No new leases will be issued in WSAs.
- *Recreation* – Off-highway vehicles and bicycles are not allowed in the WSAs within the Area of Focus.
- *Search and Rescue* – Search and rescue occurs within WSAs. Vehicles may be used on designated routes. Vehicles may be used for cross country travel when required in an emergency.
- *Wood Cutting* – Standing trees may not be cut for personal or commercial use.

Table 10 in the *Draft Land Management Plan* (below) provides a useful summary of the suitability of major management activities and uses within Designated Wilderness and Wilderness Study Areas (as well as other lands assigned to the MA 1 management prescription) within the San Juan Public Lands:

From DLMP p. 134, Table 10 - Management Area 1 - Natural Process Dominate, Suitability:

Activities and Uses	Allowable- Restricted- Prohibited
Wildland Fire Use	Allowable
Prescribed Burning	Allowable
Mechanical Fuels Treatment	Restricted (Mechanical Treatments would generally involve the use of hand-portable tools and generally be applied only in areas outside designated wilderness and WSAs)
Timber Harvesting as a Tool	Prohibited
Timber Production (schedule on a rotation basis)	Prohibited
Commercial Use of Special Forest Products and Firewood	Prohibited
Livestock Grazing	Allowable
Recreation Facilities	Prohibited
Motorized (Summer)	Prohibited
Motorized (Winter)	Prohibited
Non-motorized (Summer)	Allowable
Non-motorized (Winter)	Allowable
Motorized Tools for Administrative Work	Restricted (Motorized tools may be used in the Piedra Area and in areas outside of designated wilderness and WSAs.)
Mechanized (e.g., mountain bikes)	Restricted (Mountain bikes are suitable in MA 1 landscapes outside of designated wilderness and WSAs.)
Road Construction (permanent or temporary)	Prohibited
Minerals - Leasable (oil and gas, and other)	Restricted (Designated Wilderness is withdrawn from mineral leasing. WSAs are administratively not available for mineral leasing. A No Surface Occupancy Stipulation would be applied to IRAs outside of designated Wilderness and WSAs.)
Minerals - Saleable	Prohibited
Minerals - Locatable	Restricted (Designated Wilderness, and WSAs are withdrawn from locatable mineral entry. Limited road access and other constraints may increase the cost and complexity of locatable mineral exploration in other MA 1 lands.)

-Scenic, Historic and Backcountry Byways:

Portions of the San Juan Skyway and the Alpine Loop National Backcountry Byway pass through the Area of Focus. Consistent with the USFS National Scenic Byway Program goals, managers, "...guide the appropriate physical development of these travel corridors and their associated facilities, direct the conservation of unique and valued attributes surrounding the planning area, and provide leadership for Byway management that supports efforts to benefit these routes." (*San Juan Public Lands 2007 Draft Land Management Plan*, page 174.) The *San Juan Public Lands 2007 Draft Land Management Plan* assigns these byways to the Management Area 4 High Use Recreation Emphasis management prescription, which also reflects the current

management of these corridors. Table 12 of the plan specifies the land use suitability for MA 4 areas:

From p. 136 of the DLMP: Table 12 – Management Area 4 Suitability:

Activities and Uses	Allowable- Restricted- Prohibited
Wildland Fire Use	Prohibited
Prescribed Burning	Allowable
Mechanical Fuels Treatment	Allowable
Timber Harvesting as a Tool	Allowable
Timber Production (schedule on a rotation basis)	Prohibited
Commercial Use of Special Forest Products and Firewood	Restricted (Key areas for cone, mushroom, and other gathering, and commercial firewood collection can be beneficial.)
Livestock Grazing	Allowable
Facilities	Allowable
Motorized (Summer)	Allowable
Motorized (Winter)	Allowable
Non-motorized (Summer)	Allowable
Non-motorized (Winter)	Allowable
Motorized Tools for Administrative Work	Allowable
Mechanized (e.g., Mountain Bikes)	Allowable
Road Construction (permanent or temporary)	Allowable
Minerals - Leasable (oil and gas, and other)	No Leasing (per SJPL, will be corrected to read No Surface Occupancy in final plan)
Minerals - Saleable	Restricted (Developed recreation facilities are proposed to be withdrawn from mineral entry.)
Minerals - Locatable	Restricted (Developed recreation facilities are proposed to be withdrawn from mineral entry.)

-National Recreation and Scenic Trails, and National Historic Trails:

Portions of the Continental Divide National Scenic Trail and the Colorado Trail pass through the Area of Focus. These are federally-recognized trails that are: “recognized through establishment reports and management plans for their scenic, historic, interpretive, and recreation values.” (*San Juan Public Lands 2007 Draft Land Management Plan*, page 176.) Neither of them have any congressionally-designated protections, however the National Recreation and Scenic Trails Standards and Guidelines direct that: “other resource activities should be designed in order to meet scenic quality objectives.” The trails are currently managed under guidance provided by the 1980 Continental Divide National Scenic Trail Comprehensive Plan; the 1998 USFS Decision Notice, Colorado Trail Management Direction and Route Selection EA, Region 2; the USFS Master Plan for the Colorado Trail; and the FSM 2300, Chapter 2353, National Scenic and Historic Trails (*San Juan Public Lands 2007 Draft Land Management Plan*, page 177). The *San Juan Public Lands 2007 Draft Land Management Plan* specifies that: “other resource activities should be designed in order to meet scenic quality objectives for these special designation trails (generally, a foreground and middleground of very high to high scenic integrity or visual resource management (VRM) Class II).”

The Continental Divide Trail and the Colorado Trail are designated for non-motorized travel only within the Columbine District. Where they run through Wilderness, the protections of wilderness apply.

-Special Recreation Management Area:

The Silverton Special Recreation Management Area or “SRMA” (186,252 acres) lies within the Area of Focus. It is part of the American Flats/Silverton-Lower Lake Fork Special Recreation Management Area (SRMA). In 1981, the BLM designated the American Flats/Silverton-Lower Lake Fork Special Recreation Management Area to protect the important recreational values. This administrative designation recognized the area as both a highly valued recreation resource and an area requiring enhanced management for the protection of these recreation-related resources, including a notable number of unique and nationally significant historic mining sites. The original SRMA, together with the Alpine Loop Scenic Byway, are now known and managed as the “Alpine Triangle SRMA.”

In October 2010, the BLM released a final Recreation Area Management Plan (RAMP) for the Alpine Triangle SRMA identifying goals for the BLM recreation program in the Project Area and the supporting management actions necessary to achieve those goals and protect the intrinsic natural and heritage qualities of the area. For more information go to: http://www.blm.gov/co/st/en/fo/gfo/loop_plan.html

Quoting the BLM: “The Alpine Triangle is a Special Recreation Management Area made up of over 150,000 acres managed by the U.S. Bureau of Land Management in the San Juan Mountains of southwest Colorado. An SRMA is a place where we recognize the outstanding recreation values and opportunities available in this area and focus extra time, effort and funding on managing these outstanding resources. Our basic goals are simple:

1. To facilitate the public’s enjoyment of these recreation opportunities
2. To minimize the negative effects that recreation has on other resources in the area”

The plan provides extensive broad guidance for management within the Alpine Triangle, as well as some very specific management guidance with respect to specific recreational activities. That specific guidance is:

Motorized Recreation:

Travel designations limit motorized vehicles (e.g., street legal vehicles, motorcycles, ATVs) to designated roads. No motorized vehicles may travel off designated roads unless authorized by BLM. Mountain bikes are added to the list of equipment that must stay on designated roads and trails. Winter motorized recreation (e.g., snowmobile) is not limited to designated roads and trails, but participants are encouraged to not travel in potential avalanche areas.

Rock Climbing:

Climbing areas that are discovered to have active cliff nesting birds should be temporarily closed to climbing within 100 yards on either side of the nest, until the birds have left the nest for the season.

Camping/Cultural and Heritage Tourism:

Prohibit camping or fires within 100 feet of historical structures to minimize modern impacts to these resources from vandalism or damage from inappropriate activities. There is currently a 14-day camping limit in undeveloped sites for recreationists to allow other campers an opportunity to use the area, and to prevent impacts that often come from long-term stays. Squatters are prohibited in all cases.

Horseback riding and pack animals:

Any feed that is used on public lands must be certified weed free hay or pellets to reduce the chances of spreading invasive weeds.

Downhill skiing, snowboarding, cross-country skiing and snow shoeing:

Proposals for grooming may be considered in the future but an environmental analysis must occur that evaluates the potential for impacts to other resources such as Canada lynx.

Visual Resources:

The proposed RAMP designates the entire Project Area as BLM Visual Resource Management (VRM) Class II, which encourages management to place a high value on protecting the integrity of scenic resources. The objectives of VRM Class II are, "...to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape" (BLM 1986b).

Table 38 of the *San Juan Public Lands 2007 Draft Land Management Plan* proposes the following suitability for land management activities and uses within the Silverton SRMA (but see Scenic Byways section above for management suitability specific to the Alpine Loop and San Juan Skyway corridors):

Silverton Area Suitability (p.225, DLMP):

Activities and Uses	Allowable- Restricted- Prohibited
Wildland Fire Use	Restricted (Wildland fire use would be allowed in high-elevation spruce-fir, and in order to protect historic structures and private property.)
Prescribed Burning	Restricted (May be used in order to improve wildlife habitat, including for bighorn sheep.)
Mechanical Fuels Treatment	Prohibited
Timber Harvesting as a Tool	Restricted
Timber Production (schedule on a rotation basis)	Prohibited
Commercial Use of Special Forest Products and Firewood	Restricted to Christmas trees, post and poles, mushrooms and medicinal plants collected in the area.
Livestock Grazing	Restricted to grazing allotments.
Facilities	Restricted in order to protect resources, direct traffic, and to provide essential visitor services.
Motorized (Summer)	Allowable (designated routes only, per RAMP)
Motorized (Winter)	Allowable
Non-motorized (Summer)	Allowable
Non-motorized (Winter)	Allowable
Motorized Tools for Administrative Work	Allowable
Mechanized (e.g., Mountain Bikes)	Allowable (designated routes only, per RAMP) (CONT.)

Road Construction (permanent or temporary)	Restricted (Allowable for access to valid existing rights and for effective public access.)
Minerals - Leasable (oil and gas, and other)	Prohibited
Minerals - Locatable	Allowable
Minerals - Saleable (materials)	Restricted (Allowable where natural, cultural, and/or scenic values are not degraded.)

-USFS and BLM management (current and proposed under the Draft Plan):

Public Lands Management in the Animas River Drainage above Baker's Bridge

Current management: The areas of USFS public land within the Area of Focus are allocated to large areas of: MA1W which means: "Natural Processes Dominate: Designated Wilderness Study Areas and Piedra Area" (Weminuche Wilderness surrounding the Animas River east of HWY 550, upstream of Cascade Creek and downstream of Molas Creek) and MA3 "Natural Landscape with Limited Management" (area northwest of HWY 550 between Cascade Creek and Silverton). Smaller areas are allocated to: MA1 "Natural Processes Dominate" (roadless area within Weminuche Wilderness), MA4 "High Use Recreation Emphasis" (linear areas near HWY 550 and along Mineral Creek and South Fork Mineral Creek), and MA5 "Active Management" (Missionary Ridge and portions of Cascade Creek drainage, and an area between Lime Creek and HWY 550. The BLM public lands are all managed as MA2 "Special Areas and Unique Landscapes."

Proposed management: Under the *San Juan Public Lands Center's - 2007 Draft Land Management Plan* some changes to allocations under these management areas would occur. The USFS lands between Cascade Creek, HWY 550, West Lime Creek and South Fork Mineral Creek would change from MA3 "Natural Landscape with Limited Management" to MA1 "Natural Processes Dominate." The Elbert Creek drainage would change from MA4 "High Use Recreation Emphasis" to MA5 "Active Management." The USFS lands north of Middle Fork Mineral Creek and east of Mineral Creek would change from largely MA4 "High Use Recreation Emphasis" to MA2 "Special Areas and Unique Landscapes." The corridors of BLM lands along Cement Creek and the Animas River upstream of Silverton would change from MA2 "Special Areas and Unique Landscapes" to MA4 "High Use Recreation Emphasis." There is a proposed Electra RNA (Research Natural Area) (2,450ac) adjacent to the west bank of the Animas River between Cascade Creek and Glacier Creek. This area is currently a MA3 "Natural Landscape with Limited Management;" it would change to a MA2 "Special Areas and Unique Landscapes." There is one area (1,428ac) of the Weminuche Adjacent Inventoried Roadless Area recommended for wilderness in the DLMP. If the plan is approved, this area will be managed to maintain its wilderness characteristics until Congress designates it as Wilderness or releases it for multiple-use management (*San Juan Public Lands 2007 Draft Land Management Plan, page 171*).

Silverton BLM lands provide for motorized use on designated roads and trails only. The USFS and BLM will be commencing travel management planning for various portions of the Area within the next five years.

State Level:

-State Level Mining-Related Resources:

The Colorado Division of Reclamation Mining and Safety (DRMS) is responsible for mineral and energy development, policy, regulation and planning for mines and mined land reclamation. Under the Division's Office of Mined Land Reclamation, the Minerals Program and the Coal Program regulate mining and reclamation activities at coal, metal, aggregate and other mineral mines. These programs review and issue mining and reclamation permit applications and inspect mining operations to make sure that reclamation plans are being followed. The Colorado Office of Active and Inactive Mines reclaims and safeguards abandoned mine sites that are dangerous and create environmental hazards. The program also provides safety training for mine operators and employees. Link: <http://mining.state.co.us/About%20DMG.htm>

-Wildlife:

Colorado Parks and Wildlife is the lead agency enforcing regulations (<http://wildlife.state.co.us/RulesRegs/Regulations/Pages/Regulations.aspx>) to protect both non-game and game wildlife by limiting how wildlife can be hunted, possessed, transported, used or traded within the state. The State of Colorado's non-game and small game and migratory bird regulations protect designated nongame species and subspecies, including threatened or endangered wildlife, from harassment, taking or possession, except in specified situations. The state's game regulations address how, when and where hunting for game species can occur in order to maintain sustainable populations of these species into the future.

-Water Quality:

The Colorado Water Quality Control Division is recognized as Colorado's leading agency for monitoring and reporting on the quality of state waters, preventing water pollution, protecting, restoring and enhancing the quality of surface and groundwater, and assuring that safe drinking water is provided from all public water systems. The Colorado Water Quality Control Division regulates the discharge of pollutants into the state's surface and ground waters and enforces the Colorado Primary Drinking Water Regulations. The Colorado Water Quality Control Commission is the administrative agency responsible for developing specific state water quality policies in a manner that implements the broader policies set forth by the Legislature in the Colorado Water Quality Control Act. Link: <http://www.cdphe.state.co.us>

-Air Quality:

Created in 1970 by the Colorado Legislature, the Air Quality Control Commission develops air pollution control policy, regulates pollution sources and conducts hearings involving violations of the state's air pollution laws. The Colorado Air Quality Regulations that apply to the Area of Focus set Ambient Air Quality Standards; limit emissions of particles, smokes, carbon monoxide and sulfur oxides; control odor contamination; require notification and permits from air pollution sources; control hazardous air pollutants; require permits for open burning and prescribed fire; provide for inspection of diesel vehicle emissions; require control of ozone depleting compounds; and require implementation of the Colorado acid rain program. Link: <http://www.cdphe.state.co.us>

-Noise Levels:

Under Colorado State Law 08-063, state and federal agencies have the ability to educate and enforce state sound limits. The law sets a limit of 96 decibels on most OHVs and authorizes the use of the Society of Automotive Engineers 20-inch sound test. This test makes it possible to field test OHVs for sound education and enforcement purposes. Link:

http://www.blm.gov/pgdata/etc/medialib/blm/co/field_offices/columbine_field_office/alpine_triangle.Par.63400.File.dat/RAMP_Final_081610.pdf

-Colorado Water Rights Prior Appropriation System:

The Colorado Division of Water Resources is responsible for administering all water rights according to the Appropriation Doctrine (in short, *1st in time, 1st in right*). This work is done through the local Division Office (located in Durango). Local water commissioners ensure the priority system is followed, enforcing the decrees and water laws of the State of Colorado. The Colorado Ground Water Law of 1957 established the permitting requirement of ground water wells, and surface and ground water rights were administered together. Link: <http://water.state.co.us/SurfaceWater/SWRights/Pages/default.aspx>

-Downstream Senior Water Rights:

Senior water rights existing downstream of the Area of Focus act to maintain some flows through the area in years when natural conditions provide sufficient water.

-In-Stream Flows and Minimum Lake Levels:

As background, in-stream flow is an in-channel appropriation of non-consumptive water between two specific points and is appropriated by the Colorado Water Conservation Board (CWCB) for the purpose of protecting the natural environment to a reasonable degree. A Minimum Lake Level is a non-consumptive, in-lake use of water made exclusively by the CWCB for minimum levels in natural lakes in order to preserve or improve the natural environment to a reasonable degree. Both in-stream flow and natural lake level rights are administered within the State of Colorado's water right priority system.

In-Stream Flows in the Animas River Drainage above Baker's Bridge (As of November 16, 2011, there are 69.93 stream miles within the area of focus that have some level of In-stream Flow):

Stream Name	Case Number	Upper End	Lower End	Amounts in cfs (Dates)	Appropriation Date
MAGGIE GULCH	05CW051	headwaters	confl Animas River	2.5 (5/1-10/31) 1.5 (11/1-4/30)	1/25/2005
MILL CREEK	7-76W1491	headwaters	confl N Mineral Creek	3 (1/1 - 12/31)	7/30/1976
MINERAL CREEK	04CW040	confl with Big Horn Gulch	confl SFK Mineral Creek	15 (5/1-10/31)	7/13/1954*
MINNIE GULCH	83CW087	headwaters	confl Animas River	1 (1/1-12/31)	5/5/1983
MINNIE GULCH	05CW052	headwaters	confl Animas River	.7 (5/1-10-31)	1/25/2005

Stream Name	Case Number	Upper End	Lower End	Amounts in cfs (Dates)	Appropriation Date
SOUTH FORK MINERAL CREEK	84CW272	headwaters	confl Mineral Creek	18 (1/1-12/31)	7/13/1984
WEST LIME CREEK	7-84CW274	headwaters	confl E Lime Creek	4 (5/1 - 8/31) 2.5 (9/1 - 4/30)	7/13/1984
ANIMAS RIVER	10CW086	confl Cunningham Creek	confl Arrastra Creek	21 (5/1-10/31) 9 (11/1-4/30)	1/26/2010**
ANIMAS RIVER	10CW087	Confluence w/Minnie Gulch	Confluence w/Cunningham Crk.	12.2 (5/1-10/31) 6.1 (11/1-4/30)	1/26/2010**
BIGHORN GULCH	7-04CW040*	hdgt Carbon Lake Ditch #1	confl unnamed trib at lat 37 53 09N long 107 42 47W	5 (5/15 - 10/31)	7/13/1954
BIGHORN GULCH	7-04CW040*	confl unnamed trib at lat 37 53 09N long 107 42 47W	confl Mineral Creek	10 (5/15 - 10/31)	7/13/1954
BIGHORN GULCH (UNNAMED TRIBUTARY)	7-04CW040*	hdgt Carbon Lake Ditch #2	confl Big Horn Gulch	15 (5/15 - 10/31)	7/13/1954
CASCADE CREEK	7-83CW089	headwaters	hdgt Cascade Canal div	15 (1/1 - 12/31)	5/5/1983
CUNNINGHAM CREEK	7-84CW271	headwaters	confl Animas River	12 (4/1 - 8/31) 4 (9/1 - 3/31)	7/13/1984
DEER PARK CREEK	7-05CW050	headwaters	confl Animas River	1 (11/1 - 4/30) 2 (5/1 - 10/31)	1/25/2005
EAST LIME CREEK	7-84CW275	outlet Andrews Lake	confl W Lime Creek	1 (1/1 - 12/31)	7/13/1984
LIME CREEK	7-84CW273	confl E & W Lime Creeks	confl Cascade Creek	6 (1/1 - 12/31)	7/13/1984

* Donated water

**Pending cases

Minimum Lake Levels (There are 20 minimum lake levels established in the Area of Focus):

Lake Name	Case Number	Level (in Acre-feet)	Appropriation Date
Boyce Lake	W1776-77	47	1/19/1977
Clear Lake	W1775-77	1480	1/19/1977
Crystal Lake	W1774-77	78	1/19/1977
Denver Lake	W1773-77	1	1/19/1977
Eldorado Lake, Big	W1772-77	250	1/19/1977
Eldorado Lake, Little	W1771-77	27	1/19/1977
Fuller Lake	W1770-77	200	1/19/1977
Highland Mary Lake, Big	W1769-77	2370	1/19/1977
Highland Mary Lake, Little	W1768-77	170	1/19/1977
Ice Lake	W1778-77	580	3/9/1977
Island Lake	W1779-77	32	3/9/1977
Molas Lake, Big	W1541-76	200	11/30/1976
Molas Lake, Little	W1783-77	91	3/9/1977
Pear Lake	W1667-77	630	1/1/1977
Porphyry Basin #1	W1766-77	4	1/19/1977
Porphyry Basin #2	W1767-77	1	1/19/1977 (cont)

Lake Name	Case Number	Level (in Acre-feet)	Appropriation Date
Potato Lake	W1765-77	670	1/19/1977
Ruby Lake	W1785-77	110	3/9/1977
Webb Lake	W1509-76	72	5/12/1976
White Dome Lake	W1787-77	64	3/9/1977

Other Water Information

Existing Consumptive Uses:

Upstream of Baker's Bridge, adjudicated uses include, but are not limited to commercial use at Electra Lake; municipal water for the Town of Silverton; piscatorial use on Elbert Creek; two seasonal trans-basin diversions for agricultural at Red Mountain and Mineral Point; commercial use by the Durango and Silverton Narrow Gauge Railroad to fill the train's water tanks; for irrigation and stock water; and for consumptive use by Tall Timbers and Ah Wilderness above Cascade Creek. Animas River diversions generally entail only minimal depletions.

The Animas River is the source of water for numerous state adjudicated water rights located downstream of Baker's Bridge, including but not limited to irrigation, domestic, stock, commercial, fish, and municipal water for the City of Durango.

Potential for Additional Consumptive Uses:

There are currently 673 cfs (cubic feet per second) in conditional direct flow water rights and 116,512 AF (acre feet) in conditional storage rights within the Animas River watershed above Baker's Bridge, therefore there is potential for additional consumptive use within the Area of Focus. The 2010 SWSI (State Water Supply Initiative) Basin Update provides a list of consumptive (and non-consumptive) "Identified Projects and Processes" in the San Juan and Dolores Basins of Southwest Colorado. This update should be available online later this summer. A presidential exemption would be needed for development of facilities within the Weminuche Wilderness. Note: The next paragraph explains SWSI.

Potential New Water Diversion and Storage Locations:

The State Water Supply Initiative ("SWSI") is a basin-by-basin process conducted by the CWCB to examine Colorado's water uses, water supply needs, and future water planning efforts. It has gone through several phases, including SWSI 1, SWSI II and SWSI 2010. SWSI 1 focused on using a common technical basis for identifying and quantifying water needs and issues and it catalogued the specific projects, plans, and

processes that local water suppliers have identified and are undertaking as components of their own water supply planning efforts to meet the needs they themselves have identified. In addition, pursuant to House Bill 1117 and the Water for the 21st Century Act, the Southwest Water Roundtable is evaluating the consumptive and non-consumptive needs in the basin.

SWSI I identified seven (7) potential dam sites within the Area of Focus. See SWSI (2004) at <http://cwcbweblink.state.co.us/WebLink/ElectronicFile.aspx?docid=144066&searchid=2c16c041-d0b2-4ec5-ac42-8b95aa0c04e3&dbid=0>, Figure 10-11, page 10-20.

According to CWCB, these sites were identified as part of a CWCB dam site inventory conducted in 1997 to fulfill a statutory requirement. The inventory was a compilation of all the potential dam sites from feasibility studies, conditional water rights, and reservoirs with potential for expansion that existed at the time. Apparently any such site was included, independent of whether it was deemed feasible or not. The inventory has not been updated, but may be in the future.

Other Water-Related Efforts:

The SWSI process continues and the recent SWSI 2010 document includes lists of both consumptive and non-consumptive projects and processes (IPPs) identified by local roundtables around the state. The IPPs inventoried by the Southwest Basin Roundtable will be available to be viewed online this summer at: <http://cwcb.state.co.us/water-management/water-supply-planning/Pages/SWSI2010.aspx>

Stream-Flow Data:

Several U.S. Geological Survey gauges have been operated in the area. The following chart shows the gauge sites' number, name and dates of operation.

Gauge Site Number	Site Name	Dates of Operation
09359500	ANIMAS RIVER AT TALL TIMBER RESOURT ABOVE TACOMA	1945-1956 2006-present
09359100	LIME CREEK NEAR SILVERTON, CO	10/1/56-9/30/61
<i>09359020</i>	<i>ANIMAS RIVER BELOW SILVERTON, CO</i>	10/1/91-present
<i>09359010</i>	<i>MINERAL CREEK AT SILVERTON, CO</i>	10/1/91-present
<i>09358000</i>	<i>ANIMAS RIVER AT SILVERTON, CO</i>	10/1/91-present
<i>09357500</i>	<i>ANIMAS RIVER AT HOWARDSVILLE, CO</i>	10/1/35-present
<i>09358550</i>	<i>CEMENT CREEK AT SILVERTON, CO</i>	10/1/91 – 9/93 10/94-present

Note: Stream-flow data for each of these gauges is available in a variety of formats on the U.S. Geological Survey Water Data Web site at <http://waterdata.usgs.gov/nwis/> and the Colorado Division of Water Resources (CDWR) Web site at <http://water.state.co.us/>.

Water Rights:

The following charts summarize water rights for direct flow and storage, not including instream flow or minimum lake level rights held by CWCB in the Animas River watershed above Baker's Bridge. There are two trans-basin rights from the Animas River basin above Baker's Bridge, one for 11 cfs and the other for 6 cfs. They are both privately owned and go to the Gunnison Basin. Please refer to the Glossary of Terms (handed out at the meetings and also on the Web site) to understand these various types of water rights. Please see the tabulation of water rights available at <http://ocs.fortlewis.edu/riverprotection> for more detailed information on each water right within the area. CWCB periodically issues a list of water rights deemed abandoned available for review at <http://water.state.co.us/DWRDocs/Reports/Pages/Abandonment.aspx> under the "Division 7" link.

Direct Flow Water Rights above Baker's Bridge	Total # of Rights	Total cfs (cubic feet per second)
Absolute	90	972
Conditional	115	673*

* Conditional right for Animas Diversion Canal is 600 cfs

Storage Water Rights above Baker's Bridge	Total # of Rights	Total AF (acre feet)
Absolute	60	32,931*
Conditional	40	116,512^

* Absolute right for Cascade Reservoir is 23,254 AF

^ Conditional right for Howardsville Reservoir is 93,700 AF and for Cascade Reservoir is 22,000 AF

Pending Applications:

After improvements were made to the embankment and small dam at Molas Lake, the Town of Silverton (town) filed an application in Case No. 04CW50 for the storage above the minimum lake level held by the CWCB. The application was for multiple uses and included an augmentation plan for the town. The case had objectors including the CWCB and the United States Forest Service, but upon development of an area capacity table acceptable to the CDWR, the case will be settled with a decree and augmentation plan for approximately 113 AF of storage. In response to the anticipated filing of a RICD (see below for more information on RICD) application by the City of Durango, the town filed for additional surface and storage water rights (including an enlargement of Molas Lake) in Case No. 05CW87 to meet the future needs of the town. On behalf of San Juan County (county), the Southwestern Water Conservation District (SWCD) filed an application in 05CW88 for multiple points of diversion in San Juan County to provide future supplies for the anticipated growth and demands in the county. Both of these cases are pending, but would be senior to the RICD granted to Durango. For Case # 04CW50 there are no statements of opposition. There are objectors in both of the 2005 cases: Case # 05CW87 is opposed by the State of Colorado AG's office and Trout Unlimited, and Case #05CW88 is opposed by Trout Unlimited. The Town of Silverton case has been delayed, in part, pending the outcome and settlement of Case 04CW50. The town and county have done additional work to verify the amount of the claims, and it is believed that more aggressive settlement discussions will begin in the near future.

Pending Water Rights Case	Case #	Amount (cfs or AF)
Pending (Town of Silverton filing, Molas Lake)	04CW50	113 AF
Pending (Town of Silverton filing)	05CW87	7.5 cfs
Pending (Town of Silverton filing, Molas Lake Enlgt)	05CW87	137 AF
Pending (SWCD on behalf of San Juan County filing)	05CW88	14.5 cfs
Pending (to change the use for the Red Mtn. trans-mountain diversion)	11CW0006	6 cfs.

Water Quality:

The Colorado Water Quality Control Commission (the Commission) is the agency responsible for developing specific state water quality policies to implement the broader policies set forth by the Colorado Legislature in the Colorado Water Quality Control Act. The Commission adopts water quality classifications and standards for surface and ground waters of the state, as well as regulations aimed at achieving compliance with those classifications and standards. There are various categories that apply to measuring water quality. Basic standards are the general water-quality standards that apply to all surface waters of the state. For more detail on water quality standards, please refer to the handouts at the meeting and/or the State of Colorado’s Water Quality Control Division.

Above the Weminuche Wilderness Area boundary, all tributaries to the Animas River, including all wetlands, lakes and reservoirs, have a designation as “Outstanding Waters”, as do all streams in Wilderness Areas within Colorado. Outside of the wilderness boundary, several reaches of the Animas River and its tributaries above Baker’s Bridge have elevated levels of metals, which may be related to past mining activities and/or natural geology.

The Animas River Stakeholders is a group working, “...to improve water quality and habitats in the Animas River through a collaborative process designed to encourage participation from all interested parties.” Participants include mining companies, elected officials, local citizens and interest groups, environmental organizations and landowners, including federal and state agencies. In 1995 the Colorado Water Quality Control Commission adopted stricter standards for certain segments of the Upper Animas with a delayed effective date at the Stakeholders’ request. The Commission then empowered the Animas River Stakeholders to locate and evaluate sources of metals contamination, determine potential improvement, and prioritize sites for remediation in order to recommend achievable water quality standards and use classifications. The Stakeholder process involves collection and analysis of data to assess the impacts of contamination on aquatic life throughout the watershed. Using a watershed approach, the Stakeholders synthesize scientific findings with economic, social, and political consideration to influence future regulatory and land management decisions (<http://www.animasriverstakeholders.org/>).

For specific water quality classifications and standards by segment, please refer to: [http://www.cdph.state.co.us/regulations/wqccregs/34_2010\(06\)-2011\(06\)tables.pdf](http://www.cdph.state.co.us/regulations/wqccregs/34_2010(06)-2011(06)tables.pdf).

2007 Draft Wild and Scenic River (WSR) Information:

The *San Juan Public Lands 2007 Draft Land Management Plan* found three (3) segments (43.25 miles) to be “preliminarily suitable” for Wild and Scenic Rivers (“WSR”) designation. To be considered “eligible” for designation under the Act, a segment must be free flowing and must meet state water quality standards or at least have a plan in place to attain those standards. Please refer to Appendix D, pages D-80 to 88 of the plan for a complete description of the values associated with these streams and the

Suitability Analysis provided, including: 1) characteristics of the river, 2) current status of land ownership and use, and 3) potential uses and effects of WSR status on those uses. The following chart provides information:

Stream	Segment	Classification	Length	ORVs
Animas River	Baker's Bridge to 3.58 miles below Silverton	Recreational	27.19 mi	Recreation Scenery
Mineral Creek	From where creek becomes 3rd-order stream to confluence with Animas	Recreational	8.65 mi	Recreation Scenery Ecological
South Fork Mineral Creek	From where creek becomes 3rd-order stream to confluence with Animas	Recreational	7.41 mi	Wildlife Ecological

Source: *San Juan Public Lands 2007 Draft Land Management Plan*, Appendix D

Anyone interested in more information can access the actual Wild and Scenic Rivers Act of 1968 and its amendments by going to <http://www.rivers.gov/> and looking under the Information Tab for "WSR Act." This site also offers more user-friendly summaries of the Act under the Publications Tab in "Technical Papers."

Note: The website, www.rivers.org, is maintained by the interagency Wild and Scenic Rivers Council. According to the Website: "The Council consists of representatives of the four wild and scenic rivers administering agencies—the Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service. Other federal agencies with river interests have key contacts and participate in discussions affecting their interests. The public has an opportunity to provide input at all Council meetings; their support is crucial to the Council's success."

USFS Reserved Rights:

A case is pending (USFS Reserved Rights Application in Case W-1605-76B) that involves whether the USFS is entitled to water rights "reserved" as of the date Congress reserved land for the National Forest for fluvial geomorphological (stream-channel maintenance) purposes and, if so, how much water per stream across USFS land. In short, this case relates to whether or not the USFS holds a Federally Reserved Water Right and, if so, its size. Negotiations to resolve the case have been limited since 2003.

Federal Energy Regulatory Commission (FERC) Licensing:

Xcel Energy diverts 250-400 cfs at the Cascade Diversion on Cascade Creek into Electra Lake and uses that stored water to operate the Tacoma Power Plant at the dam to generate power. Xcel has been negotiating settlement of their relicensing and mitigation for impacts to Cascade Creek. That process is ongoing.

Animas-La Plata Project (A-LP):

A-LP diversions at the Durango Pumping Plant (DPP) are decreed as alternative points of diversion for locations at Teft (Animas Diversion Canal) and Howardsville.

Stipulated Recreational In-Channel Diversion (RICD) Settlement:

In 2006, the City of Durango filed a water court application for a Recreational In-Channel Diversion (RICD) to support kayaking and boating. A conditional water right was granted for recreational flows for four structures in the Animas River near Santa Rita Park and Smelter Rapids with flows ranging from 185 cfs in the fall and winter to 1,400 cfs during the peak June runoff. The case was contested with over 50 individuals and entities filing Statements of Opposition, and numerous applications for water rights

were filed in 2005 and 2006 in anticipation of or response to the application by the City. Due to the potential impacts to future water development in the Animas River basin, conditional water rights applications were filed for by La Plata County in Case 06CW99, and by the Southwestern Water Conservation District in Case 06CW127. Intensive negotiations resulted in a stipulated settlement that granted the recreational water rights while allowing some future development to occur in the basin. La Plata County was granted conditional water rights of 1 cfs on Junction Creek, and 2 cfs on Lightner Creek, and up to 6 cfs on the Animas River subject to land use conditions in La Plata County. These water rights are two days senior by appropriation date to the RICD. La Plata County joined the Southwestern Water Conservation District as co-owner of the future depletion allocation conditionally decreed in Case 06CW127 for depletion flow rates ranging from 20 cfs in low flow periods and 40 cfs during the peak of the hydrograph. This depletion water right is one day senior by appropriation date to the RICD. These future depletions can occur on the main stem of the Animas River and its tributaries from the upper RICD structure to the headwaters of the basin. Although not without controversy, the settlement of the RICD and related cases was viewed as a “win-win” for all involved and avoided lengthy litigation and court costs.

Other Important Information

Potential Conflicts:

To be discussed thoroughly in the River Protection Workgroup for the Animas meetings.

Air Quality:

According to the *San Juan Public Lands 2007 Draft Land Management Plan*, “...the Weminuche Wilderness Class I Area has been recognized by Congress as being an ‘outstanding special area’ – deserving the highest air quality protection in the nation” and maintaining Class I air conditions within the Weminuche is a high priority. Under the Clean Air Act of 1963, as amended, federal land managers are responsible for protecting the air quality related values within Class I areas. According to recent findings, there is an increasing trend for nitrates, but no trend for sulfates, organics or fine soil in the Weminuche Wilderness. Ongoing monitoring of air quality and air quality related values is carried out under the Weminuche Wilderness Monitoring Plan (USFS 1991) and through agreements with the EPA and State of Colorado.

Climate:

Climate plays a large role in the area's hydrology. Projections about future climate conditions can provide useful input to planning efforts around the water resources which sustain the values in the area. The CWCB has prepared several reports on climate projections, water availability, and drought planning in Colorado. These can be viewed and downloaded at: <http://cwcb.state.co.us/environment/climate-change/Pages/main.aspx>. A two-page summary is available at: <http://cwcb.state.co.us/environment/climate-change/Documents/COClimateReportOnePager.pdf>. For information specific to the San Juans, the Mountain Studies Institute has compiled a summary of studies of projected future climate in Southwest Colorado. This report is available at: http://www.mountainstudies.org/sites/default/files/pdf/publications/MSI_CC_Observ_Sum_2011.pdf. Table E.S.1 Pages 18 and 19 present a concise summary of projected climate changes for southwestern Colorado, with references cited: http://www.mountainstudies.org/sites/default/files/pdf/research/Climate/Climate_Summary.pdf

Watershed Condition:

In May 2011, the United States Forest Service completed a Watershed Condition Classification on National Forest System Lands. For complete information on the methods, results and application of this classification, please go to <http://www.fs.fed.us/publications/watershed/>.

The classification established and applied a consistent protocol for characterizing the health and condition of National Forest System lands in more than 15,000 watersheds across the country. For each watershed, the condition of each of 12 watershed condition indicators was given a rating based on the best available information. These condition indicators included: aquatic biota, riparian wetland vegetation, water quality, water quantity, aquatic habitat, roads and trails, soil, fire effects regime, forest cover, forest health, invasive species, and rangeland vegetation. By combining individual ratings, an overall watershed condition rating was developed. The protocol is documented in the Watershed Condition Classification Technical Guide available at http://www.fs.fed.us/publications/watershed/watershed_classification_guide.pdf.

The results of the Watershed Condition Classification are available in table and interactive map format at <http://www.fs.fed.us/publications/watershed/>.

The Forest Service is using the Watershed Condition Classification to assess the relative condition of watersheds across a forest unit and to identify priority watersheds on which to focus in a consistent and accountable manner. New investments in watershed restoration will provide economic and environmental benefits to local communities. Managers have begun to develop Watershed Restoration Action Plans for priority watersheds.

Watershed Restoration Action Plans are programmatic documents in which the Forest Service describes existing resource conditions and identifies possible management actions that could be taken to move towards a desired future condition. In order to move forward with any of these plans, the proposed actions will be subject to National Environmental Policy Act (NEPA) requirements.

Reasonably Foreseeable Economic Development:

Logging – Small portions of the non-wilderness USFS lands west of Silverton may be suitable and available for timber production under the *San Juan Public Lands 2007 Draft Land Management Plan*. Land within designated wilderness is not available for timber production. Most of the non-wilderness public lands (BLM/USFS) are generally not suitable for timber production.

Oil, Gas, and Mineral Development – Designated Wilderness Areas are withdrawn from mineral entry, including oil and gas leasing. There are numerous privately owned patented mining claims and approximately 100 unpatented mining claims within the Area of Focus. About 30 of these unpatented claims are within the W&SR Preliminary Suitable river corridor. Mining in San Juan County is a use by right, so there is no county permit needed (State of Colorado permits are required). However, the county can require visual protections. San Juan County Land Use Code specifies "view" corridors where the county may require mitigation for activities. While these corridors do not remove the "use by right", they can affect the way land uses are carried out.

San Juan County above Silverton contains highly mineralized geologic formations that have supported significant past metal mining operations and contain significant resources that may be mined in the future. Metal mining has been the primary economic driver in the county since 1871 until the closing of the last large mine in 1991. Mining and tourism have historically existed side by side and the historic features (railroad, back country roads, mine sites, Town of Silverton historic buildings, etc.) form a significant basis of the tourism economy.

Mineral loading in streams from both natural and past mining related sources occurs throughout the watershed. Extensive work has been conducted by the Animas River Stakeholders Group and others to identify sources and potential remediation projects that may be accomplished to improve water quality in the watershed.

There has been uranium prospecting at Elk Park in the past. Mining and milling operations require relatively small consumptive use amounts of water. Future milling operations will likely have zero discharge requirements. Future mining operations will require NPDES permits for water discharges and appropriate treatment to comply with permit terms. Note: the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution.

There is no oil and gas production within the area. Generally speaking, there is only low potential for oil and gas resources in the portion of the Area of Focus west of Highway 550, but no potential in the portion east of the highway.

Private Land Development – There are about 34,498 acres of private land in the Area of Focus including about 9,082 in the La Plata County portion, and about 25,416 acres in the San Juan County portion. About 754 acres of private land fall within the Animas Mainstem “Preliminarily Suitable” for WSR segment. About 382 acres of private land fall within the Mineral Creek segment corridor, and about 83 acres of private land fall within the South Fork of Mineral Creek segment corridor. In recent years, there has been interest in development of vacation residences in the areas around Silverton. The Town of Silverton/San Juan County Planning Department has completed a GIS analysis in February 2012 quantifying the current San Juan County build out. A table summarizing this analysis is available on the RPW website.

Commercial Outfitting – Commercial outfitters require a permit to operate on USFS and BLM lands. There are numerous outfitting permits of all kinds within the area (e.g., hunting, biking, snowmobiling, fishing, rafting, horseback riding, mountaineering, plus two ski areas). The Columbine District of the San Juan Public Lands Center is in the initial stages of doing a capacity analysis for outfitting permits.

Livestock Grazing – Livestock owners require a permit to graze on public lands. As of June 2011, there are four (4) active cattle allotments and 14 active sheep allotments within the area. There are two (2) reserve allotments, both vacant at this time.

Ski Areas – It is possible for both Silverton Mountain and Durango Mountain Resort to expand their operations. Additional ski areas include Kendall Mountain Recreation Area, two snowcat operations and two helicopter operations.

Hydroelectric Power Generation – San Juan County, outside of the Wilderness areas, contains many sites for small hydroelectric generation projects. One project is under development by the San Juan County Historical Society and several other sites are under consideration by others.

Transportation:

The Colorado Department of Transportation (CDOT) has designated Highway 550 as a scenic highway called the San Juan Skyway.

The DSNRR has a Right-of-Way (ROW) through the public lands. There are three train bridges within the ROW, and a footbridge at Purgatory Flats. There are water tanks, sidings at Elk Park, and a wye at Elk Park/Cascade Creek Picnic Area.

There are roughly 300-400 miles of roads in the Area of Focus, including USFS, BLM, and county roads. San Juan County asserts RS 2477 authority over routes in the county. There is potential for new mining roads to be constructed. San Juan County roads will support loads of up to 300 tons. If more weight is carried, road mitigation is needed, so county roads may change over time. A new tram could be installed for mining purposes, as they have been used in the past and may be used in the future, and may be a way to minimize the impact of some future mining operations.

Tall Timbers uses helicopters to access their facility which is on private land.

Utility Corridors and Telecommunication Sites:

There are three telecommunication sites located on public lands within the area serviced by roads and transmission lines. San Juan County and residents continue to push for a high-speed fiber-optic connection, as has been provided to all the other counties in Colorado, through the Governor's Office of Information Technology and Qwest/Centurylink.

There are major electrical transmission lines running parallel to Hwy. 550 between Durango, Silverton and Ouray. There is an electrical transmission line running over Ophir Pass to Telluride. There is a utility line from Tacoma to Tall Timbers. There are currently no major oil or gas pipelines existing or proposed within the area.

Weeds:

The San Juan National Forest's Invasive Species Action Plan for Fiscal Year 2007-2009 identifies as priorities for treatment the following weed species that are known to occur in the area: scentless chamomile, dames rocket, yellow toadflax, hounds tongue, spotted knapweed, leafy spurge, oxeye daisy, hoary cress, Scotch thistle, musk thistle, bull thistle, and Canada thistle. Weed infestations are largely focused along trails, roads, and other disturbed areas.

For more information, please contact:

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You can follow the River Protection Workgroup for the Animas River at:

<http://ocs.fortlewis.edu/riverprotection> (click on Animas River on the left)

Meeting minutes, agenda, handouts, maps, etc. will be posted on the site

This Information Sheet was approved by the Workgroup in February of 2012 after extensive review, edits and additions. It can be changed again if additional information becomes necessary to collect.