

River Protection Workgroup



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

River Protection Workgroup Initial Information Sheet

Piedra River (Version: 4/3/2012)

<http://ocs.fortlewis.edu/riverprotection>

This *Initial Information Sheet* was prepared to support the discussions of participants involved in the Piedra River Workgroup (PRW). This version can be updated and changed as the Workgroup proceeds and as new information is made available or requested. Please refer to the Glossary of Terms and the Glossary of Agencies handouts for clarification on any words used or entities mentioned (documents available at the meetings and on the Web site).

Area of Focus: The Area of Focus includes the watershed of the Piedra River upstream of Colorado Highway 160. The area drained by the Piedra River at the Highway 160 Bridge falls in Archuleta, Mineral and Hinsdale Counties.

The *San Juan Public Lands (USFS/BLM) 2007 Draft Land Management Plan* found 3 river segments totaling 50.12 miles in the Piedra Watershed above Highway 160 to be “Preliminarily Suitable” for the Wild and Scenic River (WSR) status. More details and information are provided below.

Values (in alphabetical order): This list of values was brainstormed by the River Protection Workgroup Steering Committee. The Workgroup can add to and refine this list. The word “values” means what is special or important about the river and the watershed. All values are considered of equal priority and weight.

Economic: Livestock grazing; agriculture; open space; agricultural and domestic water supplies; outfitting businesses (water-related, hunting, fishing, etc.); heritage tourism; forest products; and the Piedra River as a regional public access and recreation attraction form the economic foundation within the Area of Focus.

Fish: The Piedra drainage also has many miles of sustainable wild native and introduced trout habitat and populations. Non-native trout (Rainbow, brown, brook), and native Colorado River

cutthroat trout and mottled sculpin occupy the Piedra River upstream of Highway 160. There are miles of quality habitat in the Piedra Canyons (1st and 2nd Box between the Piedra Road and Highway 160) with the potential to grow large brown and rainbow trout. There is a self-sustaining population of Kokanee salmon in the Williams Creek Reservoir. Warm water species occur in the lower reach near Highway 160 and include flannelmouth and bluehead sucker.

The Piedra River drainage has some of the most intact and extensive Colorado River cutthroat populations in the State, reflecting the excellent water quality and quantity. There are 6 Conservation Populations of Colorado cutthroat trout in the Piedra watershed above Highway 160. A Conservation Population of cutthroat trout is generally defined as being 90% or more genetically pure. The East Fork of the Piedra (above Piedra Falls) is one such Conservation Population and the source of the Division of Parks and Wildlife's Weminuche broodstock. It is a high quality and unique population of fish because there are about 8 miles of mainstem river and approximately another 4 miles of tributaries flowing into it. Flows are typically 10-20 cfs – large compared to most of the cutthroat waters in Colorado, which are isolated into 2-3 mile sections of headwater stream. Also, Cimarrona Creek, Shaw Creek, Fall Creek, North Fork Sand Creek, and Sand Creek are all Colorado cutthroat trout Conservation Populations.

The Colorado Parks and Wildlife (CSP, formerly CDOW) considers all of the streams in the Piedra River to be wild trout waters. Some supplemental stocking occurs near campgrounds and popular road access points, but for the most part fish populations are self-sustaining. Stocking, mostly of sub-catchable (5 inch) fish, occurs in Williams Lake, Williams Creek, Middle Fork of the Piedra and the Piedra River at the CG near Highway 160.

Standard regulations (4 trout per day and you can use bait) apply everywhere in the Piedra above Highway 160 EXCEPT for two reaches. The regulation in the Piedra River from Tres Piedras Ranch boundary (~3 mi upstream of Highway 160) to the Piedra Road, and in the East Fork of the Piedra River above the East Fork Falls, is that all fish must be returned to the water immediately; flies and lures only.

Flora: The USFS Region 2 Forester identifies a list of Sensitive Species of animals and plants (<http://www.fs.fed.us/r2/projects/scp/sensitivespecies/>) for which population viability is a concern, based on significant current or predicted downward trends in populations and/or habitat. See the handout entitled: *Checklist of sensitive plant species known to occur, or with potential to occur, in the Piedra River drainage above Highway 160*. There are no known occurrences of plant species within the Area of Focus listed under the federal Endangered Species Act. However, there is suitable habitat on San Juan Public Lands in the area for the Pagosa skyrocket, listed as Endangered under the Federal Endangered Species Act.

Geology: The Piedra River cuts through over 6000 feet of rock as it flows from the headwaters of the East and Middle Forks of the Piedra River, to the southern edge of the Forest boundary. The river has created a slice of outcrops which opens a window in time. Much of the geologic record is missing; either due to erosion or possibly, no deposition. Today, we see great mountains and box canyons covered primarily by a temperate alpine forest. What rocks that have been preserved tell us that a lot has happened over the last 1.8 billion years. Mountains have popped out of the earth. Seas have come and receded. The world has gone from warm tropical climes to Ice Ages. What is covered by a river and mountains today was previously, at one time or another, covered by seas, rivers, lakes, swamps, beaches, deserts, volcanoes, or glaciers. An excellent timeline of the geology of the area may be found in Raby, 2008. See the separate geology handout <http://ocs.fortlewis.edu/riverprotection/piedra/resourceDocuments.htm> for broad descriptions of the history of the rocks that can be found in the Piedra River.

Intact Natural Landscape: This watershed is valuable because it supports ecosystems that encompass a diversity of life zones from ponderosa pine and mixed conifer forests up to the alpine, with abundant riverside and stream habitats. The Area of Focus is largely healthy and intact and provides abundant wildlife habitat. Due to its overall intactness, as well as the presence of Wilderness in the Piedra Area, it maintains a wild quality. The Weminuche Wilderness is the largest wilderness area in Colorado.

Forest Resources: There is a history of timber harvest in the area. The Mixed Conifer Workgroup is considering the health and management of mixed conifer in the area. A growing issue is forest die off associated with a regional spruce beetle outbreak.

Human Values: Residents of the Piedra River watershed 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 lands in the area are used and managed.

Open Space: The Piedra River watershed above US Highway 160 represents an open, relatively undeveloped landscape enjoyed and valued by residents and visitors alike. These open lands support both natural systems and agricultural land uses.

Recreation: The area is used for a variety of recreational activities including the following.

- Backcountry skiing
- Backpacking
- Camping
- Fishing
- Foraging (mushrooms, berries)
- Hiking
- Horseback riding and horse packing
- Hot springs soaking
- Hunting
- Mountaineering
- OHV use
- Painting
- Photography
- Rock climbing
- Sightseeing
- Snowshoeing
- Snowmobiling
- Whitewater boating

Scenery: The Area of Focus holds a variety of scenic values, from open agricultural lands, to the river canyon, to Piedra Falls. Visitors and residents alike value the open agricultural and natural vistas available within this landscape. The scenic reach from the confluence of the Middle and East Forks up to Piedra Falls is relatively accessible and receives high use.

Tribal Values: The Southern Ute Indian Tribe maintains an interest in management issues related to the Piedra River for a variety of reasons. The Tribe has substantial water rights in the basin downstream of the Area of Focus, and supports management actions in the watershed that serve to maintain the water supply for those rights.

Under an 1874 treaty commonly known as the Brunot Agreement, the Tribe also has the right to hunt, fish, and gather in an off-Reservation area that is approximately 4 million acres in size. The area within which the Tribe retained reserved rights is the San Juan Mountain region of Colorado and includes parts of nine counties and is marked roughly by a rectangle by the towns of Naturita, Lake City, Pagosa Springs, and Cortez. Tribal members can hunt, fish, and gather in that area subject to regulation by the Tribe. Importantly, treaty rights cannot be exercised on private property without landowner consent.

In addition, the Tribe has a significant interest in promoting management actions that protect water quality. It adopted surface water quality standards based on “designated uses” in the 1990s which, although they are not formally recognized by either USEPA or the State of Colorado, reflect the concern the Tribe has for protecting water quality. The Tribe is currently revisiting those standards as well as working on “Treatment as a State” status and the development of numeric surface water quality standards.

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, and snowshoe hare. River otters were reintroduced in 1978 and are doing well. Introduced moose also use the area occasionally. Canada lynx have been reintroduced to Southwest Colorado and use the area. There is a small population of black swifts within the Area. Wolves used the area until the 1940s, and grizzly bears up until the 1970s.

The CPW *State Wildlife Action Plan* (SWAP) identifies species most in need of pro-active 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 maintains 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 Canada lynx and the southwestern willow flycatcher. A handout is available summarizing this information for the Area of Focus.

USFS-Identified Outstandingly Remarkable Values or “ORVs”: As part of its evaluation of rivers for Wild and Scenic River (WSR) eligibility, 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.” The following box provides a description of the ORVs identified for the 3 Piedra River segments based on the *San Juan Public Lands Center’s 2007 Draft Land Management Plan*. See Appendix D (pages D-89 to 102) of that plan for the San Juan Public Land’s 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.

Piedra River North of Highway 160

Recreation and scenery: There is high quality rafting and kayaking of the Class IV and V waters through the two box canyons. The reach also offers a combination of beautiful and varied wild trout fishing for large fish and a long Class IV whitewater run. The narrow box canyon and areas of hot springs provide exceptional scenery.

Geology: In a relatively short distance, the river system cuts through some of the most recent and most ancient rock exposures in western North America. In the lower canyons, the visible rocks are from 200 million to 2 billion years old and represent nearly half of the geologic history of Earth. They cover the period when life evolved in the sea to the first colonization of land by plant and animal life.

East Fork Piedra River in Wilderness

Scenery: There are impressive waterfalls along the stream.

Recreation: Not described.

Fish: One of 12 sites within the San Juan National Forest that contain genetically pure strains of Colorado River cutthroat trout. The East Fork of the Piedra was selected as one of the two best pure cutthroat fisheries in the San Juan watershed.

Geology: In a relatively short distance, the river system cuts through some of the most recent and most ancient rock exposures in western North America.

Middle Fork Piedra River

Scenery: Not described.

Recreation: Not described

Geology: In a relatively short distance, the river system cuts through some of the most recent and most ancient rock exposures in western North America.

Land and Water Protections Currently in Place

Conservation Easements: Conservation easements are voluntary agreements between private landowners and qualified land trusts to limit the ability to subdivide and develop private land. Conservation easements are public documents recorded with the county in which they occur. Several properties within the Area of Focus are currently protected under conservation easements. As of February 2012, the workgroup estimates (based on local knowledge and conversations with landowners) the total acreage under conservation easements within the Area of Focus to be at least 6630 acres. There are approximately 48,000 acres of private land north of Hwy 160 within the Piedra watershed, so these acres covered by conservation easements represent about 14 percent of the total private land in the Area of Focus.

County Land Use Plans: The Hinsdale County Upper Piedra Area Comprehensive Plan was adopted in 2001. In 2007, the county created the “Upper Piedra District”, which was designed and developed to implement the 2001 Comprehensive Plan. The purpose of the District is to “preserve the natural character of the Upper Piedra, including its open meadows, wildlife habitats, open ridgelines, ... and to accommodate and sustain agricultural and agriculture-related uses along with low density residential development uses in the Upper Piedra area of Hinsdale County.” The District sets out use and dimensional standards for development in the Upper Piedra area, in addition to those found in the Hinsdale County Zoning Resolution. Hinsdale County has a Right to Farm and Ranch Policy. The Archuleta County Community Plan (2006) lists most of the private land within the corridor as “agricultural ranching”, with a base density of one dwelling per 35 acres. Near Highway 160, there is a small area classified as “agricultural estate”, with a base density of one dwelling per 5 acre lot to 1 per 35 acre lot (Appendix D, SJPL

DLMP-DEIS, pD-91). The Archuleta County Community Plan includes protection for riparian areas. Mineral County has a Planning and Zoning Commission; it does not have a land use plan.

Roadless Area: About 48,805 acres of Inventoried Roadless Area fall within the Area of Focus. The 2001 Roadless Area Conservation Rule (36 CFR 294) prohibits road construction and timber harvest, with limited exceptions, in Inventoried Roadless Areas. 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: About 67,520 acres of the headwaters of the Piedra River watershed above US Highway 160 fall within the Weminuche Wilderness area. 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.

Piedra Area: The Piedra Area constitutes 60,341 acres of the Piedra River watershed above US Highway 160, including about 6 miles of the Piedra River. The Piedra Area was established by the 1993 Colorado Wilderness Act, and is managed to preserve its wilderness character. It lacks the implied water rights protection of areas designated as wilderness. Also, the USFS can authorize chainsaw use within the area.

Wild and Scenic Suitability: The Wild and Scenic Rivers Act of 1968 directed the US Department of Agriculture and the US Department of Interior to evaluate selected rivers for potential addition to the National Wild & Scenic Rivers System. In 1979, one such suitability study was completed for the Piedra River and recommended designation for 50.9 miles of the river (35.2 wild, 12.9 scenic, and 5.5 recreational). The Piedra River was re-evaluated in 1989 with no changes made. From 1979 to the present, these “suitable” segments (the East and Middle Forks, and the mainstem of the Piedra down to Highway 160) have been managed to protect their free-flowing character, water quality, ORVs and recommended classifications. According to the *San Juan Public Lands 2007 Draft Environmental Impact Statement* (p.3.549), *“A finding of suitability does not create a water right. A water resource project proposed on a suitable river will be analyzed as to its effect on a river’s free-flow, water quality, and outstandingly remarkable values, with adverse effects prevented to the extent of existing agency authorities (such as special-use authority) and subject to valid existing rights. Projects on a suitable river may be subject to more intense analysis and additional mitigation, compared to rivers not eligible or suitable.”*

USFS Management (current and proposed under the San Juan Public Lands 2007 Draft Land Management Plan): The entire Area of Focus is managed by the USFS. The box below provides more information:

Piedra River above US Highway 160

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 in the Piedra headwaters and the Piedra Area and MA5 “Active Management” (most of the public lands between the Piedra Area and the Weminuche Wilderness, as well as south and east of the Piedra Area). Smaller areas between the Weminuche Wilderness and the Piedra Area are allocated to MA3 “Natural Landscape with Limited Management”. The lands west of the Piedra Area are allocated to MA5 “Active Management.” There is one small linear area stretching along the east side of the Piedra River north of Highway 160 that is allocated to MA4 “High Use Recreation Emphasis.”

Proposed management: Under the *San Juan Public Lands 2007 Draft Land Management Plan* some changes to allocations under these management areas would occur. In the USFS lands between the Piedra Area and Highway 160, a small area would change from MA3 “Natural Landscape with Limited Management” to MA5 “Active Management;” while another small area would change from “Active Management” to MA1 “Natural Processes dominate.” The linear area stretching along the east side of the Piedra River north of Highway 160 and allocated to MA4 “High Use Recreation Emphasis” would be extended further to the north, to the First Fork of the Piedra. The allocation of USFS lands to the west of the Piedra Area would change from MA5 “Active Management” to MA 3 “Natural Landscape with Limited Management.” In the USFS lands between the Piedra Area and the Weminuche Wilderness, including the drainages of the East Fork, Middle Fork, Williams Creek , Weminuche Creek, and Little Sand Creek, the total area allocated to MA5 “Active Management” would decrease and the area allocated to MA3 “Natural Landscape with Limited Management” would increase. Between the Middle Fork and the East fork of the Piedra, an area adjacent to the Wilderness would change from MA3 “Natural Landscape with Limited Management” to MA1 “Natural Processes Dominate”. The road to Williams Creek Reservoir would be allocated to MA4 “High Use Recreation Emphasis”. The areas currently managed as MA2 “Special Areas and Unique Landscapes” would continue under this management. (*San Juan Public Lands 2007 Draft EIS, page 2.15-2.16*).

The USFS has a map of mechanical and prescribed fire treatment areas, many of which are about the river. This is an area where a lot of fire mitigation work is done.

Downstream Senior Water Rights: Senior water rights existing downstream of the Area of Focus act to maintain some flows through the area of focus in years when natural conditions provide sufficient water. The decreed diversions below the Hwy 160 bridge to Navajo Reservoir total approximately 74 CFS. These are all direct flow rights; there are no storage rights. Approximately 12 CFS of the 74 CFS belongs to the Southern Ute Indian Tribe. According to CDWR records, this water is rarely diverted from the river. Of the 74 CFS, there are roughly 20 points of diversion. The most junior is a pumpsite for 1 CFS, adjudicated in 2009. The largest is the Buckskin Nailor diversion for 21.9 CFS, with adjudication dates range from 1902 to 1968. The M E & M Ditch is decreed for 12 CFS with adjudication dates in the 1962-1978 range, but they have appropriation dates ranging back to 1868 to 1945. In addition to the 74 CFS of decreed diversions, there is a CWCB instream flow right for 70 CFS.

In-Stream Flows and Minimum Lake Levels: An 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 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 Colorado Water Conservation Board 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's water right priority system.

In-Stream Flows:

STREAM NAME	CASE NO.	Upper End	Lower End	AMOUNTS IN CFS (DATES)	APPROPRIATION DATE
Piedra River	7-78W1812	Confl. MF & EF Piedra River	Confl. Williams Creek	30 (3/1-8/31) 20 (9/1-2/29)	3/16/1978
Middle Fork Piedra River	7-78W1817	Confl. Porphyry Gulch	Confl. EF Piedra River.	11 (1/1-12/31)	3/16/1978
East Fork Piedra River	7-78W1818	Confl. Deadman Creek	Confl. MF Piedra River.	10 (1/1-12/31)	3/16/1978
Williams Creek	7-78W1819	Confl. Indian Creek	Confl. Piedra River	14 (1/1-12/31)	3/16/1978
Weminuche Creek	7-78W1820	Confl. EF Weminuche Crk	Confl. Little Sand Creek	9 (1/1-12/31)	3/16/1978
Weminuche Creek	7-78W1821	Confl. Little Sand Creek	Confl. Piedra River	18 (1/1-12/31)	3/16/1978
Piedra River	7-78W1813	Confl. Williams Creek	Confl. Weminuche Crk	44 (3/1-8/31) 30 (9/1-2/29)	3/16/1978
Piedra River	7-78W1814	Confl. Weminuche Crk	Confl First Fork Piedra river	53 (3/1-8/31) 35 (9/1-2/29)	3/16/1978
Piedra River	7-78W1815	Confl First Fork Piedra River	US HWY 160 bridge	70 (3/1-8/31) 40 (9/1-2/29)	3/16/1978

Minimum Lake Levels: There are no Minimum Lake Levels within the Area of Focus.

Important Water Information

Court Actions (USFS Reserved Right): 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.

Consumptive Uses: There are three trans-mountain diversions. Two, the Don La Font 1 and 2 are Colorado Parks and Wildlife diversions. The Williams/Squaw diversion on Williams Creek is private. All three divert water to the Rio Grande basin. Other decreed consumptive uses are mainly agricultural. The East Fork of the Piedra below the USFS boundary is over-allocated. When the Abraham Davis and the Piedra Falls Ditches are used to their fullest rights, they sometimes dry up the East Fork of the Piedra for a portion of its length, until return flows replenish the water in the channel.

Potential for Additional Consumptive Uses: There are currently 7 cfs (Cubic Feet per Second) in conditional direct flow water rights and no conditional storage rights within the Piedra River watershed above Highway 160. Given these small amounts, the short term potential for additional consumptive use within the Area of Focus is very limited. 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 is available at

<http://cwcb.state.co.us/water-management/basin-roundtables/Documents/Southwest/SWBasinNeedsAssessmentReport.pdf>.

A Presidential exemption would be needed for development of facilities within the Weminuche Wilderness and the Piedra Area. Note: The next paragraph explains SWSI.

Potential New Water Diversion and Storage Locations: The State Water Supply Initiative ("SWSI") was a basin-by-basin study conducted by the CWCB to examine Colorado's water uses, water-supply needs, and future water planning efforts. SWSI 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. SWSI I identified 4 potential dam sites within the Piedra drainage above Highway 160. 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.

The sites are:

- First Box Reservoir appears to be on the Piedra in Section 32, Township 36 North, Range 4 West at an elevation of 7355 ft
- Weminuche Dam site appears to be on the Weminuche in Section 6, Township 37 North, Range 3 West at an elevation of 8065 ft.
- Weminuche Reservoir on the Weminuche in Section 18, Township 37 North, Range 3 West that has a 1968 water right
- Oneal Park Reservoir is on Gordon Creek in Section 1, Township 36 North, Range 3 West with a 1968 water right.

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.

In addition, pursuant to House Bill 1117 and the Water for the 21st Century Act, the Southwest Basins Roundtable has evaluated the consumptive processes in the San Juan basin. For more information, go to: <http://cwcb.state.co.us/public-information/publications/Pages/StudiesReports.aspx> (then go to SWSI I, SWSI II or the most recent iteration, SWSI 2010).

Other Consumptive and Non-consumptive 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 Basins Roundtable for the San Juan Basin are available at <http://cwcb.state.co.us/water-management/basin-roundtables/Documents/Southwest/SWBasinNeedsAssessmentReport.pdf>

Stream-Flow Data: Several U.S. Geological Survey gauges have been operated in the area. The chart below shows the gauge sites' number, name and dates of operation.

<u>Gauge Site Number</u>	<u>Site Name</u>	<u>Dates of Operation</u>
09349500	Piedra River near Piedra, CO.	1939-10-01 to 1973-06-30
09347500	Piedra R at Bridge Rngr Sta Nr Pagosa Springs, CO.	1936-10-01 to 1954-09-30
09347205	Middle Fork Piedra River Near Dyke, CO.	1977-10-01 to 1983-09-30
09348500	Williams C Nr Bridge Ra Sta, Nr Pagosa Spgs, CO.	1937-10-01 to 1949-09-30
09349000	Weminuche C Nr Brdge Ra Sta, Nr Pagosa Springs, CO.	1937-04-01 to 1949-09-30
09347200	Middle Fork Piedra River Nr Pagosa Springs, CO.	1969-10-01 to 1975-09-30
09347000	Don La Font Ditches No. 1 & 2 at Piedra Pass, CO.	
09348000	Williams Creek-Squaw Pass D at Squaw Pass, CO.	

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/>

Water Rights: The following charts summarize water rights for direct flow and storage, not including instream flow rights held by CWCB in the Piedra River watershed above Highway 160. There are three trans-basin rights from the Piedra River basin above Highway 160 to the Rio Grande basin for a total of 20 CFS: Don La Font 1 = 4 CFS, Don La Font 2 = 6 CFS and Williams/Squaw = 10 CFS. *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).*

DIRECT FLOW WATER RIGHTS above HWY 160	Total # of Rights	Total CFS (Cubic feet per second)
Absolute	64	470
Conditional	2	7

STORAGE WATER RIGHTS above HWY 160	Total # of Rights	Total AF (Acre-feet)
Absolute	7	10,256*
Conditional	0	0

* Williams Creek Reservoir absolute storage right is 10,084AF.

Pending Applications: The USFS has filed on two springs up First Notch Road: Cabin Spring for .0015 CFS and Mountain Lion Spring for .00078 CFS. There is also a pending diligence USFS case on Gordon Creek wetlands, asking to go absolute on an additional 3 cfs. This is not a new filing.

Water Quality: The Colorado Water Quality Control Commission is the agency responsible for developing specific state water quality policies to implement the broader policies set forth by the 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 website:
<http://www.cdphe.state.co.us/regulations/wqccregs/>

Within the Weminuche Wilderness Area, all tributaries to the Piedra 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, water quality is good overall, with no major concerns. The water is not heavily mineralized. For specific water quality classifications and standards by segment, please refer to the attached tables, which can also be accessed at
[http://www.cdphe.state.co.us/regulations/wqccregs/34_2010\(06\)-2011\(06\)tables.pdf](http://www.cdphe.state.co.us/regulations/wqccregs/34_2010(06)-2011(06)tables.pdf)

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Local History around 1979 Wild and Scenic River Efforts and Piedra Area:

In the 1970s, some ranchers within the private land above the Piedra River Fork initially supported Wild & Scenic River protection for the Upper Piedra Reach where there was a large area of private land on which development was likely to occur. When revised, a much more extensive river protection plan was introduced. There were many more protests following the original proposal because two factors had changed the potential for development of the private lands: 1) the Nature Conservancy had purchased the a large ranch and donated it to the USFS, and 2) when wilderness status was proposed for this area a special Piedra Area was created without a federally reserved water right. The Area of Focus includes about six miles of the Piedra River but for much of the distance the Area is limited to the western side of the Piedra drainage. The statute that created the Piedra Area does refer to "further study of water issues," which could change the Areas' designation, but further Congressional action would be required.

2007 Draft Wild and Scenic River (WSR) Information: The *San Juan Public Lands 2007 Draft Land Management Plan* found three (3) segments (50.12 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. The following chart summarizes the suitability findings for these reaches. Please refer to Appendix D, pages D-89 to 102 of the *San Juan Public Lands 2007 Draft Land Management 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.

Stream	Segment	Classification	Length	ORVs	% Private
Piedra River N of Highway 160	From the confluence of the East Fork and the Middle Fork, to the USFS boundary just north of HWY 160	Recreation	7.89 mi	Recreation and	?
		Wild	14.09 mi	Scenery Geology	
East Fork Piedra River in Wilderness	From headwaters to the wilderness boundary.	Wild	9.37 mi	Fish Scenery	0%
Middle Fork Piedra River	From headwaters to USFS boundary that lies upstream of the confluence with the East Fork Piedra River.	Recreation	7.03 mi	Scenery,	0%
		Wild	11.75 mi	Recreation, and Geology	

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 look 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 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.”*

Other Important Information

Potential Conflicts: To be discussed thoroughly in the Piedra River Workgroup meetings and process.

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 (San Juan Public Lands 2007 Draft Land Management Plan). 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 Juan’s, 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

Weeds: The San Juan National Forest's Invasive Species Action Plan for FY2007-2009 identifies as priorities for treatment the following weed species that are known to occur in the Area of Focus: scentless chamomile, dames rocket, yellow toadflax, houndstongue, 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.

Reasonably Foreseeable Economic Development:

Forest Products – Current USFS management classifies most of the non-wilderness, non-Piedra Management Area USFS lands within the Area of Focus as “suitable” or “tentatively suitable for timber harvest.” Under *the San Juan Public Lands 2007 Draft Land Management Plan*, some of these lands would shift from “suitable” to “tentatively suitable”. Land within designated wilderness and within the Piedra Area is not available for timber production.

Oil, Gas, and Mineral development – The Weminuche Wilderness and the Piedra Area are withdrawn from mineral entry, including oil and gas leasing. There is one privately owned patented mining claim (the East Medicine Mine, approximately 151 acres in the Piedra Area) and 14 unpatented mining claims within the Area of Focus.

There is no oil and gas production within the Area of Focus. Generally speaking, the lower portion of the Area of Focus, lying west and south of Little Sand Creek, is judged to have no potential for Oil and gas development, and much of the upper portion has only moderate potential.

Private land development – There are over 10,000 acres of private land within the Area of Focus. These lands are currently managed for ranching and recreation. Landowners have protected several properties under conservation easements to limit development in the future. Finding potable water may require deep wells, which are costly. In addition, the Upper Piedra District resolution is fairly restrictive for development.

Commercial outfitting (fishing, hunting, horseback riding, kayaking etc.) – Commercial outfitters require a permit to operate on USFS lands. There are about 21 permitted outfitters and guides within the Area of Focus. There is very limited potential for increasing the number of outfitters and guides (O/G's) to be permitted in the Area of Focus.

In the 1990's the San Juan completed a "Capacity Study" for O/G's across the San Juan. The capacity study separated the forest into "compartments" and then determined a "number of days" within each compartment. A percentage of days were allocated to commercial activities and a percentage of days were allocated to public recreation. Within the 16 compartments of the Area of Focus, essentially all days have been allocated to commercial O/G's to do specific activities.

The main way a non-permitted O/G can obtain a permit is to apply for a vacated permit when an existing permittee sells their business (permits cannot be sold). The selling of the business would create capacity and if the buyer (applicant) met FS criteria they may be issued a permit.

Most of the capacity study focused on hunting activities. There has been a demand for non-hunting activities (e.g. mountain biking tours). In order to permit these activities, the SJNF needs to conduct a needs assessment. If a legitimate need is warranted, an open competitive process would be used to permit the activities (Source: USFS Pagosa District).

Livestock grazing – Most of the Area is available for livestock use. Livestock owners require a permit to graze on public lands. There are 15 Cattle and Horse allotments (14 Active, 1 Vacant) that fall either entirely or partially within the Area of Focus. Nine are completely within the watershed, while portions of 6 others cross into other watersheds. Three of these are managed by the Columbine District. There are 6 Sheep and Goat allotments, all of which are closed due to proximity to the wild bighorn sheep population. Four of these allotments are completely within the watershed, with portions of 2 crossing into other watersheds. All are managed by the Pagosa District.

Ski Areas – There is little to no potential for ski area development in the Area of Focus.

Transportation – There are forest roads and county roads within the Area of Focus. The Piedra Road is a very heavily used Forest Service Road. There is some potential for new roads to be constructed in areas outside of the Weminuche Wilderness and Piedra Area. Lots of new social trails are being built to get to the river or to see the river canyon (especially by the headwaters near Williams Creek). The San Juan National Forest is currently conducting a travel management planning process for the Turkey Springs landscape. A similar process for the Beaver Meadows landscape has been completed.

Utility Corridors and Telecommunication Sites – There are no telecommunication sites located on public lands within the Area of Focus. There are electrical transmission lines serving the private lands within the Area. There are no designated or proposed utility corridors within the Area. There are currently no major oil or gas pipelines existing or proposed within the focus area.

Maps: refer to the map at this link: http://ocs.fortlewis.edu/riverprotection/piedra/pdf/Piedra%20Wild_Roadless.pdf