Appendix D

Wild and Scenic Rivers Suitability

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INTRODUCTION TO WILD AND SCENIC RIVER SUITABILITY

Under Section 5 (d)(1) of the Wild and Scenic Rivers Act (WSRA), federal agencies undertaking land management planning are required to assess whether any of the rivers and streams in the planning area would be appropriate for addition to the National Wild and Scenic Rivers System.

The process of designating a Wild and Scenic River (WSR) has four steps:

1. The U.S. Forest Service (USFS) and/or Bureau of Land Management (BLM) determine streams that are "eligible," and what each "classification" is.
2. The USFS/BLM Land and Resource Management Plan (LRMP) determines which streams are "suitable."
3. The USFS/BLM can choose when to forward "suitable" streams for legislative consideration.
4. Congress can "designate" a WSR.

Steps 1 and 2 are the subject of the Final Environmental Impact Statement (FEIS) and LRMP and are discussed below.

There is also an alternative process (under Section 2(a)(ii) of the WSRA) in which the state legislators and governor recommend a river and the Secretary of the Interior designates it as a WSR. That process is not considered in the FEIS and LRMP.

Eligible Rivers

The WSR analysis considered primarily third-order and larger streams located on the San Juan National Forest (SJNF) and Tres Rios Field Office (TRFO). Some smaller order streams for which subject matter experts identified a potential outstanding remarkable value (ORV) were added, so that all values could be evaluated. The list of all streams evaluated is at the end of this WSR appendix.

Streams determined to be sufficiently free-flowing (i.e., not impounded by dams or significantly channelized) were analyzed to determine if they had ORVs. In order to be assessed as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant at a comparative regional or national scale. ORVs can be related to scenery, recreation, geology, fish, wildlife, historical, cultural, or other values. Discussions with the Government Water Roundtable from September 2005 to February 2007 were useful in refining the ORV assessment. Members of the Water Roundtable provided information to help develop criteria for determining the significance of values. In addition, the Dolores River Dialogue (DRD) provided useful information and recommendations about streams located within the Dolores Public Lands Office area. Approximately 535 miles of streams on the SJNF and TRFO were found to be free-flowing and have one or more ORVs, and were determined to be "eligible" for the National Wild and Scenic Rivers System. The stream name and a brief listing of the ORVs are as follows. The column titled "Prev" indicates whether the segment (or a major portion of the segment) was previously analyzed and found suitable.

Table D.1: Stream Segments with Outstandingly Remarkable Values

Stream Name	Fish ORV	Wildlife ORV	Recreation ORV	Geology ORV	Scenery ORV	Ecological (plants) ORV***	Archaeology ORV
Dolores above McPhee	–	–	San Juan Skyway	–	–	–	–
Dolores McPhee to Bedrock*	Roundtail chub, flannelmouth sucker, bluehead sucker	Canyon treefrog	Boating	Cliffs, linear canyons	Cliffs, canyons, groves	New Mexico privet, Eastwood's monkey flower	Archeology
Rio Lado	High-purity cutthroat	–	–	–	–	–	–
West Dolores	–	Black swift nesting colonies	–	–	–	–	–
McIntyre Canyon	–	–	–	–	–	Eastwood's monkey flower	–
Bull Canyon	–	–	WSA, hiking to pools	–	–	–	–
Coyote Wash	–	–	WSA, hiking sandy wash	–	–	Kachina daisy, Eastwood's monkey flower	–
Animas River, Baker's Bridge to Silverton	–	–	Train, rafting/kayaking	–	Canyon, train	–	Historic sites, facilities, and railroad
Cement Creek	–	–	–	–	–	Iron fens	–
Cinnamon Creek	–	–	Alpine Loop	–	–	Altai cottongrass, thickleaf whitlowgrass	–
Maggie Gulch	–	–	–	–	–	Showy, Colorado Divide, and thickleaf whitlowgrass	–
Mineral Creek	–	–	San Juan Skyway	–	San Juan Skyway, wetland, colorful valley displaying geologic features	Chattanooga iron fen, sphagnum balticum	–
South Fork Mineral Creek	–	Black swift nesting colonies	–	–	–	Iron fen wetland	–

Stream Name	Fish ORV	Wildlife ORV	Recreation ORV	Geology ORV	Scenery ORV	Ecological (plants) ORV***	Archaeology ORV
West Fork Animas and California Gulch	–	–	–	–	–	Altai cottongrass, clustered sedge	–
Hermosa Creek and Tributaries	High-purity cutthroat and reintro-duction habitat	–	Hermosa Trail used by outfitters, hunters, mountain bikes, and motorized vehicles	–	–	–	–
Los Pinos above Vallecito*	–	–	Heavy-use trail	–	Scenic valley	–	–
Los Pinos Tributaries previous recommend-ation*	–	–	–	–	Scenic valley	–	–
Vallecito Creek	–	–	Heavy-use trail, kayaking	–	Canyon, surroundings	–	–
Piedra River, Chimney Rock area to Forks*	–	–	Whitewater boating, fishing	Headwaters complex	Box canyons, hot springs	–	Prehistory
East Fork Piedra River	High-purity cutthroat	–	–	–	Waterfalls	–	–
Middle Fork Piedra River*	–	–	General recreation	General geology	General scenery	–	–
West Fork San Juan River	–	–	–	San Juan volcanic field, glaciation	–	–	–
Wolf Creek and Fall Creek	–	Black swift nesting colonies	–	–	Treasure Falls	–	–
East Fork San Juan River	–	–	–	Textbook glaciation and volcanics	–	–	Archeology

*Streams that were previously recommended for inclusion in the National Wild and Scenic Rivers System.

Characteristics of Eligible Rivers

Eligible rivers are then classified by their development level, which assesses water resource and shoreline development and amount and kind of access. The WSRA calls the three development classifications “wild,” “scenic,” and “recreational.” A river’s classification does not represent the values for which it was added to the National Wild and Scenic Rivers System. For example, a “recreational” river segment denotes a level of in-corridor and water resources development and does not necessarily mean that the recreation resource has been determined an ORV. Similarly, a recreational classification does not imply that the river would be managed for recreational activities. For example, there are rivers in the National Wild and Scenic Rivers System paralleled by a road and hence classified as recreational for which the ORV is the fish resource.

Table D.2 gives some examples of the type of development that would fit into each classification.

Table D.2: Example Development Types by Classification

Activity	Wild	Scenic	Recreational
Livestock grazing	Yes	Yes	Yes
Inconspicuous or historic buildings	Yes	Yes	Yes
Housing subdivisions and stores	No	No	Yes
Timber harvest	No	Yes	Yes
Trails	Yes	Yes	Yes
Occasional road crossings and bridges	No	Yes	Yes
Parallel roads or railroads	No	No	Yes
Low dams and diversions	No	No	Yes

Further information about compatible projects on federal land is found in Forest Service Manual (FSM) 1909.12, Chapter 80.

On the SJNF and TRFO, eligible stream segments that were classified are shown in Table D.3.

Table D.3: River Miles by Classification

Classification	Wild	Scenic	Recreational	Total
Miles	200	82	253	535

Many of the eligible rivers are already in wilderness, similar Congressional designation, or BLM wilderness study areas (WSAs) (Table D.4).

Table D.4: Miles by Designation

Miles in Wilderness	Miles in Piedra Area	Miles in WSAs	Other	Total
104	10	37	384	535

Many of the stream corridors studied included some intermingled private lands. Analyzing or managing a river for WSR status does not give or imply any government control over private lands. If Congress were to designate a stream as a WSR, there would be no federally imposed management restrictions on private land. Using condemnation to acquire fee title to land is not authorized. Use of condemnation to acquire easements is permitted but is extraordinarily rare in the western United States.

If streams have long segments through private land, it may be more complicated for the federal agency to manage the federal portion as a WSR. This is one of the factors considered in the suitability analysis. For the total of all eligible segments, Table D.5 lists the miles of streams under different land ownerships.

Table D.5: Miles by Land Ownership

USFS	BLM	State	County, etc.	Private	Total Miles
294	129	5	6	102	535
Note: In this and all other tables, ownership is listed for the full length of the segment, but decisions and management recommendations are for USFS and BLM lands only.					

In the LRMP and FEIS, decisions are made as to which of these eligible streams are considered "suitable" for inclusion into the National Wild and Scenic Rivers System.

Introduction – Suitability Analysis Process

Suitability is designed to answer these questions:

1. Should the river's free-flowing character, water quality, and ORVs be protected, or are one or more other uses important enough to warrant doing otherwise?
2. Will the river's free-flowing character, water quality, and ORVs be protected through designation? Is designation the best method for protecting the river corridor? In answering these questions, the benefits and impacts of WSR designation must be evaluated and alternative protection methods considered.
3. Is there a demonstrated commitment to protect the river by any non-federal entities that may be partially responsible for implementing protective management?

The factors considered in answering these questions that are discussed by individual streams later in this document are:

1. Characteristics that do or do not make the area a worthy addition to the national system.
2. The current status of land ownership and use in the area.
3. The reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the national system.

The factors that are considered that are the same for all rivers are listed and answered below:

1. The federal agency that would administer the area should it be added to the national system.
2. The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies.
3. The estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area should it be added to the national system.
4. A determination of the degree to which the state or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national system.

At this time, the SJNF and TRFO are envisioned as the federal agencies to administer any suitable rivers that may be designated within their respective boundaries. There has been no need identified to acquire any land or interest in land. Between these findings of suitability and the actual recommendation of a river for designation, the interest of other entities and agencies to participate in management of the river would be confirmed. The "Suitability Determination" by river system shows the segments that are found suitable in the Preferred Alternative, FEIS Alternative B.

If any of the rivers found in this planning process to be suitable were to be designated as WSR by Congress or the Secretary of the Interior, a federal water right would be created. Typically, the quantification of the federal reserved right is left to the federal agency that manages the river. The agency conducts studies to determine the minimum flow rates needed to support the ORVs. Then the federal agency submits an application containing the proposed quantification to a state court for confirmation and integration into the state water rights system. This quantity would have an appropriation date as of the date of the legislation and would be junior to all existing water rights. Future diversions or proposed changes to existing diversions from the wild and scenic segment, or from tributaries or upstream reaches, could be challenged by the federal agency holding the water right, as well as by other water rights holders should there be potential injury to their water rights.

Collaboration with State and County Government and the Government-to-Government Water Roundtable

As part of the suitability analysis process, input was received from the Colorado Department of Natural Resources. Information provided by the Colorado Division of Water Resources, Colorado Parks and Wildlife (CPW), and the Colorado Water Conservation Board was incorporated into the assessment of suitable streams on the SJNF and TRFO. This analysis also acknowledges information generated by the Statewide Water Supply Initiative, basin roundtables, the government-to-government Water Roundtable and the Interbasin Compact Process. The Southwest Basin Roundtable established through Colorado H.B. 05-1177 is tasked, in part, with developing a basin-wide consumptive and non-consumptive water supply needs assessment. At the writing of this appendix, the Southwest Basin Roundtable had not yet completed its assessment or identified priorities. Future reports of this roundtable would be made available as additional information to be reviewed if WSR recommendations are made to Congress.

Following the initiative of the Southwest Water Conservation District and the San Juan Citizens Alliance, the River Protection Workgroup Steering Committee was organized to develop and make available a general process for facilitated community discussions of the need for and options to accomplish river protections. The stated purpose of this multi-year effort is:

- "to bring diverse stakeholders together in a collaborative process to determine values needing protection – ecological, economic and social;
- to recommend the types of tools necessary, either existing or newly-developed, to protect the values; and
- to make recommendations in the context of striking a balance between the protection of natural values and water development."

Using the assistance provided through the River Protection Workgroup Steering Committee's effort, community members chose to establish separate workgroups to discuss potential river protections for seven major streams and their specified tributaries. Individual workgroups considered portions of Hermosa Creek, Vallecito Creek and the Pine River, the West and East Forks of the San Juan River, the Animas River, and the Piedra River. To date, numerous publicly advertized meetings have been held to discuss each of these river segments and workgroups have prepared public reports of their findings for Hermosa Creek, Vallecito Creek and the Pine River, and the East and West Forks of the San Juan River. Community discussions continue for the remaining river segments. The published reports stemming from these multiple efforts have and would be directed toward potential steps that local, state, and federal governmental entities, and possibly even private citizens, could consider to balance the perceived needs for protecting values related to rivers and the long-term need for water and water development.

A separate, but similar, public process has been in place for the Dolores River for a number of years. The stated purpose of the DRD and related subgroups is "to explore management opportunities, build support for and take action to improve the ecological conditions downstream of McPhee Reservoir while honoring water rights, protecting agricultural and municipal water supplies, and the continued enjoyment of rafting and fishing" (Dolores River Dialogue 2013). A closely related group is the Lower Dolores Plan Working Group that has been identifying issues, compiling scientific information, and discussing possible management options to be considered as the federal agencies update management plans for the Lower Dolores River. As with the river protection workgroups, the work of the DRD and related groups has been publicly advertised and reported, and has involved diverse interests from throughout the region.

While the topics and findings of these various community efforts extended well beyond the potential WSR studies of the USFS and BLM, much of the information they have produced and made available to the public confirms or otherwise informs the analysis presented in this appendix. The findings of these groups do not constitute significant new information in terms of the required analyses of potential WSR suitability under Section 5 (d)(1) of the WSRA and related agency guidance. The findings of the groups have and may yet suggest alternative approaches to river protection that fall outside the authority of the federal agencies (e.g., separate legislative protections or additional county planning) but could eventually augment or substitute for the administrative recommendations for WSR designation stemming from the analysis in this appendix. Therefore, the analyses presented below acknowledge the relevant findings of

these community efforts and how they might relate to the administrative recommendations for WSR designation.

Through the Draft Environmental Impact Statement (EIS), public input was sought specifically on how the results of collaborative efforts such as the DRD and the Lower Dolores Plan Working Group should be considered as the BLM and USFS address the Section 5(d) requirements of the WSRA in this LRMP revision. Comments received were generally very supportive of the community efforts and encouraged the agencies to make use of the science-based information being collected in support of these efforts and to give consideration to the river management ideas being surfaced by their efforts. Some comments suggested that final suitability determinations should be postponed until individual river groups have completed their processes. A similar comment suggested that a “reopener clause” be added to suitability findings to later accommodate findings of community-based efforts in regard to alternatives to WSR suitability. While delaying WSR determinations and providing for reopeners fall outside agency guidance for considering eligibility and suitability in land management planning, the analyses below acknowledge the work that various groups have been doing in relation to river protection to highlight that alternatives to WSR designation have been, or are being, developed and would be made available to inform agency or congressional actions that may follow the determinations of suitability presented in this appendix.

The individual river segments analyses below identify generally how public comments were considered in reaching suitability determinations. Specific comments responses are presented in Volume III, Appendix S.

PROCEDURAL STEPS FOLLOWING COMPLETION OF THE LAND AND RESOURCE MANAGEMENT PLAN AND USE OF THIS APPENDIX

The procedures for forwarding WSR proposals stemming from land management plans are very similar for both the USFS and BLM. Guidance from both agencies encourages the development of a standalone appendix to the LRMP and FEIS that can be forwarded to the Chief of the USFS or the Director of BLM, and then to the respective Secretaries before the administration makes any final recommendations to Congress for their consideration. For instance, the BLM's guidance states: "This appendix should be self-contained so that, given a final decision to forward a recommendation to Congress, it can be extracted to support any legislative proposal" (BLM Manual 6400.4.1(C)). This Appendix D is intended to fulfill that requirement. Further consideration of the determinations identified under the Preferred Alternative would involve review of this appendix. For that reason, this appendix highlights where community-based river discussions have been focused to ensure that parties involved in subsequent consideration of WSR recommendations presented in this LRMP and FEIS are fully aware of community processes that may have produced suggestions for river management.

MANAGEMENT OF ELIGIBLE RIVER SEGMENTS FOLLOWING SUITABILITY DETERMINATIONS

River segments found suitable in the final decisions for the BLM and USFS land management plans would be subject to interim management protections found in BLM Manual 6400 Sections 3.5 and 3.6, and Forest Service Handbook (FSH) 1909.12 Chapter 80. This guidance outlines approaches and guidelines to be followed to ensure that suitable rivers are managed to protect their free-flowing condition, water quality, tentative classification, and ORVs until Congress chooses to designate the river or release it for other uses. In the event that no legislative action is taken to designate or release the river, the agencies would continue to protect the river segments until suitability determinations are revisited in future land use planning efforts.

Eligible river segments determined not to be suitable would be released from further management protections under the provisions of the WSRA and would be managed according to the prescriptions found in the respective land use plans.

The record of inventory for eligibility presented in this appendix would be retained for future land use planning efforts (e.g., plan revisions) where WSR eligibility findings or suitability determinations are required under the WSRA (Section 5(d)).

Dolores River System

Eligible portions of the Dolores River and tributaries, and their classification, are as follows. Details for each segment are below (Table D.6).

Table D.6: Miles per Eligible Segments

	Wild	Scenic	Recreation	Total
Dolores above McPhee	–	–	55.55	55.55
Dolores River - McPhee To Bedrock	48.84	23.15	37.04	109.02
Rio Lado	–	2.83	–	2.83
McIntyre Canyon	–	5.82	–	5.82
Summit Canyon	–	12.15	–	12.15
Bull Canyon	1.44	4.94	–	6.38
Coyote Wash	7.60	–	–	7.60

	Wild	Scenic	Recreation	Total
West Dolores	5.17	–	28.54	33.71
Dolores Totals	**63.05**	**48.89**	**121.13**	**233.06**

Dolores River above McPhee Reservoir

Location: The river above McPhee Reservoir was studied from where it became a third-order stream at the head of the East Fork down the mainstem to the reservoir. A 0.25-mile corridor on either side of the stream was also studied. The portion of the stream from the headwaters to McPhee Reservoir is 55.55 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs. Above Taylor Creek the Colorado Water Conservation Board holds an instream flow right, which would tend to maintain the free-flowing nature of the stream.

Wild and Scenic Classification: This entire segment is classified as a recreational use because it is readily accessible by road. This classification was chosen because the San Juan Skyway runs along the river for the majority of the segment. At the headwaters there is a four-wheel-drive road that follows the river.

Land Ownership: Land ownership is split between National Forest System (NFS) lands, non-Federal land (state, county, town), and private land (Table D.7 and Table D.8).

Table D.7: Ownership along Linear River Miles

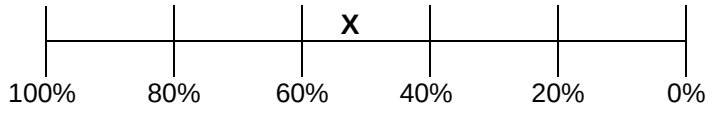
NFS	Non-Federal	Private	Total	% NFS
24.61	0.19	30.75	55.55	44.3%

Table D.8: Ownership within the 0.5-mile River Corridor in Acres

NFS	Non-Federal	Private	Total	% NFS
9,556.62	5.28	7,615.67	17,177.57	55.6%

The amount of private land changes along this corridor. North of the Montezuma/Dolores County line there is less private land in the corridor, and there are somewhat fewer conflicts. South of the county line there is more private land and more potential for conflicts of many kinds. Future analysis of this river may want to break it into several sections.

Amount of federally owned land within the River Corridor



Outstandingly Remarkable Values

Recreation: The San Juan Skyway National Scenic Byway is a nationally designated road that parallels the river. Visitors driving the San Juan Skyway are treated to views of the verdant river floodplain flanked by sculpted red sandstone and thriving aspen stands on the valley sides. The skyway attracts national and international visitors.

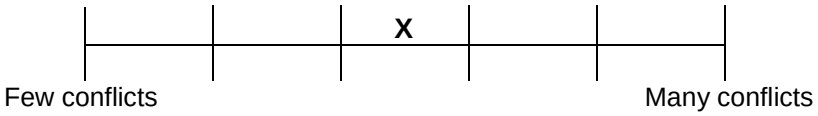
Existing and Potential Land Uses

The NFS land in the river corridor is managed for a variety of uses, including the viewshed of the San Juan Skyway National Scenic Byway. Most of the federal land in the corridor would be managed as a recreation-emphasis theme. The area around Rico would have a special theme related to the activities around the town. The upper portion away from the highway would be managed as a natural landscape

with limited management. This is compatible with the recreation classification and the protection of the recreation ORVs.

According to the Montezuma County Comprehensive Land Use Plan for the Unincorporated Areas of Montezuma County (Montezuma County 1997), the majority of the private land is classified as agricultural with a density of one dwelling per 30-acre parcel. There are 2.2 miles of stream, which account for 675 acres of private land, classified as agricultural with a density of one dwelling per 20 to 30 acres. There are 1.54 miles of stream, which account for 507 acres of private land, classified as agricultural with a density of one dwelling per 10 to 20 acres. This type of development would not interfere with the recreational classification of the river. The rest of the private land is in Dolores County. The Dolores County Master Plan (Dolores County 1997) does not classify the land within the county; therefore, the building density is unknown in this area except in the town of Rico. The Rico Regional Master Plan (Town of Rico 2004) designates five classifications within the river corridor. These are the Rico Renaissance Planned Unit Development area, Rico Renaissance Open Space, Rico Renaissance (within the Urban Growth Boundary), Sundial Planned Unit Development area and Single Family Residential (one residence per three acres).

Potential for conflict with existing and potential land uses



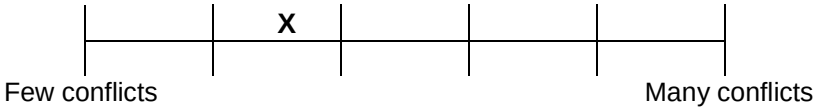
Mineral Potential

Ores rich in silver, lead, and zinc, with modest gold and copper, have been mined from deposits in the Rico mining district since 1879. There is no current production. The area around Rico is favorable for stockwork molybdenum, porphyry copper-molybdenum, and polymetallic replacement and skarn deposits. The area below Rico is favorable for placer gold.

There is no oil or gas production, and potential for oil and gas is low.

There are numerous gravel pits (active and reclaimed) along the river corridor.

Potential for conflict with minerals



Water Resources Development

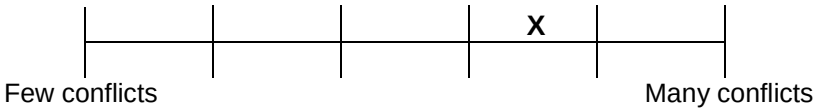
Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 45 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 77.416 cubic feet per second (cfs).
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 3.11 cfs.
3. The Colorado Water Conservation Board (CWCB) undertook a State-wide Water Supply Initiative (SWSI). Additional supply for the town of Rico is listed in SWSI Section 6 (Identified Projects and Processes) and could impact this river. The SWSI has mapped one potential reservoir site on a tributary to the Dolores River, but it has not been verified for feasibility.

There are occasional headgates and low dams associated with these diversions. In addition, short sections of riprap protect State Highway 145 from erosion on the outside some bends on the river.

Additional riprap may be present on private land to protect fields from erosion on the outside bends. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development



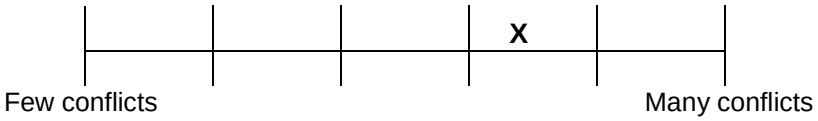
Transportation and Facilities

State Highway 145 is within the Dolores River Corridor for 46 miles. This road is paved. In addition to the highway there are 5.7 miles of roads maintained for passenger cars in USFS campgrounds and roads leading out of the corridor. There are also 2.9 miles of roads on NFS lands not maintained for passenger cars, as well as numerous additional roads on private land.

Seven miles of non-motorized trails and 1.6 miles of motorized trails are located within the river corridor. In addition to the roads and trails, there are also a number of facilities found within the river corridor. The USFS facilities are Cayton Campground, Rico Visitor Center, Priest Gulch Trailhead, and Bear Creek Trailhead. There is also a power line and pipeline corridor crossing the Dolores about a mile below its confluence with the West Fork.

The towns of Rico and Dolores are also in the river corridor. Within the towns and in other areas on the river corridor there is residential, commercial, and recreational development on private land.

Potential for conflict with transportation and facilities

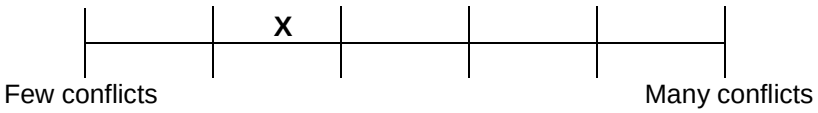


Recreation and Other Resource Activities

There are many recreation opportunities along the Dolores River above McPhee Reservoir. These include driving the San Juan Skyway, camping (dispersed and developed), hiking, mountain biking, fishing, horseback riding, hunting, rafting, and kayaking. This section of the Dolores River is also listed as a good fishing area in the Fisher's Guide to Colorado (Bartholomew 1998).

Other activities that may occur in the area include agriculture, livestock grazing, timber, harvest and mining.

Potential for conflict with recreation and other resources



North of the Montezuma/Dolores County line there is less private land in the corridor, and there are somewhat fewer conflicts. South of the county line there is more private land and more potential for conflicts of many kinds.

Special Areas

Much of this segment is paralleled by the San Juan Skyway. The proposed Grizzly Peak Research Natural Area (RNA) is adjacent to this segment.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major economic base in Montezuma County is retirees (39%) and the major economic base in Dolores County is agribusiness (33%).

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The Dolores River above McPhee Reservoir was not found to be suitable in the Preferred Alternative. While there are significant recreational values of the river corridor, there are many existing and potential uses along the river that would conflict with a designation under the WSRA. In particular, the intermingled federal and private ownership and substantial private ownership of this reach, the great number of water rights and diversions, numerous existing and historic sand and gravel operations, and the many roads and bridges along this reach counter-balance the ORVs of the stream. Comments were received both in support and in opposition to this finding, but generally did not provide additional information to be considered.

Land use planning at the county and local government level and in LRMP revision would generally be compatible with a recreation classification of this river segment and would provide some protection of the recreation ORVs identified. At the present time there is instream flow protection (20 cfs) provided for a portion of this reach by the CWCB. WSR designation could perhaps enhance protection of the free-flowing character of the stream but would not add significant levels of protection for the recreation ORVs because of the extent of private lands involved and the existing levels of development in the corridor. Other options for protecting the recreation values include the present focus placed on the scenic river corridor by national scenic byway classification and the continued protections afforded by county and local government planning. The land ownership patterns and development patterns along nearly this entire river segment would preclude alternative protections such as wilderness designation. Only the uppermost portions of the stream could be protected directly and indirectly by RNA designation and roadless area management discussed in the LRMP revision.

Dolores River - McPhee Reservoir to Bedrock

Location: The river was studied from the outlet of McPhee Reservoir to Bedrock. The portion of the stream from the outlet of McPhee Reservoir to Bedrock is 109.09 miles. The segment was determined to be sufficiently free-flowing and possess sufficient water quality to support the ORVs.

Wild and Scenic classification: The segment has a number of different eligibility classifications, which can be found in Table D.9 in miles.

Table D.9: Dolores River-McPhee Reservoir to Bedrock (miles)

Wild	Scenic	Recreational	Total
48.3	23.1	37.0	108.5

*Segment adjusted to exclude roads from wild segments.

The following discusses the river segments and their classification starting from McPhee Reservoir.

- From McPhee Reservoir to Bradfield Bridge is recreational, with numerous campgrounds and a parallel road.
- From Bradfield Bridge to the Dove Creek Pump Station is wild. There is no road, no developed or maintained trail, and the area is closed to motorized uses.

- From the Dove Creek pump station to Disappointment Creek is scenic. The Snaggletooth Road is in the corridor, but it has only short portions of obtrusive road; for or the most part, the Snaggletooth Road is unobtrusive.
- From Disappointment Creek to below Slickrock near McIntyre Creek is recreational, with the community of Slickrock and many county roads.
- From below Slickrock near McIntyre Creek to the Little Gypsum Bridge at the start of the WSA is also recreational.
- From Little Gypsum Bridge at the start of the WSA to a point about 2.5 miles above Bedrock is wild. This section is in the WSA.
- From where the river exits the WSA to Bedrock, a segment that is about 2.5 miles, the river grades from mostly wild to being flanked by campgrounds and industrial plants. This section is classified as recreational.

The BLM administrative boundaries split the WSA. Decisions about the portion of the river administered by the Montrose Field Office (approximately 6 miles) are not being made in this document, but the analysis is presented for the longer segment.

Land Ownership: Land ownership is split between BLM, CPW, NFS, non-Federal (county, town), and private land. Table D.10 is a breakdown of the miles of stream by ownership.

Table D.10 - Miles by Ownership

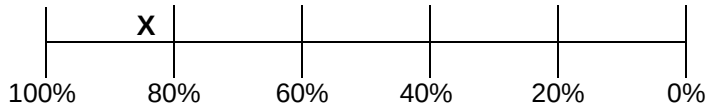
BLM	CPW	NFS	Non-Federal	Private	State	Total	% NFS	% Federal (NFS+BLM)
84.25	0.94	5.53	0.18	12.82	5.30	109.02	5.1%	82.3%

Table D.11 is a breakdown of the ownership within the river corridor in acres.

Table D.11 - Acres by Ownership

BLM	CPW	NFS	Non-Federal	Private	State	Total	% NFS	% Federal (NFS +BLM)
25,092.61	332.52	2,339.50	48.77	3,005.05	1,195.24	32,013.69	7.3%	85.7%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

This section of the Dolores River contains many ORVs.

Recreation and Scenery: This section of the river is listed as one of the most popular and beautiful rafting areas in southwest Colorado. It contains Class II, III and IV rapids. The river is in a wild and deep canyon that combines red sandstone cliffs with coniferous forests (Anderson and Hopkins 1982). It is also regionally significant for boating recreation, based on observations of actual use and interviews with regional recreation providers. It is also listed in the Nationwide Whitewater Inventory, American Whitewater, 2006, even though it is more of a scenic float trip than a whitewater experience.

The scenic values are associated with recreation. The river corridor contains cliffs, canyons, and old growth ponderosa pine groves.

Fish and Wildlife: This segment contains occupied roundtail chub (*Gila robusta*), flannelmouth sucker (*Catostomus latipinnis*), and bluehead sucker (*C. discobolus yarrowi*) habitat. Roundtail chub is a species of special concern because it is a sensitive native species and qualifies as wild stocks and/or federal or state listed or candidate threatened, endangered, or sensitive species. The flannelmouth and bluehead suckers have been added to the ORVs since the Draft EIS based on comments that suggested the three species should be considered together, as they are in the Range-wide Conservation Agreement and Strategy (Utah Department of Natural Resources 2006) signed by six state wildlife agencies, the BLM State Directors of Colorado and Wyoming, the National Park Services' Intermountain Region, and the Jicarilla Apache Nation. Comments were also received from multiple other interests suggesting that the three species should be considered together based on the scientific information that has been compiled. Roundtail chub is on the USFS and BLM Colorado sensitive species lists and is considered by CPW as species of special concern.

This segment also contains a population of canyon tree frog (*Hyla arenicolor*), which has a state ecological rating of 2, meaning that it is rare or imperiled within the state. The species is also listed as a BLM Colorado Sensitive Species. The tree frog was previously identified as a state species of concern, but is now identified as "effectively conserved" in the Colorado Natural Heritage Program's Scorecard presented in the State of Colorado's Biodiversity (Colorado Natural Heritage Program 2011). Canyon tree frogs occur along streams in deep rocky canyons. Tree frogs are most active at night but are frequently found during the day resting in small depressions in solid rock near pools of water. They breed in canyon bottom pools often bounded by solid rock.

Geology: There are dramatic Cretaceous sandstone cliffs throughout the canyon, and in some areas the geology has confined the canyon to a uniquely persistent linear and angular form. The northerly flow of this river is rare within the region of comparison, and documents the uplift of the Colorado Plateau and the subsidence of the adjacent Paradox Basin, These two geological events also determine the unusual gradient of the river. The action of the Dolores River by penetrating the hard caprock of the present-day cliffs and the linear flow pattern of its canyon demonstrate the unusual rapidity of the area's tectonic processes and the speed of the corresponding downward cutting of the river, which in turn documents the geologic timescale history of water supply in southwest Colorado.

Ecology: The segment contains the New Mexico privet (*Forestiera neomexicana*), which is extremely rare or imperiled globally, and Eastwood's monkeyflower (*Mimulus eastwoodiae*), which is extremely rare or imperiled within the state and rare globally.

Archeology: Several rare and exemplary prehistoric archeological sites are preserved immediately adjacent to the Dolores River in Colorado between McPhee Reservoir and the small town of Bedrock. The sites range in composition from large Anasazi pueblos such as Mountain Sheep Point Village and the Kayenta House cliff dwelling to sacred sites such as the rock art panel at the mouth of Bull Canyon. These archeological sites evidence at least 11,000 years of inextricable connection between the Dolores River and the area's human inhabitants.

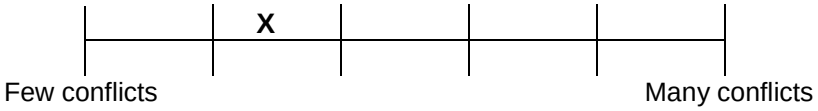
Existing and Potential Land Uses

Most of the federal land in this corridor is managed and would continue to be managed as a special theme emphasizing the river and canyon opportunities. The portion in the WSA would continue to be managed to preserve its wilderness character. This is compatible with the numerous ORVs in this corridor.

According to the Montezuma County Land Use Plan for the Unincorporated Areas of Montezuma County (Montezuma County 1997) the private land along the Dolores River in Montezuma County is classified as agricultural with a density of one dwelling per 30-acre parcel. This type of development would not interfere with the recreational classification of the river. There is also private land within Dolores County. The Dolores County Master Plan (Dolores County 1997) does not classify the land within the county; therefore, the building density is unknown in this area. The remainder of the private land is within San Miguel and Montrose Counties. According to the San Miguel County Comprehensive Development Plan (San Miguel County 2001), the private land within the river corridor in San Miguel County is classified for

natural resources, agriculture, and recreation. There is a small area of residential development within Slickrock. The private land in Montrose County is located near Bedrock and is classified as agricultural according to the Montrose County Master Plan (Montrose County 2010). These classifications should not interfere with the recreation and scenic classifications.

Potential for conflict with existing and potential land uses

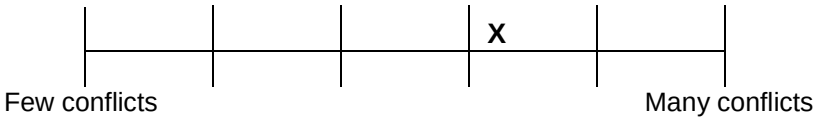


Mineral Potential

The Slickrock uranium district encompasses the Dolores River, as it passes through most of San Miguel County, giving it high potential for uranium. There is active uranium leasing in the vicinity of this stream.

The oil and gas potential is high for the Dolores River in San Miguel and Montrose Counties. Oil and gas potential is moderate as it runs through Dolores County and low as it approaches McPhee Dam.

Potential for conflict with minerals



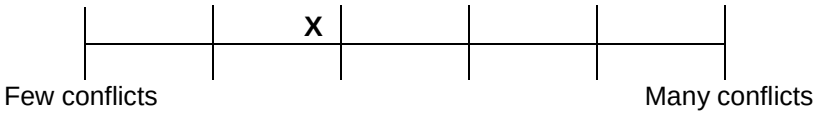
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 13 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 11.8 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 7.41 cfs and 6.5 acre feet.
3. The SWSI report shows two conditional water rights in this stream. The SWSI has also identified reservoir sites on Beaver Creek and Plateau Creek that flow into McPhee Reservoir that could be operated to increase flows in the Dolores River below McPhee Reservoir. Beaver Creek and Plateau Creek reservoir sites are a high priority for the Southwest Basins Roundtable of the Colorado Interbasin Compact Committee. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There are occasional headgates and low dams associated with these diversions. Additional riprap may be present on private land to protect fields from erosion on the outside bends. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development



Transportation and Facilities

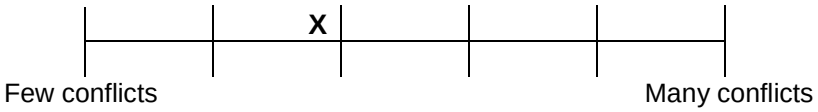
From McPhee Dam to Bradfield Bridge there are 15.3 miles of road that are maintained for passenger cars. There are also three campgrounds within the river corridor: Ferris Canyon, Cabin Canyon, and Bradfield campgrounds.

The section from Bradfield Bridge to the Dove Creek pump station has no roads or trails.

The section from the Dove Creek Pump Station to Slickrock has 30.2 miles of primitive and four-wheel-drive roads that are not maintained for passenger cars. There are also 2.6 miles of road maintained for passenger cars, 1.1 miles of all-terrain vehicle (ATV) trails, and 1.0 miles of road closed for revegetation. An additional 9.9 miles of road near Slickrock are local roads.

From Slickrock to the WSA there are 11 miles of road listed as local roads. In the WSA there is about 1 mile of road listed as local roads, which may be closed. There are also roads near Bedrock that have not been quantified because they are out of our coverage area.

Potential for conflict with transportation and facilities

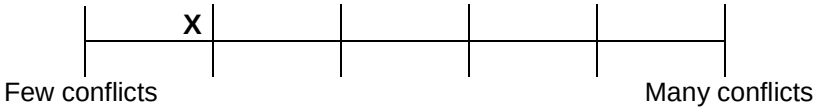


Recreation and Other Resource Activities

There are rafting opportunities through beautiful and unusual scenery and geology. There are also numerous hiking trails into the canyon and an overlook near Dove Creek. The area is used for camping, both in campgrounds and dispersed areas. There are also ATV trails along the river.

Other activities that occur include livestock grazing.

Potential for conflict with recreation and other resources



Special Areas

A portion of the river is in a WSA. This river was also previously recommended for WSR designation.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in Dolores County is agribusiness (33%). This consists mainly of agricultural production. The second highest segment of the economic base is expenditure of outside dollars by retirees and commuters who work outside Dolores. This is related to the Dolores River as it is diverted for irrigation.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

This segment of the Dolores River is determined to be suitable for WSR designation under the Preferred Alternative. On the lowest portion of the river, the BLM Uncompahgre Field Office has decision-making and on-the-ground management responsibility. This river reach contains many ORVs, has relatively few conflicts between river protection and other uses, and primarily involves federal lands. The principal

conflicts between river protection and other uses of the corridor involve mineral development. Existing water developments would not significantly conflict with designation, and at least some of the foreseeable water developments could enhance river-related values. This determination is consistent with previous findings of suitability for this river segment.

The LRMP revision provides for continued protection of many of the identified river values by proposing management under a special theme emphasizing river protections and opportunities for use. A portion of this stream segment falls within a BLM WSA that was previously recommended to Congress for designation under the Wilderness Act. This planning effort and FEIS have also considered options for protecting relatively small portions of the study segment through Area of Critical Environmental Concern (ACEC) designation. Potential ACEC designations considered through the FEIS could protect portions of the river corridor, but would not provide substantial protection to the overall river segment or all of the ORVs identified. Additional protections for the river segment considered through the FEIS include several oil and gas lease stipulations and other LRMP components that would come into play when considering specific project proposals. Interim management protection of the Dolores River Canyon WSA does provide a substantial level of protection to a relatively short length of the river segment in the lowest reaches. Again, these rather site-specific protections would not necessarily apply to the entire stream segment, nor would they fully protect the identified ORVs.

The Special Recreation Management Area (SRMA) concept included in all of the action alternatives of the FEIS would provide protection of some of the ORVs for a major portion of the stream reach. This designation emphasizes the recreation benefits of the river corridor, which are very closely connected to several of the identified ORVs. The designation of an SRMA does not, however, represent the more enduring protection that could be achieved through WSR designation. An SRMA designation could be modified or ended by future LRMP revisions or amendments and does not, in itself, ensure protection of all of the ORVs or the free-flowing character of the river.

WSR protections would specifically address the ORVs of recreation, scenery, fish, wildlife, geology, ecology, and archeology and have been found to be the best option within the authority of the agencies for protecting the river segment's free-flowing character and ORVs. WSRA protections would prevent construction of new water storage developments within the corridor, benefitting all of the identified ORVs. WSR designation would be accompanied by a federal reserved water right. However, given that nearly all of the flows in the lower Dolores River have previously been appropriated, including the state instream flows, a new federal reserved right would have little direct benefit in terms of further preserving flows. Designation of the river by Congress could, however, assist ongoing efforts to manage existing flows for some of the ORVs or to enhance instream flows working through participation of willing parties.

There are several alternatives to WSR designation falling outside the direct authorities of the two managing agencies that could achieve similar protections for the stream and its ORVs. For instance, the public process leading up to this planning document identified potential legislative protections including WSR designation, establishment of a National Conservation Area, and/or wilderness designation. These designations, or some combination of such, could provide sufficient or even superior protection of the ORVs identified. The DRD, a local collaborative effort addressing the management concerns and needs for the Dolores River, has long been working through the values to be protected and some of the options for achieving needed protection.

Many comments were received on the Draft EIS analysis of this river segment. Comments ranged from providing additional protections to recognizing the numerous potential conflicts with private rights and development opportunities. A prominent theme was to consider carefully the work of the DRD and related efforts. The Draft EIS and LRMP revision recognized the progress of the DRD process. Although the DRD process continues, and appears to have made great progress in gathering information and ideas for future river management, few specific actions have been implemented to achieve enduring protections for this stream reach.

Through the Draft EIS, public input was sought specifically on how the results of collaborative efforts such as the DRD should be considered as the BLM and USFS address the Section 5(d) requirements of the WSRA in the LRMP revision. Comments received on the Draft EIS generally encouraged the agencies to

find ways to support the work of these community-based groups and to make use of the scientific information stemming from these efforts. Some comments also asked that the finding of suitability be delayed to provide additional time for the DRD to complete its process. A delay does not appear to be warranted given the analysis above and agency guidance encouraging the completion of suitability determinations through the land use planning process. However, it is important to note that the DRD and related group processes continue, including serious discussion of legislative or other actions that could achieve protections similar, and possibly much broader, than those offered by WSR designation.

Rio Lado

Location: The stream and associated corridor (0.25 mile on either side) was studied from its confluence with the Dolores River upstream for 2.83 miles. Even though this is not a third-order or larger stream, all streams occupied by high-purity Colorado River cutthroat (*Oncorhynchus clarkii pleuriticus*) were analyzed. Rio Lado was eligible because it is the best high-purity Colorado River cutthroat fishery on the SJNF in the Dolores River Geographic Management Unit (GMU) (see below). Since the initial finding of eligibility was presented in the Draft EIS, genetic research of the fish population has shown that the cutthroat trout inhabiting Rio Lado are actually greenback cutthroat (*O.c. stomias*), Colorado's State fish and a threatened species under the Endangered Species Act.

The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a scenic classification. This classification was chosen because the stream is accessible by a four-wheel-drive road at the headwaters, but does not have readily available access to the stream. There is also a trail along the river.

Land Ownership: Land ownership is split between NFS and private land. Table D12 is a breakdown of the ownership along the river, in miles.

Table D.12: Miles by Land Ownership

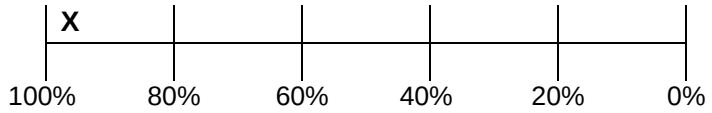
NFS	Private	Total	% NFS
2.80	0.03	2.83	99.1%

Table D.13 is a breakdown of the ownership within the river corridor in acres.

Table D.13: Acres by Land Ownership

NFS	Private	Total	% NFS
947.84	8.60	956.44	99.1%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

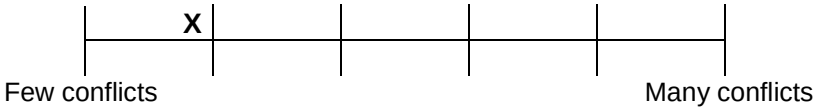
Fish: The Rio Lado contains a population of high-purity greenback cutthroat trout. The greenback cutthroat trout is a threatened species under the protection of the Endangered Species Act.

Existing and Potential Land Uses

NFS land at the Rio Lado would be managed as a natural landscape with limited management. The upper tip of the corridor is within an area of active management, but timber harvest is not expected because the terrain is not suitable for timber. The allotment management plan prohibits livestock grazing within the

stream corridor. According to the Montezuma County Land Use Plan for the Unincorporated Areas of Montezuma County (Montezuma County 1997), the small amount of private land along the Rio Lado is classified as agricultural with a density of one dwelling per 30-acre parcel. This type of development would not interfere with the recreational classification of the river.

Potential for conflict with existing and potential land uses

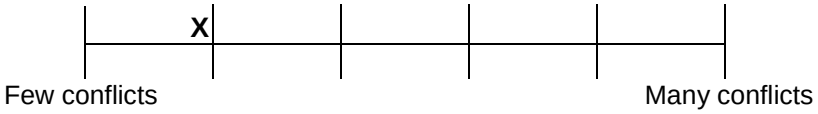


Mineral potential

There is no favorable occurrence for locatable minerals, and there has been no production.

There is no oil or gas production and potential is low.

Potential for conflict with minerals



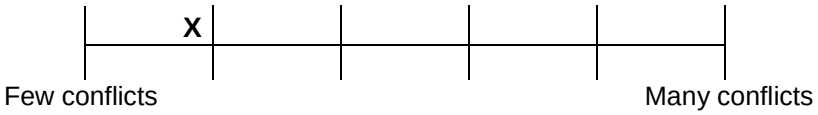
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream, and no potential reservoir sites. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

The fish habitat improvement structure is a structural change at one point on the stream.

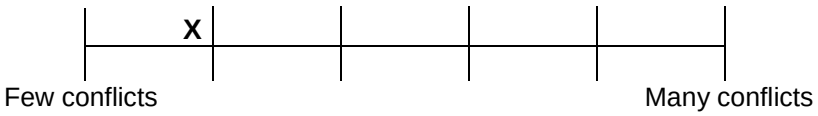
Potential for conflict with water resources development



Transportation and Facilities

The river corridor along the Rio Lado contains 1.6 miles of trail and 1.7 miles of closed logging roads.

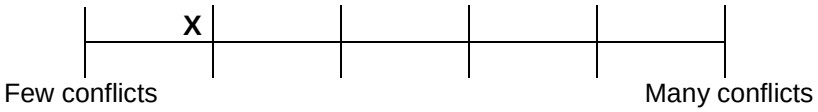
Potential for conflict with transportation and facilities



Recreation and Other Resource Activities

The Rio Lado gets light overall recreation use with the exception of heavy commercial horseback and hunting use of the trail paralleling the stream. The corridor has been closed to grazing, and the terrain is generally not conducive to timber harvest.

Potential for conflict with recreation and other resources



Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major economic base in Montezuma County is retirees (39%).

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and impacts of Wild and Scenic and Other Methods and Suitability Determination

The Rio Lado is not determined to be suitable as a Preferred Alternative in this analysis. The ORV of greenback cutthroat trout recognizes the potential importance of the Rio Lado in terms of contributing to the long-term conservation of the threatened greenback cutthroat. Although a relatively small stream and a segment of less than 3 miles in total length, the Rio Lado does present the species conservation benefits of relative isolation that can be key to maintaining genetic diversity and protecting populations from certain catastrophic events. This single ORV, however, can be protected sufficiently through the management of adjacent NFS lands and through the protection of instream flows through programs such as CWCB instream flow protection. This is possible because of the relatively few conflicts with stream protection and the fact that most of the conflicts fall within direct control of the USFS. In the LRMP revision, the Rio Lado falls within management areas that provide for adequate protection of the watershed. Protection of flows can be pursued through other methods.

Comments received on the Draft EIS included support for a determination of suitability because Colorado River cutthroat (since identified as greenback cutthroat) are an appropriate ORV and there are few conflicts. Other comments questioned whether the fish population is an ORV and cited potential conflicts with future county planning and development opportunities. In our review, we find that the cutthroat population is indeed an ORV, but WSR suitability is not the preferred approach for ensuring protection of the population.

West Dolores River (and portions of tributaries Falls Creek and Eagle Creek)

Location: The stream was studied from its headwaters where it becomes a third-order stream in the Lizard Head wilderness to its confluence with the Dolores River. The 0.25-mile corridor on either side of the stream encompasses waterfalls on Falls Creek and Eagle Creek. The entire studied section was determined to be eligible. The total length of river studied and found eligible was 33.74 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

This stream was previously studied for inclusion in the National Wild and Scenic Rivers System. In 1976, the Colorado Department of Natural Resources recommended the West Dolores as a suitable river, even though the federal agencies did not concur. Though Congress never acted, the USFS has managed the NFS portions as a 10D management area (“Wild and Scenic River management area”) to protect the ORVs.

Wild and Scenic Classification: The segment has a number of different eligibility classifications, which can be found in Table D.14 of stream miles by classification.

Table D.14: Miles by Classification

Wild	Scenic	Recreational	Total
5.17	0.00	28.54	33.71

The segment in a recreation classification was chosen because a major gravel road follows the river until it reaches the wilderness boundary. From the wilderness boundary to the headwaters the segment is classified as wild since there is no road access.

Land Ownership: Land ownership is split between NFS, non-Federal, and private land. Table D.15 is a breakdown of the ownership along the West Dolores River, in miles

Table D.15: Miles by Ownership

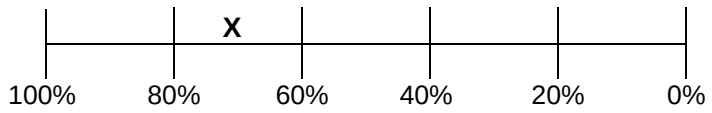
NFS	Non-Federal	Private	Total	% NFS
17.78	1.51	14.42	33.71	52.7%

The following table is a breakdown of the ownership within the river corridor in acres.

Table D.16: Acres by Ownership

NFS	Non-Federal	Private	Total	% NFS
6,954.24	281.79	2,647.43	9,883.46	70.4%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Wildlife: The West Dolores River contains a cluster of black swift (*Cypseloides niger*) nests. The nest sites are behind or adjacent to waterfalls on Navajo Falls and Falls Creek in the 0.25-mile corridor on either side of the West Dolores River.

The black swift builds nests only at waterfalls. The nests are made of moss and require mist from the waterfall to remain intact. The black swift worldwide breeding distribution is limited to a narrow portion of the Rocky Mountains from Mexico to British Columbia and a narrow band along sea cliffs overlooking the Pacific coast from California to Alaska. The SJNF planning area provides a significant contribution to the species' worldwide breeding distribution by providing a core breeding population and by providing critical connectivity within the southern Rocky Mountains portion of its range. Of the 10 streams studied on the SJNF that have black swift nest sites, three were chosen as outstandingly remarkable because they contained the best clusters of nests.

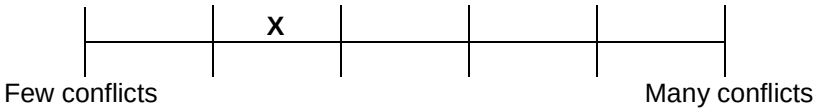
Existing and Potential Land Uses

The NFS land in the corridor of the West Dolores would be managed as a recreation-emphasis area along Road 535 and as an area where natural processes dominate in and adjacent to the Lizard Head wilderness. This is compatible with the black swift ORVs

According to the Montezuma County Land Use Plan for the Unincorporated Areas of Montezuma County (Montezuma County 1997) the private land along the West Dolores River in Montezuma County is classified as agricultural with a density of one dwelling per 30-acre parcel. This type of development

would not interfere with the recreational classification of the river. The rest of the private land is in Dolores County. The Dolores County Master Plan (Dolores County 1997) does not classify the land within the county; therefore, the building density is unknown in this area.

Potential for conflict with existing and potential land uses

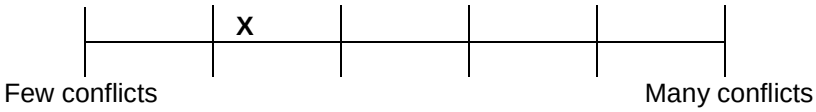


Mineral Potential

The area near Dunton has been mined for silver and gold since the late 1800s. There is no current production. The area near Dunton is favorable for polymetallic replacement and skarn deposits. It is favorable for epithermal veins in the Lizard Head wilderness.

There is no oil or gas production and potential is low.

Potential for conflict with minerals



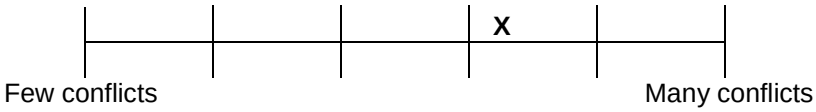
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 28 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 31.421 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 0.9 cfs.
3. The SWSI report shows one conditional water right on a tributary to this stream. The CWCB has also mapped three potential reservoir sites, but these have not been verified for feasibility. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There are occasional headgates and low dams associated with the water diversions. In addition, short sections of riprap protect Road 535 from erosion on the outside of some bends on the river. Additional riprap may be present on private land to protect fields from erosion on the outside of bends. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development



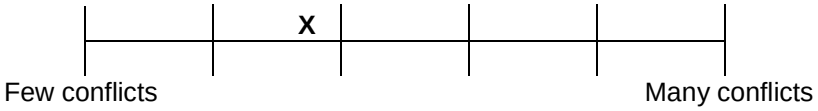
Transportation and Facilities

The West Dolores River corridor contains 24.9 miles of road running up the valley, which is maintained for passenger cars. There is an additional 3.2 miles of road maintained for passenger cars in campgrounds and roads leading out of the corridor on NFS land. There is also 1 mile of four-wheel-drive road leading out of the corridor and additional roads on private land.

USFS facilities within the corridor are the Navajo Lake Trailhead, Burro Bridge Campground, Dunton Guard Station, Geyser Trailhead, Johnny Bull Trailhead, Willow Divide Trailhead, Mavreeso Campground, Goble Trailhead, West Dolores Campground, and Lower Stoner Trailhead.

There are also 4.7 miles of the Navajo Lake Trail within the corridor and 4.1 miles from eight other trails leading out of the corridor.

Potential for conflict with transportation and facilities

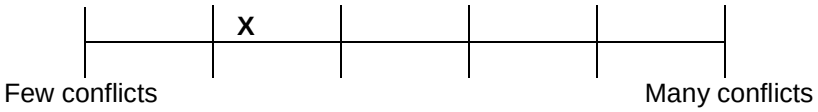


Recreation and Other Resource Activities

Recreation in the area includes camping, both within developed campgrounds and at dispersed sites, hiking, mountain biking, hunting, horseback riding, and fishing.

Other activities that may occur in the area include agriculture, livestock grazing, and mining.

Potential for conflict with recreation and other resources



Special Areas

The headwaters and the first 5 miles of the river are in the Lizard Head wilderness.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major economic base in Dolores County is agribusiness (33%) based on agricultural production in the area. This affects the West Dolores River, which is diverted for irrigation.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The West Dolores River was not determined to be suitable for WSRA designation under the Preferred Alternative. The ORVs present on the upper reaches of the West Dolores would be protected sufficiently through land use plan management direction, existing wilderness designation, and existing instream flow protections. The West Dolores River was previously studied for WSR suitability and was found by the Colorado Department of Natural Resources to be suitable, although the USFS did not concur.

The West Dolores River contains one identified ORV related to the occurrence of active black swift nests. Black swifts are a relatively rare species with highly specialized nesting requirements. The SJNF contains a large portion of the active nests in Colorado and the headwaters of the West Dolores contain particularly high concentrations of black swift nests. The values associated with these nest clusters on the West Dolores are indeed remarkable, but they are limited to the uppermost reaches of the stream and its

tributaries. There are essentially no conflicts with protection of this ORV in the upper reaches of the West Dolores. The ORV is located within or adjacent to the Lizard Head wilderness area and would be adequately protected by either wilderness designation, the management proposed under the LRMP that natural processes would be allowed to dominate, or the CWCB instream flows that exist for this stream and tributary.

By contrast, lower portions of the river do not contain identified ORVs and do present numerous conflicts with river protection. In particular, concentrations of private land and associated development near and along the river, numerous water diversions, foreseeable future water diversions and reservoir sites, and transportation facilities in the river corridor, would combine to make it difficult to protect many river values. Because of the absence of identified ORVs in the lower portion of the river, alternative protections have not been considered.

Comments received on the Draft EIS were generally supportive of the findings presented in the draft and carried forward above.

Summit Canyon

Location: The stream was studied from the Colorado state line to its confluence with the Dolores River, and the entire stream was found eligible. The total length of river studied and found eligible is 12.15 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs

Wild and Scenic Classification: This entire segment has a scenic classification. This classification was chosen because there is a four-wheel-drive road that runs along the top of the canyon. The river is accessible in some locations but not readily accessible by road.

Land Ownership: Land ownership is split between BLM and private land. Table D.17 is a breakdown of land ownership along this segment in miles.

Table D.17: Miles by Ownership

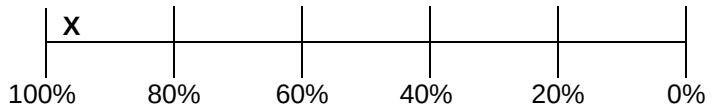
BLM	Private	Total	% Federal (BLM)
11.76	0.39	12.15	99.1%

Table D.18 is a breakdown of the ownership within the river corridor in acres.

Table D.18: Acres by Ownership

BLM	Private	Total	% Federal (BLM)
3,563.03	85.48	3,648.51	97.7%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Wildlife: Summit Canyon is one of three canyons on the TRFO that contains canyon tree frogs. Canyon tree frogs have a state ecological rating of 2, meaning that they are rare or imperiled within the state. The species is also listed as a BLM Colorado Sensitive Species. The tree frog was previously identified as a state species of concern, but is now identified as “effectively conserved” in the Colorado Natural Heritage Programs Scorecard presented in the State of Colorado’s Biodiversity (Colorado Natural Heritage Program 2011). The canyon tree frog is river-related because the species occur along streams in deep rocky canyons. Tree frogs are most active at night but are frequently found during the day resting in small

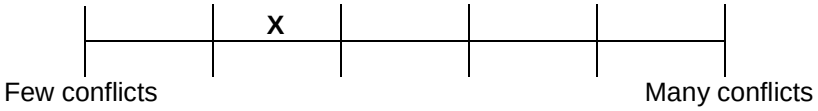
depressions in solid rock near pools of water. They breed in canyon bottom pools often bounded by solid rock.

Existing and Potential Land Uses

The lower half of Summit Canyon would be managed as a natural landscape with limited management. The upper half would have active resource management, such as grazing and mineral leasing. Protection of the wildlife ORV in the active management area may require some compromises.

The small amount of private land is classified for natural resources, agriculture and recreation in the San Miguel County Comprehensive Development Plan (San Miguel County 2001). These uses would not interfere with the scenic classification.

Potential for conflict with existing and potential land uses

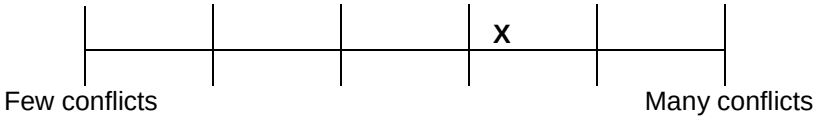


Mineral Potential

The area has numerous uranium mines. The Slickrock uranium district encompasses the Dolores River, Summit Canyon, and McIntyre Canyon as they pass through most of San Miguel County, giving them high potential for uranium. There is active uranium leasing in the vicinity of this stream.

The oil and gas potential is high.

Potential for conflict with minerals

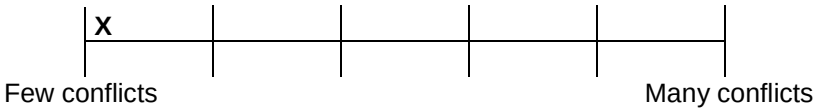


Water Resources Development.

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights or reservoir sites in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

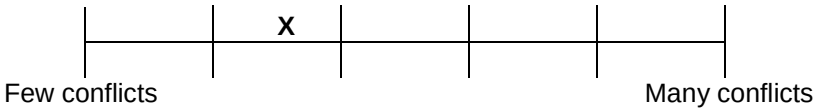
Potential for conflict with water resources development



Transportation and Facilities

There are 10.6 miles of primitive, four-wheel-drive or local roads likely not maintained for passenger cars, as well as 0.4 mile of road maintained for passenger cars. In addition there are 5.7 miles of ATV trails within the river corridor.

Potential for conflict with transportation and facilities

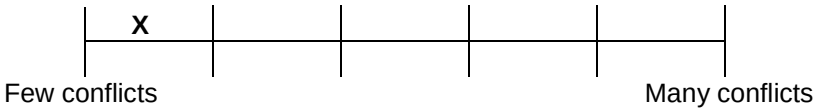


Recreation and Other Resource Activities

The main recreational activity in the area is hiking, as well as use of the road and trails by ATVs.

Other activities that may occur in the area include agriculture, livestock grazing, and mineral development.

Potential for conflict with recreation and other resources



Socioeconomic Environment

According to the San Miguel County Comprehensive Development Plan (San Miguel County 2001), San Miguel County is a diverse county that consists of 1,287 square miles. The east end of the county is driven by the upscale resort economy of the Telluride area, while the west end of the county, which is where Summit Canyon is located, is filled with wide-open spaces and an old-time western ranching lifestyle. The economic base in this area is dominated by agriculture.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Summit Canyon was not determined to be suitable for WSR designation in the Preferred Alternative. This is a change from the Draft EIS preliminary finding of suitability. The Summit Canyon ORV presented in the Draft EIS was limited to the presence of canyon tree frogs. The canyon tree frog continues to be given a NatureServe ranking of G5/S2, globally secure but imperiled within the state of Colorado, but is identified as “effectively conserved” in the Colorado Natural Heritage Programs Scorecard presented in the State of Colorado’s Biodiversity (2011) and is represented within multiple BLM-protected areas in the state. Comments received on the Draft EIS raised the concern of whether the tree frog should constitute an ORV given that occurs in multiple locations in western Colorado and is considered stable range-wide. Comments also suggested the tree frog would not receive effective protection via WSR designation given the ephemeral nature of the stream and the potential impact of upland activities in the watershed. In addition, comments pointed to the activities of the DRD that may ultimately provide broader protections for Summit Canyon. After reviewing comments on the Draft EIS and considering further the global and state ranking of the species, it has been determined that a finding of WSR suitability would not constitute the most effective means of protecting the tree frog habitat in Summit Canyon.

The canyon tree frog remains a BLM sensitive species and, as such, would receive adequate attention through other actions presented in the LRMP, as well as management prescriptions applied to future activities within the canyon and its watershed. Efforts of the DRD may provide even greater security for this ORV despite removing the determination of suitability.

McIntyre Canyon

Location: The stream was studied from where it becomes a third-order stream to its confluence with the Dolores River and the entire stream was found eligible. The total length of river studied and found eligible is 5.77 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs. We believe that it is an intermittent stream that flows fairly predictably for a short time in the spring.

Wild and Scenic Classification: This entire segment has a scenic classification. This classification was chosen because there are both gravel and four-wheel-drive roads that run along the canyon and it is accessible in some locations, but not readily accessible by road.

Land Ownership: Land ownership is split between BLM and private land. Table D.19 is a breakdown of land ownership along this segment, in miles.

Table D.19: Miles by Ownership

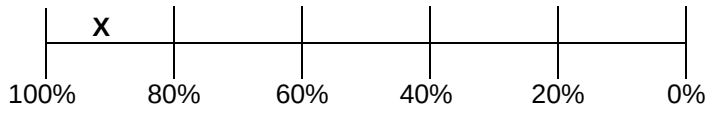
BLM	Private	Total	% Federal (BLM)
5.01	0.81	5.82	86.2%

Table D.20 is a breakdown of the ownership within the river corridor (0.25 mile on either side of the stream) in acres.

Table D.20: Acres by Ownership

BLM	Private	Total	% Federal (BLM)
1,569.00	98.72	1,667.73	94.1%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Ecology: McIntyre Canyon is one of the few areas within the planning area that contains Eastwood's monkeyflower. It is extremely rare or imperiled within the state and rare globally (G3G4/S1, Colorado Natural Heritage Program). McIntyre Canyon has unique hanging gardens with rare Eastwood's monkeyflower. The Colorado Natural Heritage Program ranks the hanging garden community including Eastwood's monkeyflower as G2G3/S2S3 The combination of the stream-carved canyon and seeping groundwater coming to the surface on the canyon wall provides the unique habitat required by Eastwood's monkeyflower.

Existing and Potential Land Uses

Management prescriptions stemming from this plan generally provide for managing the McIntyre Canyon area as a natural landscape. This is compatible with protection of the ecology ORV.

The small amount of private land is classified for natural resources, agriculture, and recreation in the San Miguel County Comprehensive Development Plan (San Miguel County 2001). These uses would not interfere with the scenic classification.

Potential for conflict with existing and potential land uses

X				

Few conflicts — Many conflicts

Mineral Potential

The Slickrock uranium district encompasses the Dolores River, Summit Canyon, and McIntyre Canyon as they pass through most of San Miguel County, giving them high potential for uranium. There is active uranium leasing in the vicinity of this stream.

The oil and gas potential is high.

Potential for conflict with minerals

			X	

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights or potential reservoir sites in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

Potential for conflict with water resources development

X				

Few conflicts — Many conflicts

Transportation and Facilities

There are 4.1 miles of primitive four-wheel-drive road, which are not maintained for passenger cars, as well as 0.2 mile of ATV trail within the river corridor.

Potential for conflict with transportation and facilities

X				

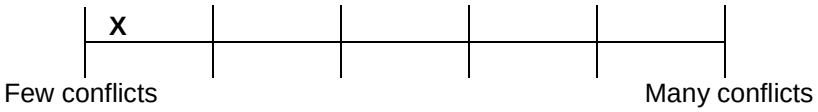
Few conflicts — Many conflicts

Recreation and Other Resource Activities

The main recreational activity in the area is hiking from the Dolores Canyon, as well as use of the road and trails by ATVs.

Other activities that may occur in the area include agriculture, livestock grazing, and mineral development.

Potential for conflict with recreation and other resources



Socioeconomic Environment

According to the San Miguel County Comprehensive Development Plan (2001), San Miguel County is a diverse county that consists of 1,287 square miles. The east end of the county is driven by the upscale resort economy of the Telluride area, while the west end of the county, which is where McIntyre Canyon is located, is filled with wide-open spaces and an old-time western ranching lifestyle. The economic base in this area is dominated by agriculture.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

McIntyre Canyon is found not to be suitable. The ORV of monkeyflower does represent a very significant concern that deserves protection, but McIntyre Canyon falls within an area of active uranium leasing and high oil and gas potential, posing some significant conflicts with river protection. Most of the lower reach of McIntyre Canyon would be protected from adverse impacts of fluid mineral development by No Surface Occupancy stipulations under the Preferred Alternative. Part of the canyon would also receive protection through a Controlled Surface Use stipulation. As with Summit Canyon, there is potential to mitigate the effects of other uses, but the ORV is more easily impacted by adjacent land use, especially those in the upper reaches, than the fairly limited habitats of the canyon tree frog. Coyote Wash, discussed below, also contains monkeyflower and another ORV and is at less risk of impact from adjacent land uses such as uranium mining and has been found suitable.

Comments received on the Draft EIS included suggestions to determine McIntyre Canyon as suitable for WSR designation to ensure a more holistic approach to managing the Lower Dolores River system. Other comments questioned whether ephemeral streams could be considered eligible and why hanging gardens should be an ORV. A broader view of the Lower Dolores River system is appropriate and is reflected in other plan prescriptions for the area. The DRD process has also been taking a holistic view of the system. Should future activities of the DRD lead to other forms of protection for the mainstem of the Dolores River, consideration could be given to extending protections to some or all of McIntyre Canyon. There are no specific requirements concerning the flow of an eligible river segment. Flows are sufficient if they sustain or complement the ORVs for which the segment would be designated. As such, intermittent and ephemeral streams can be eligible. The presence of hanging gardens including Eastwood's monkeyflower is determined to be an ORV due to its rare occurrence in the state as discussed above. While hanging gardens are often situated outside the main stream channel, they are closely associated with the stream and related water movement.

Bull Canyon

Location: The stream was studied from its headwaters to its confluence with the Dolores River and the entire stream was found eligible. The total length of river studied and found eligible is 6.38 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

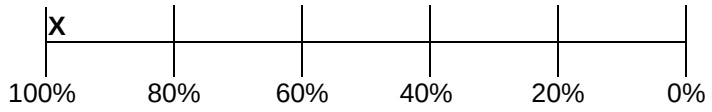
Wild and Scenic Classification: The lower section of the river to the confluence with the Dolores River is classified as wild since there is no development in this area and no easy access to this part of the river. The upper portion of the river contains many gravel roads leading into the river corridor, making it accessible in a few areas but not along the entire stream length.

Land Ownership: The entire segment is on land owned by the BLM (Table D.21). There are 1,880.77 acres of land within the corridor 0.25 mile on either side of Bull Canyon.

Table D.21: Miles by Ownership

Name	Wild	Scenic	Recreation	Total
Bull Canyon	1.44	4.94	0	6.38

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

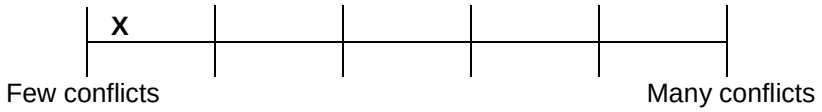
Recreation: Portions of Bull Canyon are within a BLM WSA that offers outstanding recreation in an undeveloped setting. The pothole pools within this stream are a unique river-related feature, which draws rafters to hike from the Dolores to pools.

Existing and Potential Land Uses

The lower portion of Bull Canyon is in the WSA and would be managed to retain its wilderness character. The majority of the Bull Canyon corridor is managed as a natural landscape with limited management. A small portion of the upper corridor is in the active management theme, where mineral leasing and other commodity production would be emphasized.

The ORVs are not in this upper portion, and it could be excluded without compromising the outstanding recreation opportunities.

Potential for conflict with existing and potential land uses

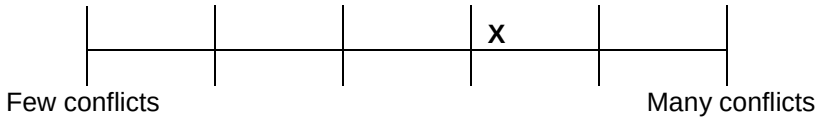


Mineral Potential

Bull Canyon is within the Uravan mineral belt, but outside the Slickrock uranium district, giving it moderate potential. There is active uranium leasing in the vicinity of this stream.

The oil and gas potential is high.

Potential for conflict with minerals

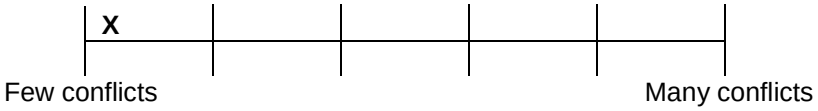


Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights or potential reservoir sites in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

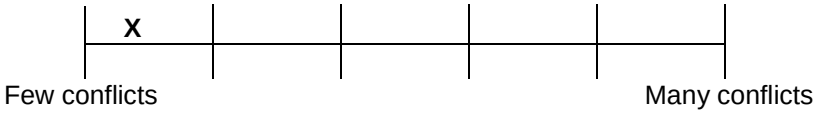
Potential for conflict with water resources development



Transportation and Facilities

The river corridor contains 7.68 miles of local roads that are likely not maintained for passenger cars.

Potential for conflict with transportation and facilities

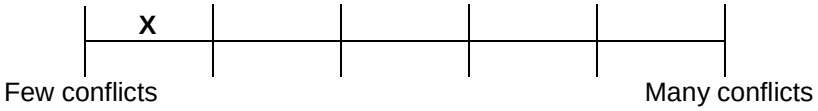


Recreation and Other Resource Activities

In addition to the hiking opportunity in the WSA, there is four-wheel-drive and ATV use on the roads.

Other activities that may occur in the area include agriculture, livestock grazing, and mineral development.

Potential for conflict with recreation and other resources



The potential conflicts are in the upper portion of the stream. If only the wild portion is considered for a WSR, the ORVs are substantially protected and the conflicts with other uses are greatly diminished.

Special Areas

The lower portion of Bull Canyon is in the WSA.

Socioeconomic Environment

The SJNF and TRFO did not conduct an economic study of Montrose County, so statistics comparable to those quoted for other counties are not readily available.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Bull Canyon was found not to be suitable in the Preferred Alternative. The recreation ORV recognizes the popularity of Bull Canyon with Dolores River floaters, and there are few conflicts with protection of the ORV. However, much of the portion of Bull Canyon containing the recreation ORV, and much of the larger Bull Canyon watershed, falls within the Dolores River Canyon WSA, ensuring protection of the recreation ORV and the free-flowing character of the stream until such time as Congress chooses to act on the designation of wilderness. This WSA was previously recommended to Congress for wilderness designation by the Secretary of the Interior and would be managed to protect wilderness values, including the recreational opportunities provided by Bull Canyon. The Bull Canyon watershed would receive further protection through a Controlled Surface Use oil and gas stipulation under the Preferred Alternative.

Comments received on the Draft EIS suggested Bull Canyon be found suitable to provide opportunity for a more holistic review of the Lower Dolores River system as discussed under McIntyre Canyon above. Other comments questioned whether the recreational value of Bull Canyon justified the ORV.

Once again, should the DRD lead to other forms of protection for the mainstem of the Dolores River, consideration could be given to extending protections to some or all of Bull Canyon.

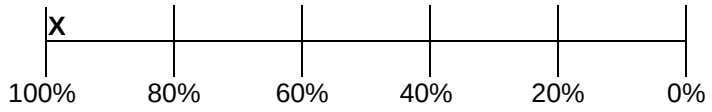
Coyote Wash

Location: The stream was studied from its headwaters to its confluence with the Dolores River. Only the lower portion of the stream was found eligible. This segment begins where two unnamed drainages enter, at the boundary between Range 19 and 20 West. The total length of river studied was approximately 9.6 miles and the segment found eligible was 7.60 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a wild classification. This segment of the river contains no developed roads or trails, making it generally inaccessible.

Land Ownership: The entire stream segment is located on BLM land. There are 2,011.4 acres of land within the river corridor in Coyote Wash.

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Ecology: Colorado's largest population of the Kachina daisy (*Erigeron kachinensis*) is located in Coyote Wash. It grows in horizontal crevices in seeping alcoves. This species is the most imperiled of all plants found in San Miguel and Montrose Counties and is ranked as G2/S1 by the Colorado Natural Heritage Program, as well as a BLM Colorado sensitive species. Eastwood's monkeyflower is also found in horizontal crevices on seeping canyon walls.

Recreation: Recreation is also an ORV. The flat sandy bottom of the wash, coupled with the vertical canyon walls, offers a hiking experience rarely duplicated in southwest Colorado. This attracts hikers from the camping areas in Colorado (Silvey's Pocket) and Utah, as well as significant use by rafters who camp at the mouth of Coyote Wash and hike upstream in Coyote Wash.

Existing and Potential Land Uses

Coyote Wash is within a BLM WSA and would be managed to retain its wilderness characteristics. This is compatible with protection of the ecology ORV.

Potential for conflict with existing and potential land uses

X				

Few conflicts — Many conflicts

Mineral Potential

Coyote Wash is outside the Slickrock uranium district and outside the Uravan mineral belt, giving it low potential for uranium. There is active uranium- easing in the vicinity of this stream.

The oil and gas potential is high.

Potential for conflict with minerals

		X		

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights or potential reservoir sites in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

Potential for conflict with water resources development

X				

Few conflicts — Many conflicts

Transportation and Facilities

There are no roads in the WSA.

Potential for conflict with transportation and facilities

X				

Few conflicts — Many conflicts

Recreation and Other Resource Activities

Rafters on the Dolores hike up Coyote Wash, and campers in Silvey's Pocket outside the WSA find Coyote Wash an attractive hike to reach the Dolores River.

Other resource activities in the vicinity include uranium mining, oil and gas development, and livestock grazing.

Potential for conflict with recreation and other resources

X				

Few conflicts — Many conflicts

Special Areas

The entire segment is located within a WSA.

Socioeconomic Environment

The SJNF and TRFO did not conduct an economic study of Montrose County, so statistics comparable to those quoted for other counties are not readily available.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Coyote Wash is found suitable for WSR designation under the Preferred Alternative. Coyote Wash contains multiple ORVs that are very rare in Colorado and even in a broader context. There are few conflicts with protection of ORVs and WSA status minimizes the opportunities for future conflicts. Interim protection of wilderness values under WSA status does provide significant levels of protection to Coyote Wash. However, the WSA does not include a large portion of the Coyote Wash watershed and, as a result, does not provide the same level of protection for the free-flowing character of the streams that could be provided through WSR designation and the federal reserved water right that would accompany designation by Congress. The Controlled Surface Use stipulation applied to the upper reaches of the canyon under the Preferred Alternative would, however, provide some protection to some of the watershed. The very strong ORVs and the opportunity to protect multiple ORVs on one stream segment, in addition to protecting the free-flowing character of the stream, weigh heavily in favor of adding additional protections under the WSRA.

Comments on the Draft EIS questioned whether the proper area of consideration was used for the ORVs, suggesting that the identified ORVs would not be outstanding if viewed using a broader geographic area. Comments also questioned whether recent scientific data were used. In the case of the Kachina Daisy, the plant continues to be listed as globally imperiled and critically imperiled within Colorado, one of only two states where the plant is known to exist (Colorado Natural Heritage Program 2011). For recreational ORVs, Forest Service Handbook 1909.12, Chapter 80, provides the criteria: "Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. River-related opportunities include, but are not limited to, sightseeing, interpretation, wildlife observation, camping, photography, hiking, fishing, hunting, and boating."

As stated above, it is important to note that the DRD process continues, including serious discussion of legislative or other actions that could achieve protections similar, and possibly much broader, than those offered by WSR designation for this stream segment.

Suitability Determination

Miles found suitable by classification are provided in Table D.22 and are illustrated on Figure D-1 Dolores River and Tributaries.

Wild and Scenic Rivers
Dolores River and Tributaries
San Juan National Forest and Tres Rios Field Office
Figure D-1

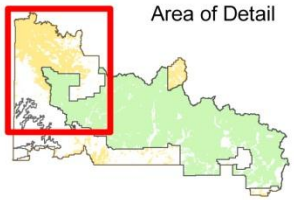
Legend

Suitable Wild & Scenic River Classification

- Recreation
- Scenic
- Wild
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 5 10 20 Miles

Area of Detail



The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs without notification.

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MDR
NAD 83, Polyconic Projection
May 30, 2013

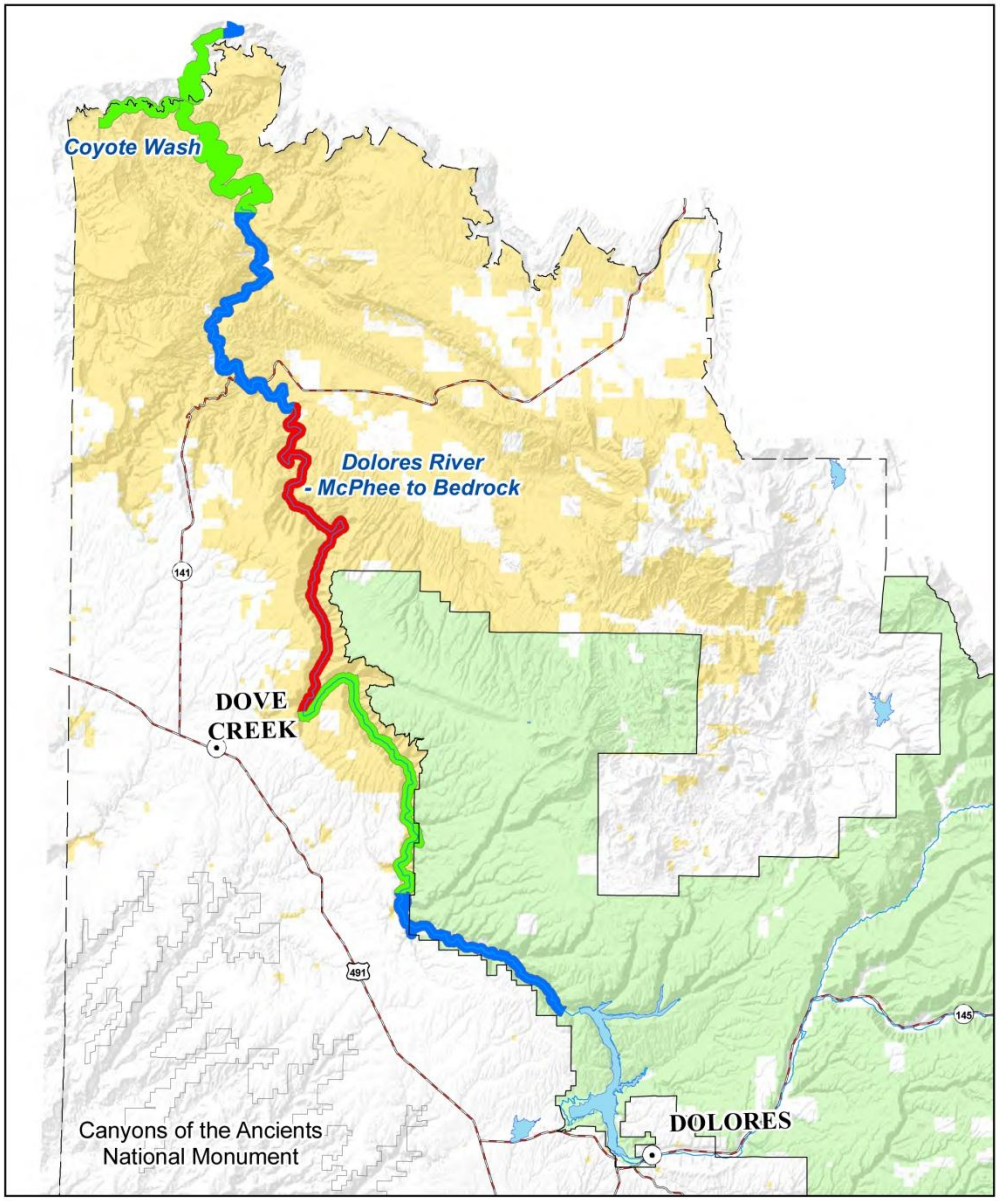


Table D.22: Miles found Suitable by Classification

River Segment Name	Wild	Scenic	Recreation	Total
Dolores above McPhee	0	0	0	0
Dolores River - McPhee To Bedrock	48.84	23.15	37.04	109.03
Rio Lado	0	0	0	0
West Dolores	0	0	0	0
McIntyre Canyon	0	0	0	0
Summit Canyon	0	0	0	0
Bull Canyon	0	0	0	0
Coyote Wash	7.60	0	0	7.60
Dolores Totals	56.44	35.30	37.04	128.78

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Animas River System

Eligible portions of the Animas River and tributaries, and their classification, are as follows (Table D.23). Details for each segment are below.

Table D.23: Eligible Portions

River Segment Name	Wild	Scenic	Recreation	Total
Animas River - Bakers Bridge to Silverton	0	0	30.77	30.77
Cement Creek	0	0	7.62	7.62
Cinnamon Creek	0	0	1.96	1.96
Maggie Gulch	0	0	4.62	4.62
Mineral Creek	0	0	8.65	8.65
South Fork Mineral Creek	0	0	7.41	7.41
California Gulch (West Fork Animas)	0	0	3.16	3.16
Animas River Totals	0	0	64.19	64.19

Animas River – Bakers Bridge to Silverton

Location: The stream was studied from Animas Forks north of Silverton to Bakers Bridge, where the river leaves the narrow rocky canyon and enters the broad alluvial valley that is predominantly private land. The portion of the stream determined to have ORVs is from Silverton to Bakers Bridge and is 27.39 miles.

The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs. Although some portion of this and rivers in the other upper Animas watershed do not have water quality sufficient to support a fishery, the WSRA states that “rivers would not be precluded from scenic or recreational classification because of poor water quality at the time of their study, provided a water quality improvement plan exists or is being developed in compliance with…state law”. The total maximum daily loads adopted by the state incorporate the improvement plan. Water quality is currently sufficient for recreation, scenery, and cultural/historical ORVs.

Wild and Scenic Classification: This entire segment is classified as a recreational use. This classification was chosen because the Durango-Silverton Narrow Gauge Railroad follows the river along this entire segment.

Land Ownership: Land ownership is split between BLM, NFS, non-Federal, and private land. Table D.24 is a breakdown of the ownership along this segment, in miles

Table D.24: Miles by Ownership

BLM	NFS	Non-Federal	Private	Total	% NFS	% Federal (NFS+BLM)
1.29	22.44	0.03	7.02	30.78	72.9%	77.1%

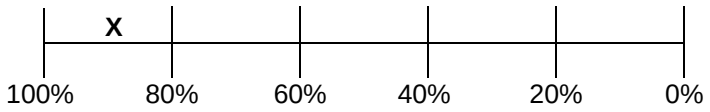
Table D.25 presents acres of land by ownership along the segment.

Table D.25: Acres by Ownership

BLM	NFS	Non-Federal	Private	Total	% NFS	% Federal (NFS+BLM)
678.75	7,147.43	20.18	894.18	8,740.54	81.8%	89.5%

The rights-of-way granted by the BLM for the Durango-Silverton Narrow Gauge Railroad follow the river within most of the corridor. These rights-of way encumber about 73 acres of BLM and 525 acres of NFS land listed in the above tables.

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Recreation and Scenery: The Durango-Silverton Narrow Gauge Railroad runs along the river throughout this entire segment. Visitors from all over the country and the world take the train each year to see the canyon and scenery associated with the river. The Durango-Silverton Narrow Gauge Railroad is a unique recreation opportunity in that it combines the historic aspects of the steam-powered train with the dramatic setting of the Animas River Canyon. It draws more than 200,000 visitors annually and is a primary economic engine for both Durango and Silverton during the summer months. This is a one-of-a-kind opportunity not duplicated by the Cumbres and Toltec Railroad or the diesel train that accesses the rim of the Grand Canyon.

Seventeen commercial outfitter and guide operators with USFS permits utilize the Upper Animas River corridor, including guided whitewater boating, fishing, hiking, backpacking, hunting, mountain climbing, and horse packing. Both private recreationists and commercial outfitters' clients are drawn to the Upper Animas from all over the United States and internationally due to the unique and rare opportunities the area offers. The free-flowing Upper Animas River provides the highest commercial whitewater put-in point elevation (over 9,300 feet) in Colorado. The Class V-rated (violent rapids, extremely difficult hazards) whitewater is also one of just a few rivers in Colorado that provides this type of extreme whitewater for commercial passengers. The Animas River has also been the site of numerous national competitive kayaking, rafting, and fishing events. Its listing on American Whitewater's national river inventory, while not sufficient by itself to be an ORV, supports the above analysis.

Cultural/Historical: The Animas River has historically served as a transportation corridor linking the hard rock mining community of Silverton to the larger communities of Animas City/Durango. The Animas Canyon wagon road was the first transportation route to connect Silverton to Animas City/Durango. The site has been determined eligible for the National Register of Historic Places. The road ran alongside the Animas River for much of its route. The Durango-Silverton Narrow Gauge Railroad, a designated National Historic Landmark, is a popular way to observe remote portions of the Animas River. Portions of the railroad in the Animas Canyon overlay the Animas Canyon wagon road. The town of Silverton, located on the Animas River, and the terminus of the railroad, are both a National Historic District and a National

Historic Landmark. The Tacoma power plant, a site listed on the National Register of Historic Places, and the associated residences are located on the banks of the Animas River. The power plant supplied electricity to Silverton and several milling operations in the vicinity of Silverton. Electricity from the power plant was supplied to Silverton via a transmission line that was located adjacent to the Animas River.

Existing and Potential Land Uses

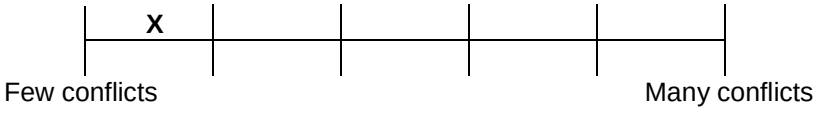
The majority of this corridor would be managed as a recreation-emphasis area that bisects the Weminuche wilderness. A small portion at the lower end would be managed as a natural landscape with limited management, and the upper terminus is within the Silverton special management area. This is compatible with the recreation, scenery, and cultural resource ORVs.

Approximately 3.3 miles of the stream channel, accounting for 754 acres of private land, are within La Plata County. Section 106-151 and the North County Land Use District Plan classifies the majority of this land as large-lot residential. This classification allows low-density single-family uses. These areas are developed at relatively low densities and either sited on large lots, typically between 10 and 15 acres, or sited on smaller lots (3–10 acres) within a cluster development that achieves a transition between rural areas/densities and more exurban or suburban areas. There is another private parcel at Needleton that was not included in the La Plata County Land Use Plan; therefore, the classification is unknown for this small private parcel.

The remainder of the private land is within San Juan County. The Animas River from the San Juan County line to Silverton is located in the Scenic Preservation Overlay District of the San Juan County Zoning and Land Use Regulation. This district includes all sites located within 1,500 feet of the center line of the track of the Durango-Silverton Narrow Gauge Railroad. The intent of the Scenic Preservation Overlay District is to prevent development from adversely affecting the scenic and historic assets of the county to the greatest degree possible. Within the Scenic Preservation Overlay District, only activities that do not involve any construction or development of any sort, including disturbing of soil or trees (such as grazing, camping, picnicking, hiking, and outdoor recreation), would be permitted as uses by right. All other uses within this zone would be uses subject to review. Development within the Scenic Preservation District must be designed in a manner that protects the environmental and historical assets of the area. All site design and development must be done in a manner that minimizes impacts upon scenic views or vistas. Design plans must take into account characteristics of soils, slopes, and geological hazards in a manner intended to protect the health, safety, and welfare of users of the site and the scenic value of the site. Design of the site must include safe, convenient, and adequate arrangements for pedestrian circulation, roadways, driveways, off-road parking, and loading space. Additional setbacks, landscaping, screening, or design requirements may be required by the county in order to preserve the natural, pristine appearance of the area and to minimize the visual impact to viewsheds and view corridors.

This type of development would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses



Mineral Potential

The Animas River at the confluence of Needle Creek is just west of the Needle Mountains Mining District. There was active gold and silver exploration from 1881 to 1935 and molybdenum exploration in the 1970s. These activities were to the east of the Animas River corridor. There is no current production, and the area in the Weminuche wilderness has been withdrawn from mineral entry. There is favorable occurrence of minerals as polymetallic replacement and skarn deposits.

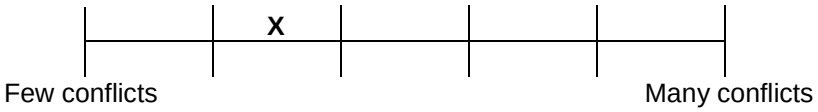
Approximately 5 to 6 miles south of Silverton there was prospecting for gold and silver near White Head Gulch and, in the 1980s, prospecting for uranium at Elk Park. There is no current production. Resource

occurrence is favorable in polymetallic epithermal veins near White Head Gulch and in epithermal uranium veins near Elk Park. These sites are just south of the highly mineralized area of the Silverton Caldera. With changes in the price of metals, mining activities could resume.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the USFS and/or BLM, or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes "undue degradation."

There is no potential for oil and gas.

Potential for conflict with minerals



Water Resources Development

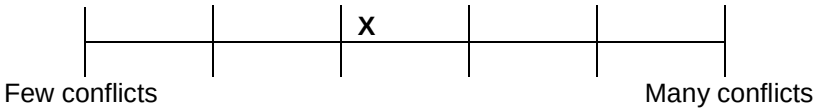
Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 14 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 20.904 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 613.3 cfs
3. The CWCB has mapped two potential reservoir sites in the reach, and one above the reach, but these have not been verified for feasibility. Several of the projects listed in SWSI Section 6 (Identified Projects and Processes) are likely related to the conditional water rights listed by the Colorado Division of Water Resources.

The volume of water needed for future uses near Silverton, as identified by the conditional water rights applications filed by both private and public entities, is a very small volume relative to the entire volume of water that flows in the river. The larger conditional water rights within and upstream of this segment are for proposed reservoirs. If these reservoirs were to be constructed, they would provide flatwater recreation opportunities in the Silverton area, but most of the consumptive use of the stored water would occur at downstream locations near Durango. It is unlikely that the aggregate amount of conditional water rights converted to absolute uses would be large enough to have any significant impact on the flows needed to support ORVs.

There are occasional headgates associated with existing diversions. In addition, short sections of riprap protect the tracks of the Durango-Silverton Narrow Gauge Train from erosion on the outside of some bends on the river. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

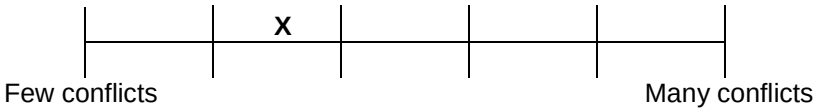


Transportation and Facilities

There are no roads within the river corridor; however, the railway follows the entire length of the segment. There are also 8.5 miles of trail within the river corridor.

There are train water tank facilities and railroad spurs at several locations along the corridor and plans for some additional development. The Tacoma power plant is also located within the segment, while the town of Silverton is above the upper end of this stream segment.

Potential for conflict with transportation and facilities

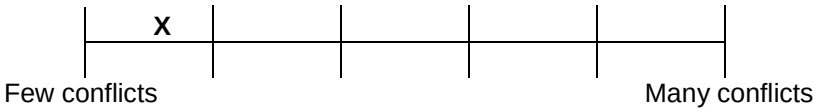


Recreation and Other Resource Activities

There are many recreation opportunities along the Animas River. These include riding the Durango-Silverton Narrow Gauge Train, whitewater rafting, kayaking, fishing, hiking, backpacking, hunting, skiing, and horse packing. A private tourist resort located on private land in the Animas Canyon approximately 2.5 miles north of Tacoma is accessible only by the railroad or helicopter.

Other activities that may occur in the river corridor include agriculture and mining.

Potential for conflict with recreation and other resources



Special Areas

Much of the stream segment is surrounded by the Weminuche wilderness on both sides of the river. The San Juan Scenic Byway is within the corridor for a short section at the lower end of the stream.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the economic base in both La Plata and San Juan Counties is tourism. Thirty-four percent of the economy comes from tourism in La Plata County, while 58% of the economy is based in tourism in San Juan County. Along the lower part of the river in La Plata County the tourist industry is mainly resorts, while in San Juan County around Silverton the tourist industries are second homes and tourist services. The train is a major draw for many of the tourists in both counties. The second highest segment of the economic base is funds coming in to retirees.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The Animas River between Bakers Bridge and the boundary of public and private land just below Silverton is found to be suitable under the Preferred Alternative. The portion of the Animas from the public land boundary to Silverton (approximately 3.6 miles) is not found suitable due to potential conflicts with private land and future development of the river corridor. The ORVs for the Animas River are substantial and are very closely tied to community and regional identity in the area. The Animas River corridor and the closely associated narrow gauge railroad represent the historical and modern-day economic engines of the region. The river is renowned for its scenic character and is a very popular recreational attraction.

Comments on the Draft EIS covered a wide spectrum of concerns and expressed both strong support and opposition to finding the Animas River suitable for WSR designation. Concerns were raised regarding potential impacts to the continued operation of the train. Given that the scenic and historic railway itself is identified as an ORV, a finding of suitability would support continued train operations and maintenance, and the related economic activity that itself presents a way to enjoy the ORVs and preserve the historical character.

Other comments raised concerns that a finding of suitable would impede future water developments and mining within the reach. USFS guidance (Forest Service Handbook 1909.12 Chapter 80) states that proposed water developments "would be analyzed as to their effect on a river's free-flow, water quality, and outstandingly remarkable values, with adverse effects prevented to the extent of existing agency authorities." In some cases, the results of this analysis could lead to a decision to prevent certain new developments and could result in requiring mitigation measures for other developments. It should be noted that determining a river to be suitable does not create a water right, although designation of a WSR by Congress or the Secretary of the Interior would establish a federal reserved water right.

Forest Service Handbook 1909.12 provides guidelines for managing mineral development activities. For locatable minerals such as gold, silver, or rare earths, the handbook states that activities "shall be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment." Agency policy does not necessarily prohibit mineral development along suitable reaches but some proposed activities could be limited or prohibited, subject to valid existing rights, if necessary to protect the free-flowing nature of the stream and the identified ORVs.

Other comments questioned whether the presence of the train should be viewed as a positive ORV and whether the described whitewater recreation should constitute an ORV.

The remote character of the Animas River throughout much of this reach contributes to few conflicts with the protection of the river under the WSRA. WSR suitability for this reach of the Animas River was determined to be the best method of protecting the river segment's values because 1) there are few points of diversion within this reach and nearly all sizable water needs fall below this reach, allowing the suitable portion of the river to serve as the conduit for transporting water needed downstream; 2) there are no state instream flows currently in place and the state instream flow process typically has not based protections on recreation, scenery, cultural, or historical values; 3) the ORVs of recreation, scenery, cultural, and historic values typically do not require preservation of all of the current flows in a river segment through a federal reserved right and need not present direct conflicts with existing water uses within or upstream of the study segment; 4) the adjacent Weminuche wilderness, including potential expansions of the wilderness, would add protection to the upland portions of the watershed but would not directly protect much of the stream corridor for this segment; 5) a WSR designation would largely support the recreation and tourism activities focused within the river corridor and could provide further opportunities for the marketing of these activities that greatly benefit the local economy; and (6) WSR designation of this segment of the Animas River could prove valuable in obtaining the necessary resources and support for ongoing water quality improvement and abandoned mine land reclamation efforts in the upper reaches of the Animas River and its tributaries that would ultimately benefit downstream uses as well. (Please refer to *Abandoned Mines and Hazardous Materials* sections of the LRMP for a discussion of abandoned mine land reclamation and the work of the Animas River Stakeholders Group.)

A community-based effort titled the Animas River Workgroup was formed in June 2011 to consider potential river protections and alternatives to WSR designation. At the time of writing this analysis, the workgroup has not yet finished their review nor published a report. When the Animas River Workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Cement Creek

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with the Animas River and the entire stream was found

eligible. The total length of river found eligible was 7.62 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs. The water quality of Cement Creek and the connected seeps is similar, and both are of a quality that nurtures the iron fen plants.

Wild and Scenic Classification: This entire segment has a recreation classification. This classification was chosen because there is an improved gravel road that closely follows the stream from the confluence to the forks. This road then becomes a four-wheel-drive road to the headwaters.

Land Ownership: Land ownership is split between BLM and private land. Table D.26 is a breakdown of land ownership along this segment.

Table D.26: Miles by Ownership

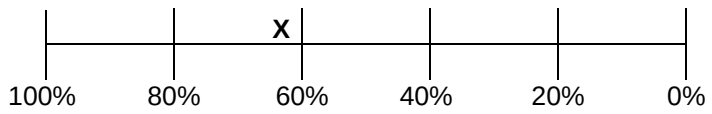
BLM	Private	Total	% Federal (BLM)
4.83	2.79	7.62	63.4%

Table D.27 is a breakdown of the ownership within the river corridor in acres.

Table D.27: Acres by Ownership

BLM	Private	Total	% Federal (BLM)
1,518.46	872.93	2,391.39	63.5%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Cement Creek is one of the few areas in the world with iron fens. Iron fens have state and global ecological ratings of 2, meaning that they are rare or imperiled within the state and worldwide. Currently there are only 13 iron fens known globally, four of which occur in San Juan County. The Cement Creek iron fens occupy the valley bottom and are fed by groundwater seeping from eastern and western valley walls, as well as overflow from Cement Creek. As such, Cement Creek is a Colorado Natural Heritage Program potential conservation area.

Existing and Potential Land Uses

The BLM land in the corridor would be managed as a recreation-emphasis area, with a small portion in the Silverton Mountain ski area. Protection and interpretation of the ecology ORV can be accomplished within this management framework.

Cement Creek is located mostly in the Mountain Zoning District of the San Juan County Zoning and Land Use Regulation. The intent of the Mountain Zoning District is to preserve the natural environment of the mountains of San Juan County while allowing activities normally occurring in the mountains of San Juan County. Within the Mountain Zone, only mining and milling, and activities that do not involve any construction or development of any sort (such as grazing, camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. All other uses within the Mountain Zoning District would be uses subject to review. The minimum parcel or lot area would be 5 acres. The minimum setback would be 50 feet from the property line.

A small section of Cement Creek is in the Rural Residential District where it runs near Silverton. The intent of the Rural Residential Zoning District is to maintain a low-density residential use of larger tracts with individual sewer and water services. Within the Rural Residential Zone, only activities that do not

involve any construction or development of any sort (such as camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. Other activities including single-family dwellings, multiple-family dwellings, and commercial businesses would be permitted within this zone as uses subject to review. Industrial uses, including mining, milling, and manufacturing, would not be permitted in this zone unless approved as a conditional use. The minimum parcel or lot area would be 5 acres. The minimum setback would be 50 feet from the property line.

These types of development would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses

		X		

Few conflicts Many conflicts

Mineral Potential

Cement Creek is the site of numerous exploration and production activities, beginning in the 1870s. Production in this vicinity ceased in 1991, though small-scale exploration continues. The area is favorable for polymetallic alteration within the Silverton Caldera.

With changes in the price of metals, mining activities could resume.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the agency, or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes “undue degradation.”

There is no oil and gas potential.

Potential for conflict with minerals

		X		

Few conflicts Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists five diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 0.016 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 1.19 cfs.
3. The SWSI report shows three conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river. Short sections of riprap protect County Road 110 from erosion on the outside of some bends on the stream, and at stream crossings. Additional riprap is present on private land at road crossings and to protect mining and milling operations from stream erosion. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

X				

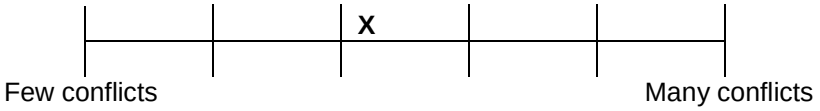
Few conflicts Many conflicts

Transportation and Facilities

County Road 110 is a gravel road that is located within the river corridor for 6.9 miles. There are also 4.8 miles of native surface road, which are not maintained for passenger cars, and include numerous bridges on private land.

The Silverton Mountain ski area development is located on private land, while the some of the ski runs are located on BLM land. There is also a power line in the corridor up to the mining facility at Gladstone.

Potential for conflict with transportation and facilities

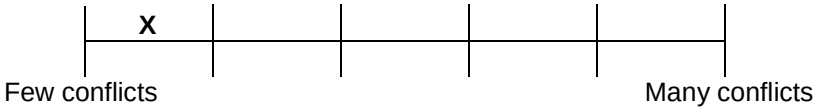


Recreation and Other Resource Activities

The Silverton Mountain ski area is located along the creek. The road along the stream is also driven for the scenery in the area. Private lands in the corridor are being developed for recreation and/or summer homes, and for mining.

Other activities that may occur in the river corridor include sheep grazing in the alpine areas and mining.

Potential for conflict with recreation and other resources



Special Areas

Cement Creek is a Colorado Natural Heritage Program potential conservation area. Cement Creek is part of the Silverton SRMA for high-alpine four-wheel-drive and scenic touring activities.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming into retirees. The tourist services are related to the use of the area around Cement Creek and Silverton Mountain ski area due to the proximity to Silverton.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Cement Creek was found to be not suitable in the Preferred Alternative. The iron fens of Cement Creek are rare or imperiled and deserve additional protections, but there are a number of conflicts with the successful protection of Cement Creek that preclude further consideration for WSR status. In particular,

the location of the county road, the amount of private land involved, future additional development of Silverton Mountain ski area, and the potential for additional mining and/or mined land reclamation present major obstacles to protection. Comments received on the Draft EIS also pointed to potential conflicts with the county development corridor and water rights along Cement Creek. Other options for protection could include ACEC designation but such a designation would be hampered by the same conflicts identified above. The TRFO would continue to work with San Juan County, the Animas Rivers Stakeholder Group, and others to identify approaches for preserving the iron fens along Cement Creek. Cement Creek has been discussed by the Animas River Workgroup.

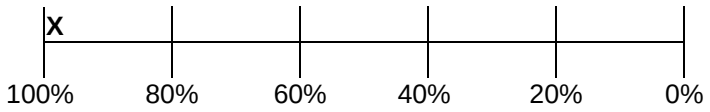
Cinnamon Creek

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with the Animas River and the entire stream was found eligible. The total length of river studied and found eligible was 1.96 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a recreation classification. This classification was chosen because the stream has a four-wheel-drive road the length of the valley leading to Cinnamon Pass, an important link in the Alpine Loop.

Land Ownership: The entire segment is within land owned by the BLM. There are 544.33 acres of land within the river corridor.

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Recreation: Cinnamon Creek is along the Alpine Loop road system, a high country four-wheel-drive and heritage tourism opportunity that draws people from throughout the country. There are 17 commercial four-wheel-drive touring operators that utilize the Alpine Loop with permits from the BLM and USFS. People are drawn to the valley between the high peaks. The road parallels the stream, offering views of the lush riparian area in the foreground.

Ecology: Colorado Natural Heritage Program has also identified an excellent specimen of the altai cottongrass (*Eriophorum altaicum* var. *neogaeum*) and thickleaf whitlowgrass (*Draba crassa*) communities unique to the alpine tundra within the corridor. Both species have a state ecological rating of 3, meaning that they are vulnerable within the state. Cinnamon Pass is a Colorado Natural Heritage Program potential conservation area. The altai cottongrass and thickleaf whitlowgrass communities also extend beyond the streamside corridor.

Existing and Potential Land Uses

The Cinnamon Creek corridor is within the Silverton special management area, emphasizing mining heritage and motorized roads in the alpine. This is compatible with the recreation classification and the protection and interpretation of the alpine ecosystem ORV.

Cinnamon Creek is located in the Mountain Zoning District of the San Juan County Zoning and Land Use Regulation. The intent of the Mountain Zoning District is to preserve the natural environment of the mountains of San Juan County while allowing activities normally occurring there. Within the Mountain Zone, only mining and milling, and activities that do not involve any construction or development of any sort (such as grazing, camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. All other uses within the Mountain Zone would be uses subject to review. The minimum parcel or lot

area would be 5 acres. The minimum setback would be 50 feet from the property line. This type of development would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses

X				

Few conflicts — Many conflicts

Mineral Potential

Cinnamon Creek has had exploration activities beginning in the 1870s, with most mines shutting down in the 1920s. There is no current production. The area is favorable for polymetallic alteration within the Silverton Caldera.

With changes in the price of metals, mining activities could resume.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the agency, or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes “undue degradation.”

There is no oil and gas potential

Potential for conflict with minerals

		X		

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

Development of mineral resources may require the development of water resources.

There are no dams or riprap that impact the free-flowing character of this stream.

Potential for conflict with water resources development

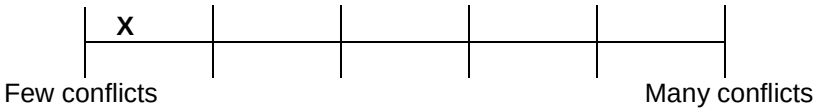
X				

Few conflicts — Many conflicts

Transportation and Facilities

There are 2 miles of native surface road that are not maintained for passenger cars along the river corridor. This is part of the Alpine Loop Scenic Byway.

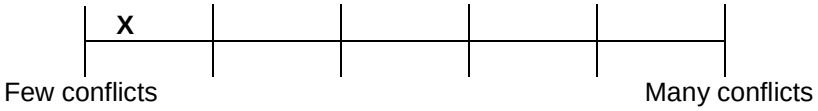
Potential for conflict with transportation and facilities



Recreation and Other Resource Activities

The Alpine Loop follows Cinnamon Creek, which is used by four-wheel-drive touring operators and the general public.

Potential for conflict with recreation and other resources



Other activities that may occur in the river corridor include sheep grazing and mining.

Special Areas

The Alpine Loop runs along the length of the stream. This area is also a potential Colorado Natural Heritage Program potential conservation area.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming in to retirees. The tourist services are related to the use of the area along Cinnamon Creek. There are a number of four-wheel-drive touring operators that drive the Alpine Loop Scenic Byway.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Cinnamon Creek is not found suitable under the Preferred Alternative. The ORVs of Cinnamon Creek are fairly modest when compared to other streams of the planning unit. There are relatively few conflicts facing the protection of the altai cottongrass and thickleaf whitlowgrass communities, which are only partially associated with the stream itself and the recreational ORV is protected by the designation of backcountry byway and incorporation into the Silverton special management area. Management under these protections should ensure adequate protection of the ORVs.

Comments on the Draft EIS pointed to concerns for wild and scenic suitability conflicts with mining activities and the presence of a county-maintained road along the stream.

Maggie Gulch

Location: The stream and associated corridor (0.25 mile on either side) was studied from its headwaters to its confluence with the Animas River and the entire stream was found eligible. The total length of river found eligible was 4.62 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a recreation classification. This classification was chosen because there is a four-wheel-drive road paralleling the river on the valley side wall, which then becomes a trail closely following the stream channel.

Land Ownership: Land ownership is split between BLM and private land. Table D.28 is a breakdown of land ownership along this segment, in miles.

Table D.28: Miles by Ownership

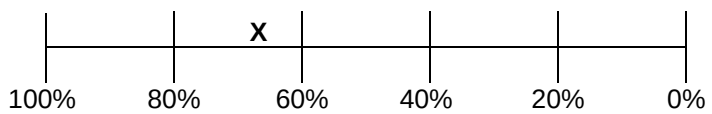
BLM	Private	Total	% Federal (BLM)
3.33	1.29	4.62	72.0%

Table D.29 is a breakdown of the ownership within the river corridor in acres.

Table D.29: Acres by Ownership

BLM	Private	Total	% Federal (BLM)
988.79	506.11	1,494.90	66.1%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

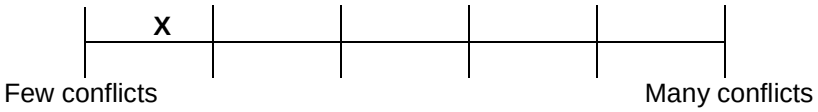
Maggie Gulch contains thickleaf whitlowgrass, Colorado Divide whitlowgrass (*Draba streptobrachia*), and showy whitlowgrass (D. *spectabilis var. spectabilis*), which all have state and global ecological ratings of 3, meaning they are vulnerable within the state and worldwide. Maggie Gulch is a Colorado Natural Heritage Program potential conservation area. It has also been identified by Colorado Natural Heritage Program as the site of altai cottongrass, which also has a state ecological rating of 3 and is vulnerable in the state. Many of these species grow in the streamside zone and in adjacent wet meadows. Thickleaf whitlowgrass grows in the drier rocky tundra at the head of the drainage.

Existing and Potential Land Uses

The Maggie Gulch Corridor is within the Silverton special management area, emphasizing mining heritage and motorized roads in the alpine. This is compatible with the recreation classification and the protection and interpretation of alpine ecosystem ORV.

Maggie Gulch is located in the Mountain Zoning District of the San Juan County Zoning and Land Use Regulation. The intent of the Mountain Zoning District is to preserve the natural environment of the mountains of San Juan County while allowing activities normally occurring in these mountains. Within the Mountain Zoning District, only mining and milling, and activities that do not involve any construction or development of any sort (such as grazing, camping, picnicking, hiking, and outdoor recreation), would be permitted as uses by right. All other uses within the Mountain Zoning District would be uses subject to review. The minimum parcel or lot area would be 5 acres. The minimum setback would be 50 feet from the property line. This type of development would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses



Mineral Potential

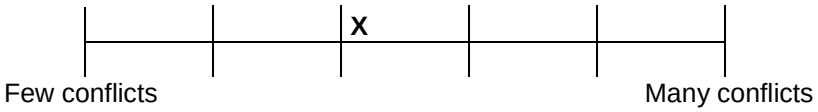
Maggie Gulch has had exploration and production activities, beginning in the 1870s, with most mines shutting down in the 1920s. Active mining occurred in this area as late as 1977, with ore being shipped to the mill at Howardsville and milled there at that time. There is no current production, though small-scale exploration continues. There is favorable occurrence of polymetallic alteration within the Silverton Caldera.

With changes in the price of metals, mining activities could resume.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the agencies or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes “undue degradation.”

There is no oil and gas potential.

Potential for conflict with minerals



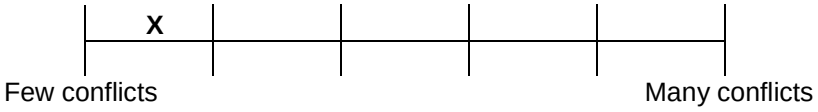
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists one diversion in the corridor of this stream. The CWCB holds an instream flow water right on Maggie Gulch.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows one conditional water right (Cole Ranch) near this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There is little or no riprap in this stream. Development of mineral resources may require the development of additional water resources.

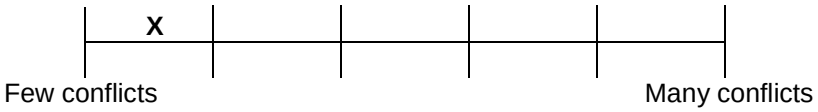
Potential for conflict with water resources development



Transportation and Facilities

There are 4.5 miles of native surface road that are not maintained for passenger cars at the lower end of the segment. County Road 110 approaches the lower end of Maggie Gulch for 0.3 mile and is maintained for passenger cars. The Continental Divide Trail is within the river corridor at the upper end of the segment for 1.7 miles.

Potential for conflict with transportation and facilities

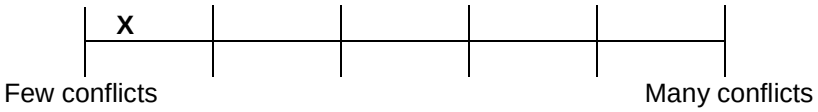


Recreation and Other Resource Activities

The major recreational activity in this area is sightseeing and driving the four-wheel-drive road along the stream.

Other resource activities that may occur are mining and livestock grazing.

Potential for conflict with recreation and other resources



Special Areas

Maggie Gulch is a Colorado Natural Heritage Program potential conservation area.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming in to retirees. The tourist services are related to the use of the area around Maggie Gulch due to its proximity to Silverton.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Maggie Gulch is not found suitable under the Preferred Alternative. The ORVs of Maggie Gulch are fairly modest when compared to other streams of the planning unit. There are relatively few conflicts facing the protection of the altai cottongrass, Colorado Divide whitlowgrass, showy whitlowgrass, and thickleaf whitlowgrass communities, which are only partially associated with the stream itself and are offered some protection by CWCB instream flows and being incorporated into the Silverton special management area.

There were no comments on the Draft EIS specific to Maggie Gulch suitability.

Mineral Creek

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with the Animas River and the entire stream was found eligible. The total length of river found eligible was 8.65 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a recreation classification. The San Juan Skyway Scenic Byway follows the stream along the entire segment.

Land Ownership: Land ownership is split between NFS, BLM, and private land. Table D.30 is a breakdown of land ownership along this segment.

Table D.30: Miles by Ownership

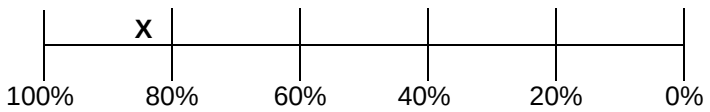
BLM	NFS	Private	Total	% NFS	% Federal (NFS+BLM)
0.20	7.07	1.39	8.66	81.7%	84.0%

Table D.31 is a breakdown of the ownership within the river corridor in acres.

Table D.31: Acres by Ownership

BLM	NFS	Non-Federal	Private	Total	% NFS	% Federal (NFS+BLM)
147.69	2,043.59	0.12	381.69	2,573.09	79.4%	85.2%

Amount of federally owned land within the river corridor



Mineral Creek is located mainly in the Scenic Preservation Overlay District of the San Juan County Zoning and Land Use Regulation. This district includes all sites located within 1,500 feet of the center line of U.S. Highway 550. The intent of the Scenic Preservation Overlay District is to prevent development from adversely affecting the scenic and historic assets of the county to the greatest degree possible. Within the Scenic Preservation Overlay District, only activities that do not involve any construction or development of any sort, including disturbing of soil or trees (such as grazing, camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. All other uses within this zone would be uses subject to review. Development within the Scenic Preservation Overlay District must be designed in a manner that protects the environmental and historical assets of the area. All site design and development must be done in a manner that minimizes impacts on scenic views or vistas. Design plans must take into account characteristics of soils, slopes, and geological hazards in a manner intended to protect the health, safety, and welfare of users of the site, and the scenic value of the site. Design of the site must include safe, convenient, and adequate arrangements for pedestrian circulation, roadways, driveways, off-road parking, and loading space. Additional setbacks, landscaping, screening, or design requirements may be required by the county in order to preserve the natural, pristine appearance of the area and to minimize the visual impact to viewsheds and view corridors.

Mineral Creek also has a small area in the Town/County Zone of Mutual Interest where it runs near Silverton. The intent of the Town/County Zone of Mutual Interest is to provide for cooperative approval and review of development and uses that might occur in that area of the county that is adjacent to the town of Silverton in which it is anticipated that town streets, water, sewer, and other public services might be extended, and which might be subject to annexation at some point in the future by the town. Any proposed development or use within this zone must be reviewed by both the Town of Silverton and San Juan County. The Town/County Zone of Mutual Interest identifies areas that, because of their proximity to the town of Silverton, are deemed to be subject to a commonality of interest by both the town and county in regards to future development. Any development that would occur along Mineral Creek would not interfere with the recreation classification of the river.

Outstandingly Remarkable Values

Recreation and scenery: Mineral Creek is along the San Juan Skyway. This stretch of highway is designated as an All-American Road and a national scenic byway. The skyway attracts national and international visitors. Scenic values include wetlands containing unusual iron fens (bogs) and colorful geology from exposed mineral/ore deposits. Yellow to orange-brown deposits of sulfates, oxides, and hydroxides of iron cover the cobbles of the creek. Mineral Creek runs through a U-shaped glacial valley whose walls are marked by numerous snow avalanche runs. The aspen occupying avalanche chutes are able to survive. Mineral Creek is carved along ring fractures that outline the southwestern rim of the Silverton Caldera. The caldera process is also shown on the slopes of Anvil Mountain, which exhibit brilliant reddish and yellowish scree derived from the highly altered volcanic rocks.

Ecology: The Chattanooga iron fen, which borders Mineral Creek, has been identified by the Colorado Natural Heritage Program as a unique wetland site. It is home to a rare moss, Baltic sphagnum (*Sphagnum balticum*), that has not been found anywhere else in the continental United States. This wetland may qualify as a World Heritage Site. Iron fens have state and global ecological ratings of 2, meaning that they are rare or imperiled within the state and worldwide. Currently there are only 13 iron fens known globally, four of which occur in San Juan County. The Chattanooga iron fen is a Colorado Natural Heritage Program potential conservation area.

Existing and Potential Land Uses

The Mineral Creek corridor would be managed with a recreation emphasis, largely because of the San Juan Skyway, with special areas at the fens managed for protection and interpretation of the ecology. This is compatible with the recreation classification and the recreation, scenery, and ecology ORVs.

Mineral Creek is located mainly in the Scenic Preservation Overlay District of the San Juan County Zoning and Land Use Regulation. This district includes all sites located within 1,500 feet of the center line of U.S. Highway 550. The intent of the Scenic Preservation Overlay District is to prevent development from adversely affecting the scenic and historic assets of the county to the greatest degree possible. Within the Scenic Preservation Overlay District, only activities that do not involve any construction or development of any sort, including disturbing of soil or trees (such as grazing, camping, picnicking, hiking, and outdoor recreation), would be permitted as uses by right. All other uses within this zone would be uses subject to review. Development within the Scenic Preservation Overlay District must be designed in a manner that protects the environmental and historical assets of the area. All site design and development must be done in a manner that minimizes impacts upon scenic views or vistas. Design plans must take into account characteristics of soils, slopes, and geological hazards, in a manner intended to protect the health, safety, and welfare of users of the site, and the scenic value of the site. Design of the site must include safe, convenient, and adequate arrangements for pedestrian circulation, roadways, driveways, off-road parking, and loading space. Additional setbacks, landscaping, screening, or design requirements may be required by the county in order to preserve the natural, pristine appearance of the area and to minimize the visual impact to viewsheds and view corridors.

Mineral Creek also has a small area in the Town/County Zone of Mutual Interest where it runs near Silverton. The intent of the Town/County Zone of Mutual Interest is to provide for cooperative approval and review of development and uses that might occur in that area of the county that is adjacent to the Town of Silverton in which it is anticipated that town streets, water, sewer, and other public services might be extended, and which might be subject to annexation at some point in the future by the town. Any proposed development or use within this zone must be reviewed by both the Town of Silverton and San Juan County. The Town/County Zone of Mutual Interest identifies areas which, because of their proximity to the town of Silverton, are deemed to be subject to a commonality of interest by both the town and county in regards to future development. Any development that would occur along Mineral Creek would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses

X				

Few conflicts — Many conflicts

Mineral Potential

Mineral Creek is the site of numerous exploration and production activities, beginning in the 1870s. Most mines shut down in the 1920s, though small-scale exploration continues. The area is favorable for polymetallic alteration within the Silverton Caldera.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the agencies or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes “undue degradation.”

Oil and gas potential is low to none.

Potential for conflict with minerals

	X			

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists three diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 8.6 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights, though a recent application for conditional water rights has been filed by a public entity to support future expected development in this corridor and development of new water facilities. Town of Silverton municipal water intake is on a tributary to Mineral Creek.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

Short sections of riprap protect the stream crossings at the South Mineral Creek Road, the Ophir Pass Road at Burro Bridge, U.S. Highway 550, and the mining structures at the Silver Ledge Mine. These do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

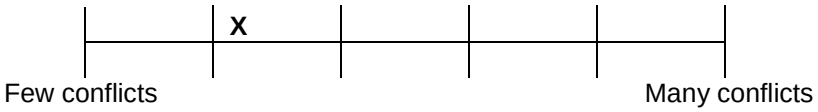
	X			

Few conflicts — Many conflicts

Transportation and Facilities

The San Juan Skyway, U.S. Highway 550, is within the river corridor for 9.1 miles. There are an additional 1.2 miles of road leading to South Mineral Creek, which is maintained for passenger cars. There are 3.4 miles of road not maintained for passenger cars, which includes access roads to U.S. Basin. The Columbine Lake Trail is within the river corridor for 0.3 mile. San Miguel Power has a power line and substation within the river corridor.

Potential for conflict with transportation and facilities

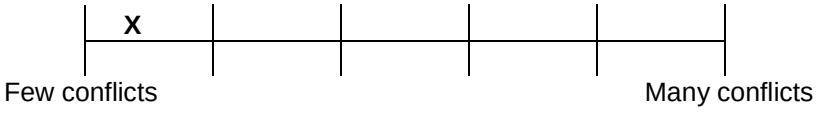


Recreation and Other Resource Activities

Mineral Creek is along the San Juan Scenic Byway, which is driven for the scenery in the area.

Other resource activities that may occur are mining and sheep grazing.

Potential for conflict with recreation and other resources



Special Areas

Mineral Creek is along the San Juan Scenic Byway. In addition, the Chattanooga iron fen is a Colorado Natural Heritage Program potential conservation area.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming in to retirees. The tourist services are directly associated with the San Juan Scenic Byway that follows the stream and accesses Silverton.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Mineral Creek is found suitable for designation as a WSR under the Preferred Alternative. The ORVs of Mineral Creek, particularly the Chattanooga iron fen, are very significant. In contrast with Cement Creek and its iron fens, Mineral Creek presents fewer conflicts to protecting the ORVs: there is a much lower percentage of private land involved, there are fewer existing developments, etc. The major potential conflicts on Mineral Creek would be renewed mining activity or development of the private lands in a potential economic development corridor identified by San Juan County.

Alternative approaches to protecting Mineral Creek include establishment of instream flows and perhaps some form of special management area for the purposes of conserving the Chattanooga iron fen. WSR designation, however, is determined to be the best form of protection, providing similar or better protections than the combination of instream flows and special management prescription while providing the additional recognition of the recreation and scenery ORVs, and could complement the All-American Road and national scenic byway status of the nearby San Juan Skyway.

Comments received on the Draft EIS raised concerns with impacts to future water development, mining, and continued use of county roads. As noted elsewhere, USFS guidance (Forest Service Handbook 1909.12 Chapter 80) states that proposed water developments "would be analyzed as to their effect on a river's free-flow, water quality, and outstandingly remarkable values, with adverse effects prevented to the extent of existing agency authorities." In some cases, the results of this analysis could lead to a decision to prevent certain new developments and could result in requiring mitigation measures for other developments. The town of Silverton currently obtains water from a tributary to Mineral Creek. This existing water rights and delivery system are documented above and are consistent with the finding of suitability.

Forest Service Handbook 1909.12 also provides guidelines for managing mineral development activities. For locatable minerals such as gold, silver, or rare earths, the handbook states that activities "shall be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment." Agency policy does not necessarily prohibit mineral development along suitable reaches.

County-maintained roads are also documented above and their continued use and maintenance are consistent with the "recreation" classification.

Mineral Creek has been discussed by the Animas River Workgroup. When the Animas River Workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

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

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with Mineral Creek and the entire stream was found eligible. The total length of river found eligible was 7.41 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a recreation classification. This classification was chosen because of the roads that parallel the stream for nearly the entire segment. There is also a developed campground within the river corridor.

Land Ownership: Land ownership is split between NFS and private land. The following table is a breakdown of land ownership along this segment, in miles.

Table D.32: Miles by Ownership

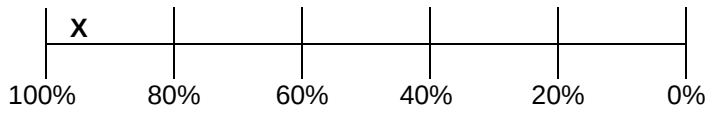
NFS	Private	Total	% NFS
7.16	0.25	7.41	96.6%

The following table is a breakdown of the ownership within the river corridor in acres.

Table D.33: Acres by Ownership

NFS	Non-Federal	Private	Total	% NFS
2,286.79	6.16	82.89	2,375.84	96.3%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Ecology: There is an important ecological feature of the iron fen/wetland complex at the mouth of South Fork Mineral Creek. Iron fens have state and global ecological ratings of 2, meaning that they are rare or imperiled within the state and worldwide. Currently there are only 13 iron fens known globally. South Fork Mineral Creek is a Colorado Natural Heritage Program potential conservation area.

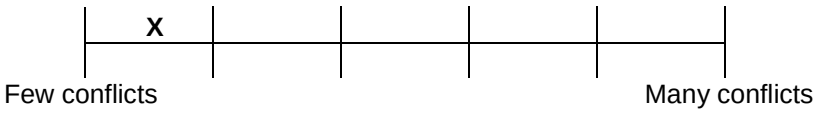
Wildlife: Four breeding colonies of black swifts, a bird that is vulnerable in Colorado, were found at waterfalls within South Fork Mineral Creek corridor, on Porcupine Creek, Cataract Creek, and unnamed tributaries. The nest sites are behind or adjacent to waterfalls, where the mist from the falls waters the mosses that make up the nest. The black swift worldwide breeding distribution is limited to a narrow portion of the Rocky Mountains from Mexico to British Columbia, and a narrow band along sea cliffs overlooking the Pacific coast from California to Alaska. The SJNF planning area provides a significant contribution to the species' worldwide breeding distribution by providing a core breeding population and by providing critical connectivity within the southern Rocky Mountains portion of its range. Of the 10 locations on the SJNF that have black swift nest sites, three were chosen as outstandingly remarkable because they contained the best clusters of nests.

Existing and Potential Land Uses

South Fork Mineral Creek would be managed as a recreation corridor up to South Mineral Campground, and as a natural landscape with limited management upstream from the campground. This is compatible with the ecology and wildlife ORVs.

South Fork Mineral Creek is located in the Mountain Zoning District of the San Juan County Zoning and Land Use Regulation. The intent of the Mountain Zoning District is to preserve the natural environment of the mountains of San Juan County while allowing activities normally occurring in these mountains. Within the Mountain Zoning District, only mining and milling, and activities which do not involve any construction or development of any sort (such as grazing, camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. All other uses within the Mountain Zoning District would be uses subject to review. The minimum parcel or lot area would be five acres. The minimum setback would be 50 feet from the property line. This type of development would not interfere with the recreation classification of the river.

Potential for conflict with existing and potential land uses



Mineral Potential

South Fork Mineral Creek has had exploration activities beginning in the 1870s. Most mines shut down in the 1920s. There is no current production. The area is favorable for polymetallic alteration within the Silverton Caldera.

See FEIS Chapter 3 for a further discussion of mining activities allowed if a river is found suitable by the agencies or if it is designated by Congress or the Secretary of the Interior. In brief, in a recreation classification, mining activities are allowed as long as they do not diminish the ORVs, do not change the classification, and are not operating in a way that causes "undue degradation."

Oil and gas potential is low to none.

Potential for conflict with minerals

	X			

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

Minor bank protection and fishery habitat improvements exist near South Mineral Campground, but these do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

X				

Few conflicts — Many conflicts

Transportation and Facilities

Within the river corridor there are 3.6 miles of road maintained for passenger cars and 4.1 miles of road not maintained for passenger cars. The Ice Lakes Basin Trail is also within the river corridor for 0.6 mile. There is also camping at the South Mineral Campground, as well as dispersed camping at select locations along the river.

Potential for conflict with transportation and facilities

X				

Few conflicts — Many conflicts

Recreation and Other Resource Activities

The South Fork Mineral Creek area contains a campground and dispersed camping. There are also a number of hiking and mountain-biking opportunities on trails near the river.

Other activities that may occur include mining and livestock grazing.

Potential for conflict with recreation and other resources

X				

Few conflicts — Many conflicts

Special Areas

South Fork Mineral Creek is a Colorado Natural Heritage Program potential conservation area.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming in to retirees. The tourist services are related to the use of the area around South Fork Mineral Creek. The stream is close to the town of Silverton and people camping in the designated and dispersed campgrounds regularly go into Silverton.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

South Fork Mineral Creek is found to be suitable under the Preferred Alternative. This stream segment contains another major iron fen community and provides for outstanding black swift nesting sites with a relatively high concentrations of nests. There are very few conflicts to protection of the river. Renewed mining interest and existing recreational and transportation facilities present the most immediate threats. Alternatives to WSR protections would include a combination of instream flow protections (e.g., to protect black swift nesting sites) and special management prescriptions for the maintenance of the fen community. WSR designation, however, is determined to be the best form of protection, providing similar protections but with additional surety and potential marketing benefits. Protections of South Fork Mineral Creek's ORVs would greatly complement the protections provided for black swift nests in the West Dolores drainage and the protections of iron fen communities in nearby Mineral Creek. In combination, protecting these streams would greatly increase the odds for successfully conserving the rare iron fen plant communities and critical nesting habitat of a relatively rare bird species.

Comments received on the Draft EIS for South Mineral Creek were similar to those identified for Mineral Creek above.

South Fork Mineral Creek has been discussed by the Animas River Workgroup. When the Animas River Workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

West Fork Animas River in California Gulch

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with the Animas River and the entire stream was found eligible. The total length of river studied and found eligible was 3.16 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire segment has a recreation classification. There is a four-wheel-drive road that follows the stream throughout its length.

Land Ownership: Land ownership along the segment is split between BLM and private lands. Table D.34 is a breakdown of the ownership along the river in miles of river.

Table D.34: Miles by Ownership

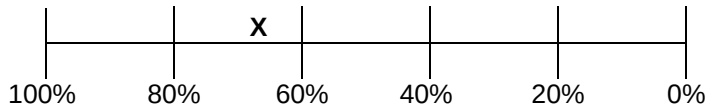
BLM	Private	Total	% Federal (BLM)
2.03	1.13	3.16	64.1%

Table D.35 is a breakdown of the ownership within the river corridor in acres.

Table D.35: Acres by Ownership

BLM	Private	Total	% Federal (BLM)
702.36	374.76	1,077.12	65.2%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

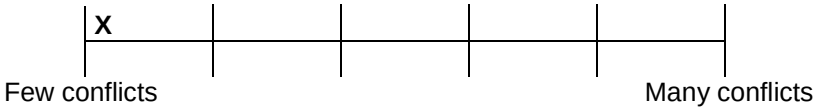
Ecology: The Colorado Natural Heritage Program has identified an important ecological community of altai cottongrass and clustered sedge (*Carex cumulata*), wetland plants that grow near the stream. Altai cottongrass communities are unique to the alpine tundra. Altai cottongrass has a state ecological rating of 3, meaning it is vulnerable within the state. Clustered sedge has global and state ecological ratings of 3 and 2, respectively, meaning it is vulnerable globally and rare or imperiled within the state. California Gulch is a Colorado Natural Heritage Program potential conservation area.

Existing and Potential Land Uses

This corridor is within the Silverton special management area, emphasizing mining heritage and motorized roads in the alpine. This is compatible with the scenic and ecology ORVs.

California Gulch is located in the Mountain Zoning District of the San Juan County Zoning and Land Use Regulation. The intent of the Mountain Zoning District is to preserve the natural environment of the mountains of San Juan County while allowing activities normally occurring there. Within the Mountain Zoning District, only mining and milling, and activities that do not involve any construction or development of any sort (such as grazing, camping, picnicking, hiking, and outdoor recreation) would be permitted as uses by right. All other uses within the Mountain Zoning District would be uses subject to review. The minimum parcel or lot area would be 5 acres. The minimum setback would be 50 feet from the property line. This type of development would not interfere with the recreation classification of the river

Potential for conflict with existing and potential land uses



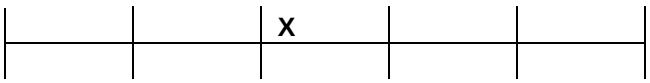
Mineral Potential

This area is the site of numerous exploration and production activities, beginning in the 1870s. Most mines shut down in the 1920s. The area is favorable for polymetallic alteration within the Silverton Caldera.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County.

There is no oil and gas potential.

Potential for conflict with minerals



Few conflicts Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists four diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 0.124 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There is little or no riprap or other channel modifications on the stream.

Potential for conflict with water resources development

	X			

Few conflicts Many conflicts

Transportation and Facilities

Within the river corridor there are 4.3 miles of road that are not maintained for passenger cars.

Potential for conflict with transportation and facilities

X				

Few conflicts Many conflicts

Recreation and Other Resource Activities

The main recreational activity in the area is sightseeing and driving the four-wheel-drive road along the river, as well as use of the road by ATVs.

Other activities that may occur in this area include livestock grazing and mining.

Potential for conflict with recreation and other resources

X				

Few conflicts Many conflicts

Special Areas

California Gulch is a Colorado Natural Heritage Program potential conservation area.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in San Juan County is tourism (58%). This consists mainly of second homes and tourist services. The second highest segment of the economic base is funds coming in to retirees. The tourist services are related to the use of the area around California Gulch, where people are drawn to the mining heritage and opportunity to drive in the high mountains.

Other sources indicate the potential for mining to return to a position of significant long-term economic importance in San Juan County

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

West Fork Animas River in California Gulch is not found suitable under the Preferred Alternative. The ORVs of California Gulch are fairly modest when compared to other streams of the planning unit. There are relatively few conflicts facing the protection of the altai cottongrass and clustered sedge communities, but the high percentage of private land along the stream corridor could preclude WSR designation. The stream is currently offered some protection under the Silverton special management area designation. Further protection of the plant communities could be provided through instream flow protections under the CWCB. Also, the BLM would work with San Juan County to address future development plans that could affect these imperiled plant communities.

Comments expressed concern for interfering with proposed water developments and mining.

Suitability Determination

Miles found suitable by classification are provided in Table D.36 and are illustrated on Figure D-2 Animas River and Tributaries.

Table D.36: Miles Found Suitable by Classification

	Wild	Scenic	Recreation	Total
Animas River - Bakers Bridge to Silverton*	0	0	27.19	27.19
Cement Creek	0	0	0	0
Cinnamon Creek	0	0	0	0
Maggie Gulch	0	0	0	0
Mineral Creek	0	0	8.65	8.65
South Fork Mineral Creek	0	0	7.41	7.41
California Gulch/West Fork Animas	0	0	0	0
Animas River Totals	0	0	43.25	43.25

*End of segment moved to 3.58 miles below Silverton.

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wild and Scenic Rivers
Animas River and Tributaries
San Juan National Forest and Tres Rios Field Office
Figure D-2

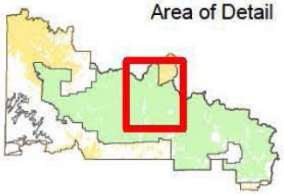
Legend

Suitable Wild and Scenic River Classification

- Recreation
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 2.5 5 10 Miles

Area of Detail



The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs w thout notificat on.

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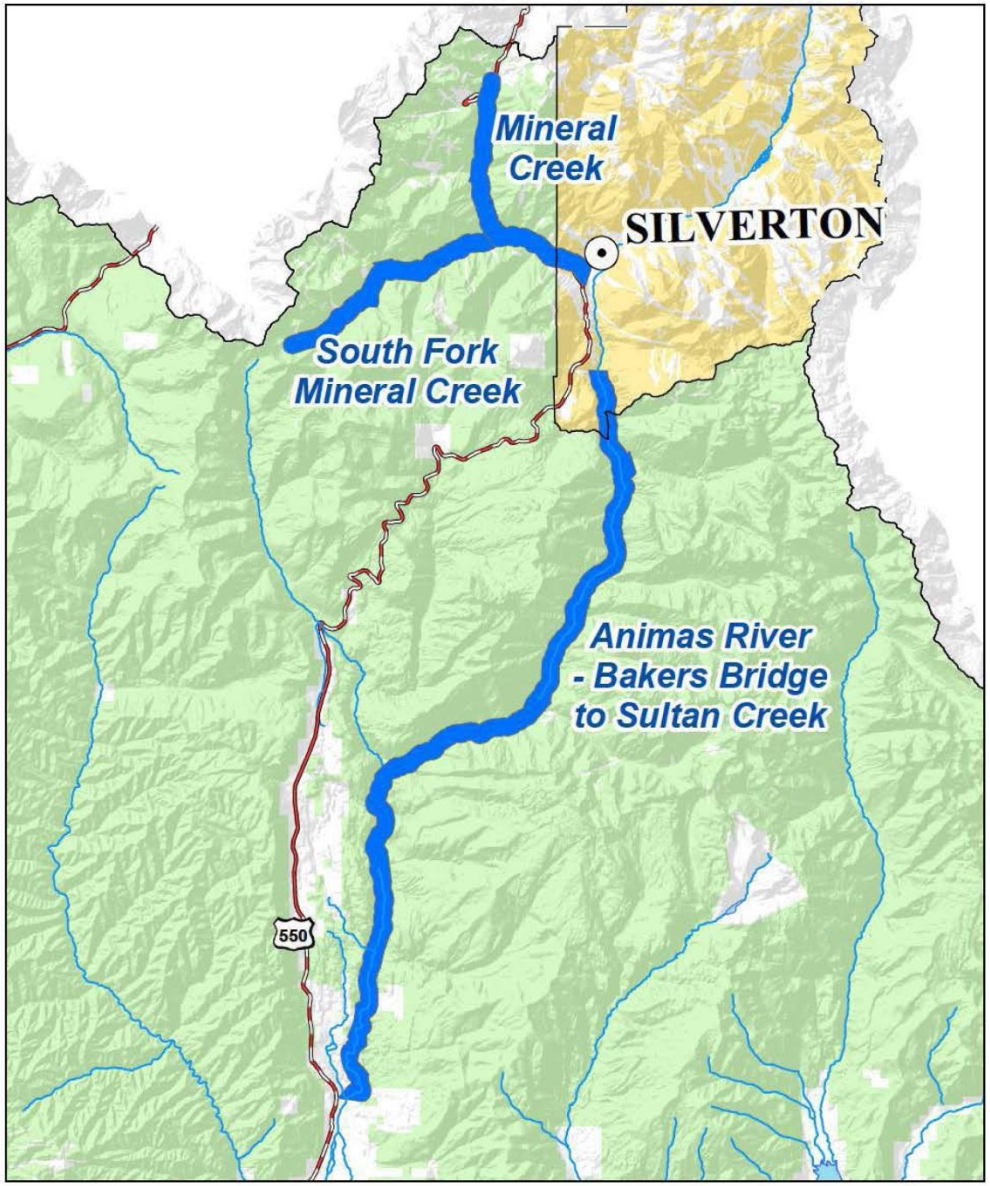
MDR
NAD 83, Polyconic Projection
May 30, 2013



Hermosa Creek River System

Hermosa Creek and Tributaries

Location: Hermosa Creek was studied from its headwaters to its confluence with the Animas River. Hermosa Creek was found eligible from its headwaters to the SJNF boundary, after which there are many diversions. Thirteen tributaries of Hermosa Creek were studied and nine were found eligible. The total length of river studied was 84.37 miles and the total found eligible was 62.28 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: Throughout the Hermosa Creek watershed there are portions of wild, scenic, and recreation classifications (Table D.37).

Table D.37: Miles per Eligible Segments

Name	Wild	Scenic	Recreation	Total
Big Bend Creek	4.43	0	0	4.43
Big Lick Creek	0.76	0	0	0.76
Clear Creek	0	5.36	0	5.36
Corral Creek	1.65	0	0	1.65
Deer Creek	2.72	0	0	2.72
East Fork Hermosa Creek	0	0	6.70	6.70
Elk Creek	4.25	0	0	4.25
Hermosa Creek	0	28.08	0	28.08
South Fork Hermosa Creek	5.89	0	0	5.89
West Cross Creek	2.44	0	0	2.44
Hermosa Creek Totals	22.14	33.44	6.70	62.28

The East Fork Hermosa Creek has a road that follows its entire length, making it a recreation classification. Both Clear Creek and Hermosa Creek have trails designated for ATV and motorcycle use, making them scenic segments. Big Bend Creek, Big Lick Creek, and South Fork Hermosa Creek all have trails along some portion of the segment. The other creeks do not have any development near them.

Land Ownership: The majority of the land along Hermosa Creek and its tributaries is owned by the SJNF with a small portion of private land along the East Fork Hermosa Creek and Hermosa Creek. The following is a breakdown of the ownership along the river in miles (Table D.38).

Table D.38: Miles by Ownership

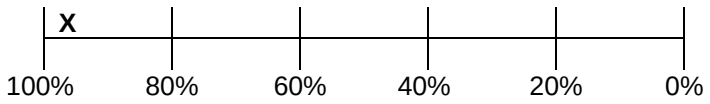
Name	NFS	Private	Total	% NFS Owned
Big Bend Creek	4.43	0.00	4.43	100.0%
Big Lick Creek	0.76	0.00	0.76	100.0%
Clear Creek	5.36	0.00	5.36	100.0%
Corral Creek	1.65	0.00	1.65	100.0%
Deer Creek	2.72	0.00	2.72	100.0%
East Fork Hermosa Creek	6.52	0.18	6.70	97.3%
Elk Creek	4.25	0.00	4.25	100.0%
Hermosa Creek	27.03	1.05	28.08	96.3%
South Fork Hermosa Creek	5.89	0.00	5.89	100.0%
West Cross Creek	2.44	0.00	2.44	100.0%
Hermosa Creek Totals	61.05	1.23	62.28	98.0%

Table D.39 is a breakdown of the ownership within the river corridor in acres.

Table D.39: Acres by Ownership

Name	NFS	Private	Total	% NFS
Big Bend Creek	1,445.71	0.00	1,445.71	100.0%
Big Lick Creek	295.25	0.00	295.25	100.0%
Clear Creek	1,743.42	0.00	1,743.42	100.0%
Corral Creek	586.30	0.00	586.30	100.0%
Deer Creek	917.40	0.00	917.40	100.0%
East Fork Hermosa Creek	1,943.76	53.12	1,996.88	97.3%
Elk Creek	1,372.24	0.00	1,372.24	100.0%
Hermosa Creek	7,301.32	115.32	7,416.64	98.4%
South Fork Hermosa Creek	1,850.50	0.00	1,850.50	100.0%
West Cross Creek	831.69	0.00	831.69	100.0%
Hermosa Creek Totals	18,287.59	168.44	18,456.03	99.1%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

The Hermosa watershed is unique for high-purity Colorado River cutthroat reintroduction in the limestone outcropping that bisects many of the tributaries on both the east and west sides of Hermosa Creek provides a barrier to upstream migration of other fish species. Also, the proximity of the numerous tributaries would allow a vibrant and stable population of cutthroat in the mainstem that could draw from each of the tributaries. Such a meta-population is much more resilient and can survive damaging events in any one tributary, without threatening the whole population. Big Bend Creek, Clear Creek, and East Fork Hermosa Creek are three of 12 sites within the SJNF that contain genetically pure strains of Colorado River cutthroat trout. In addition, they are part of the Hermosa Creek watershed and have potential for meta-population reintroduction, as does the rest of the Hermosa Creek watershed. Since cutthroat reintroduction is one of the ORVs, any WSR suitability finding or designation would include the required steps of fish-barrier construction and elimination of non-native fish.

The Hermosa Creek Trail is utilized by five outfitters, primarily for hunting and mountain biking. It is one of the most popular mountain bike trails in southwest Colorado due to the trail paralleling the Hermosa Creek drainage for 23 miles. It is also popular with horseback riders and OHV users because of the easy access to the lower trailhead from Durango. OHV riders find it unique because it is one of the few motorized trails that is surrounded by undeveloped mountainous country.

Existing and Potential Land Uses

The majority of the Hermosa Creek drainage is split between management where natural processes dominate and natural landscapes with limited management. Tributaries on the west side (Clear Creek, South Fork Hermosa Creek, Deer Creek, West Cross Creek) are predominantly in the management theme where natural processes dominate. Elk Creek and Big Lick Creek on the west side are in a natural landscape with limited management. East Fork Hermosa is predominantly in a recreation management corridor with some portions being within the Durango Mountain Resort ski area. This management is compatible with the recreation and fisheries ORV.

The private land portion is not zoned by La Plata County, but is currently used as agricultural property.

Potential for conflict with existing and potential land uses

X				

Few conflicts — Many conflicts

Mineral Potential

There is favorable occurrence for minerals in Clear Creek and South Fork Hermosa Creek within the "Au-Ag-Te replacement veins and skarns" of the La Plata Mining District. There has been no production and no extensive exploration in the watersheds of these streams.

The lower portion of the mainstem of Hermosa Creek has areas favorable for sandstone uranium deposits. Above the area considered for WSR designation, there is potential for vanadium/uranium deposits. The Graysill mine was operated for uranium and vanadium from 1945 to 1967, but it is on a small stream not considered in the WSR inventory. There is no production in any location in the watershed of Hermosa Creek.

The oil and gas potential is low.

Potential for conflict with minerals

X				

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists three diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 1.5 cfs. One of those water rights, totaling 1.5 cfs, has since come under the ownership of the Colorado Water Trust. The trust is a non-profit organization that engages in and supports voluntary efforts to restore and protect stream flows in Colorado to sustain healthy aquatic ecosystems.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights on East Fork Hermosa of 4.54 cfs and 414 ac. ft
3. The SWSI report shows 19 conditional rights for wells and reservoirs in the corridor of East Fork Hermosa and three more in the surrounding watershed. The CWCB has also mapped one potential reservoir site, but it has not been verified for feasibility. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There is little if any riprap or other channel modification in the Hermosa or its tributaries

Potential for conflict with water resources development

	X			

Few conflicts — Many conflicts

Transportation and Facilities

There are 14.5 miles of the Hermosa Creek Trail, which is open to motorcycles within the river corridor of the mainstem. There are also connecting pieces of the trails up the tributaries, for a total of 19.1 miles of trail within the river corridor along the mainstem.

There is a 5.4-mile trail along Clear Creek, which is also open to motorcycles.

There are 5.0 miles of non-motorized trail in South Fork and 4.5 miles of non-motorized trail in Big Bend Creek.

Clear Creek has 0.7 mile of road maintained for passenger cars at its upper end, as well as 2.0 miles of closed logging roads.

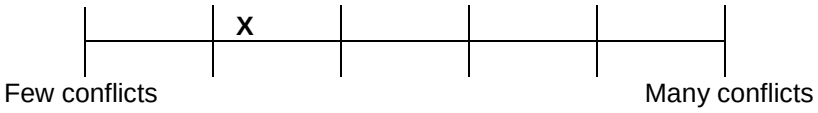
There are 1.3 miles of road maintained for passenger cars at the lower end of Hermosa Creek used to access the Lower Hermosa Campground/Trailhead. In the upper Hermosa there are 1.9 miles of road maintained for passenger cars, though access for cars is limited by a ford across Hermosa Creek, as well as 3 miles of road not maintained for passenger cars. The upper end of the Hermosa mainstem also has 1.3 miles of closed timber roads near Grassy Creek.

West Cross Creek has 0.5 mile of closed timber roads at its upper end.

In the East Fork Hermosa there are 6.1 miles of road maintained for passenger cars and 5.2 miles of road that are closed timber and ski area roads.

There are also a number of facilities within the river corridor. These include Sig Creek Campground, the Upper Hermosa Trailhead, and ski lift facilities for Durango Mountain Resort.

Potential for conflict with transportation and facilities



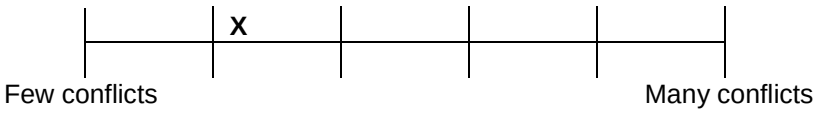
Recreation and Other Resource Activities

The Hermosa Creek Trail is utilized by five outfitters, primarily for hunting and mountain biking. It is one of the most popular mountain bike trails in southwest Colorado due to the trail paralleling the Hermosa Creek drainage for 23 miles. It has also become popular with horseback riders and OHV users. Hermosa Creek is also being utilized by extreme kayakers who put in at the Upper Hermosa Creek Trailhead located west of Durango Mountain Resort (Purgatory ski area). It is rated Class IV and V and recommended for expert kayakers only. It is also nationally significant for whitewater recreation. Its listing on American Whitewater's national river inventory, while not sufficient by itself to be an ORV, supports the above analysis.

There is also fishing in Hermosa Creek and East Fork Hermosa Creek. Durango Mountain Resort is used for skiing within the watershed. The East Fork and Upper Hermosa area is increasingly used by snowmobiles.

Other activities that occur in the area include livestock grazing and hunting, with minor timber harvest in the watershed of the East Fork.

Potential for conflict with recreation and other resources



Special Areas

Hermosa Creek has been named among the Outstanding Waters of the U.S.

Socioeconomic Environment

Most of the river segments are in La Plata County. According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part (34%) of the economic base in La Plata County is tourism and this is mostly resorts. The second highest segment of the economic base is funds coming in to retirees. The Hermosa Creek watershed is largely used for tourist activities, including hunting, fishing, and mountain biking.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Hermosa Creek is found to be suitable under the Preferred Alternative. Hermosa Creek presents perhaps the best opportunity for re-establishment and conservation of the Colorado River cutthroat trout within the SJNF and, possibly, across the current range of the species. The unique landforms, high quality of water, and relatively undisturbed river and associated uplands of Hermosa Creek all contribute to this ORV. In turn, these same factors contribute to the recreational aspects of the river corridor.

There are few conflicts with protection of the stream since much of the reach falls within a USFS roadless area and would be managed to maintain natural processes or natural landscapes with limited management. In recent years, CPW, in conjunction with the USFS, have completed several Colorado River cutthroat projects, some of which have involved modest structures within the stream channels. Such work performed in direct support of the fishery ORV would not be in conflict with the continued protection of the fishery ORV. There are few water rights within the drainage and they would not be greatly affected by protecting the ORVs. Alternative approaches to protecting the ORVs could include wilderness designation for portions of the drainage, additional instream flows for Hermosa Creek and the major tributaries, and continued management direction to benefit the ORVs. WSR designation, by itself or in conjunction with the other protection options, would provide greater emphasis on the stream and its function, and would likely be strongly supported by other agency partners in the conservation of the Colorado River cutthroat and the many users and nearby residents who value this river system. WSR designation is determined to be the best option for overall protection for Hermosa Creek and the identified tributaries due to few conflicts with other uses, the strong protection that would be provided the ORVs, and the opportunity to fully protect the free-flowing character of a relatively large stream system.

Essentially all comments on the Draft EIS specific to Hermosa Creek suitability were supportive of the findings in the draft.

The Hermosa Creek Workgroup was initiated in the spring of 2008 and resulted in a report published in June 2010. This effort was conducted outside the USFS's WSR review process but initiated, in part, in response to the findings presented in the Draft EIS. The workgroup and its report focused on potential management actions for the entire Hermosa Creek watershed and did not reach a final conclusion regarding WSR status. The workgroup instead postponed developing final positions on WSR status until Hermosa Creek could be looked at in a broader context along with the outcomes of other similar river protection workgroup processes in southwest Colorado—a process proposed to begin sometime during 2013.

At the completion of the Hermosa Creek Workgroup's discussions, some of the participants drafted legislative concepts to provide to the congressional delegation for possible legislative protections for the watershed. A bill was introduced on July 18, 2012, to designate 108,000 acres as the Hermosa Creek Watershed protection area, but no final action was taken prior to the end of that Congress.

The final report of the Hermosa Creek Workgroup would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Suitability Determination

Miles found suitable by classification are provided in Table D.40 and are illustrated on Figure D-3 Hemosa River and Tributaries.

Table D.40: Miles Found Suitable by Classification

Name	Wild	Scenic	Recreation	Total
Big Bend Creek	4.43	0	0	4.43
Big Lick Creek	0.76	0	0	0.76
Clear Creek	0	5.36	0	5.36
Corral Creek	1.65	0	0	1.65
Deer Creek	2.72	0	0	2.72
East Fork Hermosa Creek	0	0	6.70	6.70
Elk Creek	4.25	0	0	4.25
Hermosa Creek	0	28.08	0	28.08
South Fork Hermosa Creek	5.89	0	0	5.89
West Cross Creek	2.44	0	0	2.44
Hermosa Creek Totals	22.14	33.44	6.70	62.28

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wild and Scenic Rivers
Hermosa Creek and Tributaries
San Juan National Forest and Tres Rios Field Office
Figure D-3

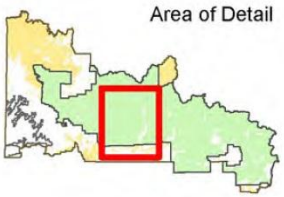
Legend

Suitable Wild & Scenic River Classification

- Recreation
- Scenic
- Wild
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 2.5 5 10 Miles

Area of Detail



The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs without notification.

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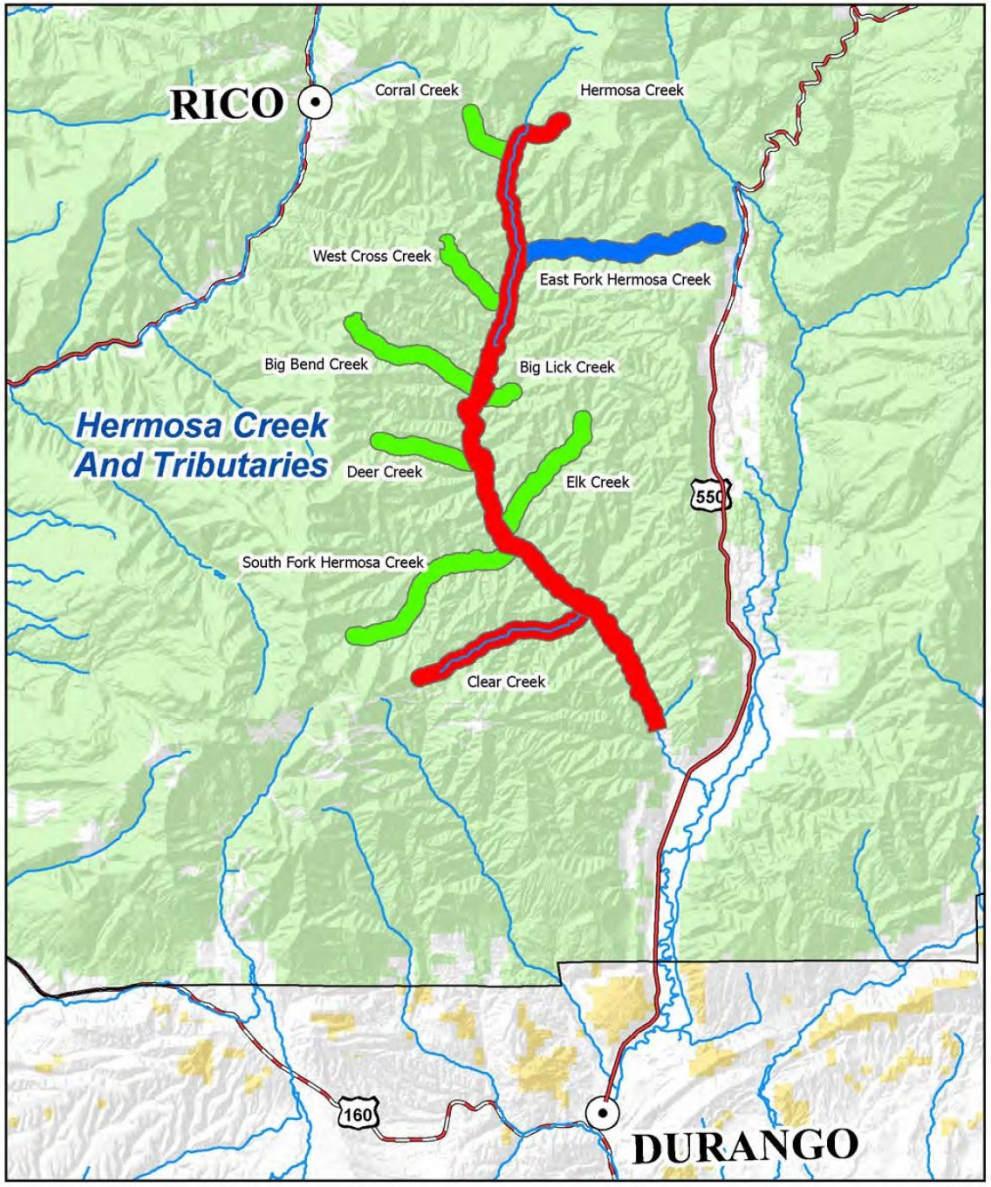
NAD 83, Polyconic Projection
May 30, 2013



Los Pinos River System

Eligible portions of the Los Pinos River and tributaries, and their classification, are as follows. Details for each segment are below (Table D.41).

Table D.41: Miles per Eligible Segments

	Wild	Scenic	Recreation	Total
Los Pinos, above Vallecito Reservoir	21.89	0.00	0.00	21.89
Lake Creek	8.05	0.00	0.00	8.05
Flint Creek	7.03	0.00	0.00	7.03
Sierra Vandera Creek	3.67	0.00	0.00	3.67
Snowslide Gulch	3.51	0.00	0.00	3.51
Rincon la Osa	5.69	0.00	0.00	5.69
Rincon la Vaca	4.33	0.00	0.00	4.33
Los Pinos Totals	54.17	0.00	0.00	54.17

Los Pinos River and Tributaries above Vallecito Reservoir

Location: The Los Pinos River was considered from its headwaters to the New Mexico border. The Los Pinos River was found eligible from its headwaters to the private land boundary. Eleven tributaries off Los Pinos River above Vallecito Reservoir were studied and six were found eligible. The total length of river studied above Vallecito Reservoir was 72.14 miles and the total found eligible was 54.17 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: All of these segments have a wild classification. This classification is based on the fact that all the segments are within the Weminuche wilderness area and can only be accessed by trail.

Land Ownership: Land ownership along the segments is entirely NFS lands. Table D.42 is a breakdown of the ownership along the river in miles.

Table D.42: Miles by Ownership

Name	NFS	Total	% NFS
Los Pinos, above Vallecito Reservoir	21.89	21.89	100.0%
Lake Creek	8.05	8.05	100.0%
Flint Creek	7.03	7.03	100.0%
Sierra Vandera Creek	3.67	3.67	100.0%
Snowslide Creek	3.51	3.51	100.0%
Rincon la Osa	5.69	5.69	100.0%
Rincon la Vaca	4.33	4.33	100.0%
Los Pinos	54.17	54.17	100.0%

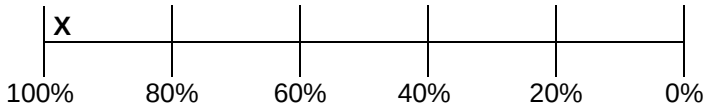
Table D.43 is a breakdown of the ownership within the river corridor in acres.

Table D.43 - Acres by Ownership

Name	NFS	Private	Total	% NFS
Los Pinos, above Vallecito Reservoir	5,987.62	4.42	5,992.04	99.9%
Lake Creek	2,564.95	0.00	2,564.95	100.0%
Flint Creek	2,236.60	0.00	2,236.60	100.0%
Sierra Vandera Creek	1,166.12	0.00	1,166.12	100.0%
Snowslide Creek	964.45	0.00	964.45	100.0%

Name	NFS	Private	Total	% NFS
Rincon la Osa	1,755.99	0.00	1,755.99	100.0%
Rincon la Vaca	1,379.80	0.00	1,379.80	100.0%
Los Pinos	16,055.53	4.42	16,059.95	100.0%

Amount of federally owned land within the river corridor



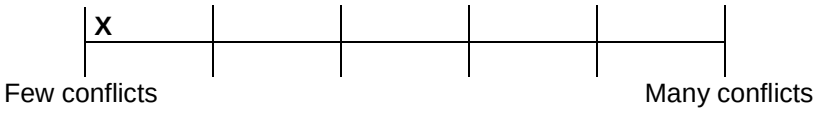
Outstandingly Remarkable Values

Scenery: The Los Pinos River and the tributaries were previously studied and recommended for WSR designation. The ORV determined in the 1979 study was scenery. Its inclusion in the Weminuche wilderness has maintained those values.

Existing and Potential Land Uses

These streams are all within the Weminuche wilderness.

Potential for conflict with existing and potential land uses

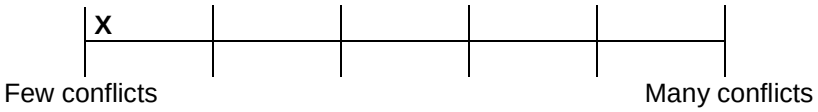


Mineral Potential

The geology is not favorable for locatable mineral deposits.

There is no oil and gas potential.

Potential for conflict with minerals



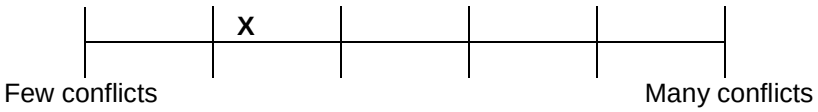
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists one diversions in the corridor of this stream. The Weminuche Pass Ditch has a decreed capacity of 40 cfs and transports water out of the basin
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There is little or no riprap on these streams, as they are in the wilderness.

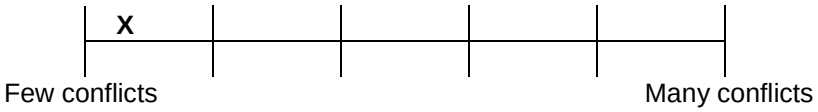
Potential for conflict with water resources development



Transportation and Facilities

The entire segment is located within the wilderness; therefore, there are no roads in this area. However, there are many trails along the mainstem and tributaries. There are 22.3 miles of trail in the river corridor along the mainstem, 8.8 miles in the Lake Creek corridor, 8.0 miles in the Flint Creek corridor, 4 miles in the Sierra Vandera Creek corridor, 3.2 miles in the Snowslide Canyon corridor, 4.3 miles in the Rincon la Osa corridor, and 3.2 miles in the Rincon La Vaca corridor.

Potential for conflict with transportation and facilities

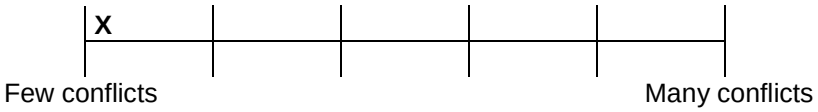


Recreation and Other Resource Activities

The main recreational use of this area is for hiking, fishing, backpacking, camping, horseback riding, and packing. The trail along the river is heavily used since it is one of the main access routes into the Weminuche wilderness.

Other activities that may occur in this area include grazing of horses and pack stock.

Potential for conflict with recreation and other resources



Special Areas

The entire length is within the Weminuche wilderness. This river was also previously recommended for WSR designation in legislation introduced in 1983.

Socioeconomic Environment

According to the Lake City and Hinsdale County Community Plan (Hinsdale County 2006), Hinsdale County encompasses 1,118 square miles. Hinsdale is one of the least populated counties in Colorado and the 15th lowest in the nation, with less than one person (0.7) per square mile—96% of its acreage is public land, 46% of which is wilderness. The majority of county residents live in Lake City or within a 15-mile radius. The county was built on mining, ranching, and recreation. Because of the transportation and access, much of the economic benefit from the use of this portion of the wilderness likely goes to La Plata County instead of Hinsdale County.

Current Administration and Funding Needs

Finding this stream suitable for Wild and Scenic would not dramatically change the use or management in this area; therefore the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The Los Pinos River and identified tributaries are found suitable under the Preferred Alternative. This river segment was previously found suitable and there have been essentially no changes to management or in the conflicts with protecting the scenery ORV since that finding. The eligible portion of the Los Pinos remains somewhat unique within Colorado as an extensive river drainage falling entirely within designated wilderness. Wilderness designation does provide substantial protections for the stream and

the scenery ORV. Designation as a WSR, however, is determined to be the best approach for ensuring the free-flowing character of the stream while complementing the protections of the ORV received through wilderness designation. WSR designation would preclude dam construction such as that previously proposed on Lake Creek and would ensure protection from additional trans-basin diversion of the stream's headwaters. Comments on the Draft EIS were generally supportive of the analysis presented in the draft. One comment questioned whether WSR suitability was needed within a designated national wilderness area. Although it is dependent on the ORVs and other issues related to particular stream segments, there is nothing inherently precluding overlapping wilderness and WSR designations.

The Vallecito Creek/Pine River Workgroup was initiated in June 2010 and resulted in a report published in October 2011. This effort was conducted outside the USFS's WSR review process but initiated, in part, in response to the findings presented in the Draft EIS. The final report of the workgroup was not completed prior to the close of the comment period for the Draft EIS and could not fully be addressed here. It does, however, include a number of findings and suggestions that could assist federal, state, and local governments, as well as private landowners, in future management of the river and surrounding watershed.

The final report of the Vallecito Creek/Upper Pine River Workgroup would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Suitability Determination

Miles found suitable by classification are provided in Table D.44 and are illustrated on Figure D-4 Los Pinos River and Tributaries.

Table D.44: Miles Found Suitable

	Wild	Scenic	Recreation	Total
Los Pinos, above Vallecito Reservoir	21.89	0	0	21.89
Lake Creek	8.05	0	0	8.05
Flint Creek	7.03	0	0	7.03
Sierra Vandera Creek	3.67	0	0	3.67
Snowslide Gulch	3.51	0	0	3.51
Rincon la Osa	5.69	0	0	5.69
Rincon la Vaca	4.33	0	0	4.33
Los Pinos Totals	54.17	0.00	0.00	54.17

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wild and Scenic Rivers
Los Pinos and Tributaries
San Juan National Forest and Tres Rios Field Office
Figure D-4

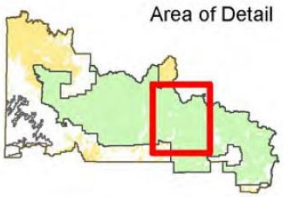
Legend

Suitable Wild & Scenic River Classificatio

- Wild
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 2.5 5 10 Miles

Area of Detail



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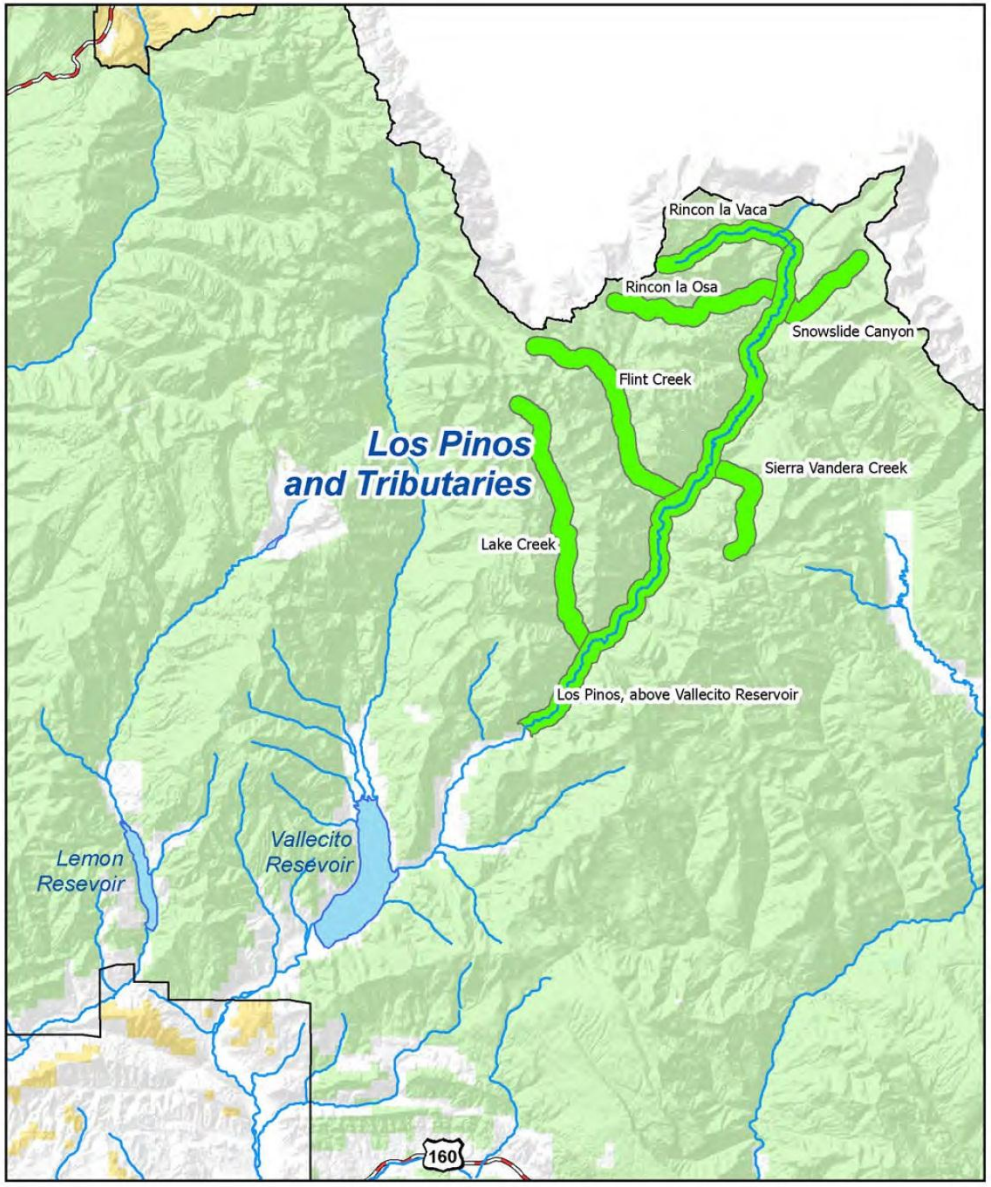
NAD 83, Polyconic Projection
May 30, 2013



Vallecito Creek

Vallecito Creek

Location: The stream was studied from its headwaters to Vallecito Reservoir, and the stream was found eligible from its headwaters to the boundary with private land. The total length of river studied was 22.15 miles and the segment found eligible was 16.59 miles (Table D.45). The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs above the private land north of Vallecito Reservoir.

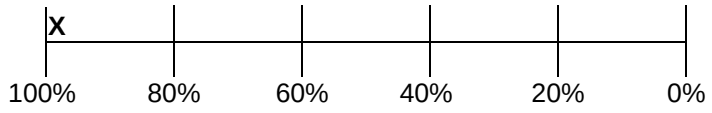
Table D.45: Miles per Eligible Segments

	Wild	Scenic	Recreation	Total
Vallecito Creek	16.59	0	0	16.59

Wild and Scenic Classification: This entire segment has a wild classification. This classification was chosen because the entire segment is within the Weminuche wilderness and can only be accessed by trail.

Land Ownership: The entire segment is within land owned by the SJNF. There are 5,242.74 acres of land within the river corridor.

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

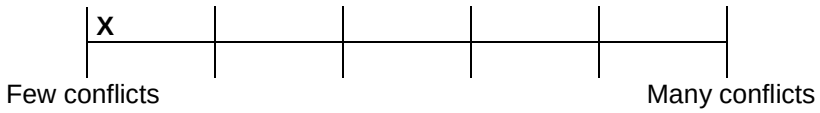
Recreation: Vallecito Creek is popular with extreme kayakers due to its difficulty (Class V+) and the sheer-walled granite canyon, which provides extremely narrow slots. It is recommended for expert kayakers only. It has crystal-clear water flowing through an incredible gorge with some of the highest-quality drops to be found. It is also nationally significant for whitewater recreation. Its listing on American Whitewater's national river inventory, while not sufficient by itself to be an ORV, supports the above analysis.

Scenery: The valley also provides outstanding views of the stream in the impressive granite canyon and the views of surrounding mountains.

Existing and potential land uses

This stream is within the Weminuche wilderness.

Potential for conflict with existing and potential land uses



Mineral Potential

Vallecito Creek is east of the epithermal vein deposits, polymetallic veins and skarns and granitic uranium of the Needle Mountains Mining District. There was exploration in a tributary of Vallecito Creek, but not near the stream corridor of Vallecito Creek. There is no production within the watershed.

There is no oil and gas potential.

Potential for conflict with minerals

X				

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists no diversions in the corridor of this stream.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There is little or no riprap on this stream, as it is in the wilderness.

Potential for conflict with water resources development

X				

Few conflicts — Many conflicts

Transportation and Facilities

The entire river segment is located within the wilderness, so there are no roads in this area; however, there are 17.6 miles of trail within the river corridor.

Potential for conflict with transportation and facilities

X				

Few conflicts — Many conflicts

Recreation and Other Resource Activities

Vallecito Creek is popular with extreme kayakers due to its difficulty and the sheer-walled granite canyon, which provides extremely narrow slots. This area is heavily used by hikers, backpackers, and horse packers as one of the main access routes into the Weminuche wilderness. Fishing, hunting, rock climbing, and camping occur in the river corridor.

There is limited grazing of recreational pack stock.

Potential for conflict with recreation and other resources

X				

Few conflicts — Many conflicts

Special Areas

This entire stream is within the Weminuche wilderness.

Socioeconomic Environment

According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in La Plata County is tourism (34%). This consists mainly of resorts. The second highest segment of the economic base is funds coming in to retirees. The Weminuche wilderness is a draw for tourists who use trails, including Vallecito Creek Trail, for access.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Vallecito Creek is not found to be suitable under the Preferred Alternative. Similar to the Los Pinos River, Vallecito Creek is a lengthy drainage entirely within a designated wilderness area. Vallecito Creek, however, was not previously studied or found suitable as was the Los Pinos River. Vallecito Creek contains the ORVs of scenery and recreation. These ORVs receive substantial protection under the existing wilderness designation. There are few conflicts with the protection of these values. WSR designation could provide greater emphasis on river values.

Comments received on the Draft EIS generally encouraged adding wild and scenic protections in addition to National Wilderness System status; however, some questioned whether whitewater boating should be considered an ORV. WSR designations and wilderness designations do not necessarily protect the same resources or uses. In the case of Vallecito Creek, it is determined that the existing wilderness designation would adequately protect the stream's identified ORVs. Given that the entire stream segment falls within designated wilderness and that there are no existing private water rights or diversions, it has been determined that suitability is not needed. Whitewater boating in itself does not always constitute an ORV, but Vallecito Creek stands out in providing an extreme challenge through a highly scenic drainage.

The Vallecito Creek/Upper Pine River Workgroup was initiated in June 2010 and resulted in a report published in October 2011. This effort was conducted outside the USFS's WSR review process but initiated, in part, in response to the findings presented in the Draft EIS. The final report of the workgroup was not completed prior to the close of the comment period for the Draft EIS and could not fully be addressed here. It does, however, include a number of findings and suggestions that could assist federal, state, and local governments, as well as private landowners, in future management of the river and surrounding watershed.

Suitability Determination

No miles were found suitable, as indicated in Table D.46.

Table D.46: Miles Found Suitable

	Wild	Scenic	Recreation	Total
Vallecito Creek	0	0	0	0

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Piedra River System

Eligible portions of the Piedra River and tributaries, and their classification, are as follows. Details for each segment are below (Table D.47).

Table D.47: Miles per Eligible Segments

	Wild	Scenic	Recreation	Total
Piedra River	14.08	0	16.25	30.33
East Fork Piedra River	9.37	0	7.16	16.53
Middle Fork Piedra River	11.75	0	7.03	18.78
Piedra River Totals	35.20	0	30.44	65.64

Piedra River

Location: The stream segment is from the confluence of East Fork Piedra and Middle Fork Piedra to the SJNF boundary, a length of 30.33 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: The segment has a number of different eligibility classifications (Table D.48).

Table D.48: Miles by Classification

Wild	Scenic	Recreation	Total
14.08	0	16.25	30.33

The areas of wild classification are upstream and downstream of the First Fork Trailhead within the first and second box canyons. These segments extend to the boundaries with private land. These two segments have no road access and are essentially primitive. There is a small portion between the two segments that is classified as recreation due to a road crossing the creek to reach a trailhead. The other recreation segments are upstream from the private boundary to the forks. There is a picnic area at the lower end of this segment and a road that parallels the river to the forks. The other recreation segment is downstream from the private land boundary to the SJNF boundary. This segment has many roads along it as well as a designated campground north of Highway 160.

Land Ownership: Land ownership is split between NS, private, and tribal land. Table D.49 is a breakdown of the miles of stream by ownership.

Table D.49: Miles by Ownership

NFS	Private	Tribal	Total	% NFS
19.41	8.03	2.89	30.33	64.0%

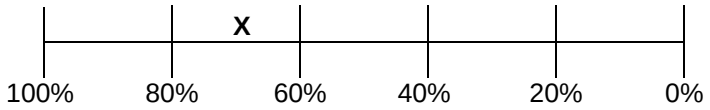
Table D.50 is a breakdown of the ownership within the river corridor in acres.

Table D.50: Acres by Ownership

NFS	Private	Tribal	Total	% NFS
6,574.56	2,117.09	676.70	9,368.35	70.2%

Much of the private land is in the portion of the corridor south of Highway 160. Some of the NFS land in that portion of the corridor does not touch the stream.

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

The Piedra River north of Highway 160 and the East and Middle Forks in the wilderness were previously studied and recommended for WSR designation. The ORVs determined in the 1979 study were scenery, recreation, and geology. Our current study confirms and amplifies those findings. We also studied the river south of Highway 160 and found archeological ORVs.

Recreation and Scenery: This was recommended because of the quality rafting and kayaking of Class IV and V waters through two box canyons. This river offers exceptionally beautiful and varied wild trout fishing for large fish combined with a long and interesting Class IV whitewater run. It is listed at Riversearch.com as one of the best rafting vacations in the world. Its listing on American Whitewater's national river inventory, while not sufficient by itself to be an ORV, supports the above analysis

The outstandingly remarkable scenery is an incredibly scenic narrow box canyon and areas of hot springs.

Geology: In the upper reaches, deep and dramatic canyons cut through a complex of Tertiary Oligocene pyroclastics (ash flows, tuffs, and lava flows) (Tev) emplaced during creation of the San Juan volcanic field, a time of possibly the most violent volcanic explosions (caldera eruptions) of the last 4 billion years, with abundant recent glacial and post-glacial erosional features. In the lower reach of the Piedra River, canyons cut through a series of Paleozoic and pre-Cambrian sedimentary, metasedimentary, and metavolcanic rocks and igneous intrusives (Pc, PPrm, Ml, Doe, Ci, pCe, pCus, pCi) emplaced between 200 million and 2 billion years ago, representing nearly half of the geologic history of the planet and covering the period when life evolved from the simplest sea life to the first colonization of land by complex plant and animal forms. In a relatively short distance, the river system flows through rock from the most recent to among the most ancient exposures in western North America.

Archeology: The sites along the east bank of the river south of Highway 160 relate to early Anasazi cultural adaptation and habitation along the river course during Late Pueblo I and Early Pueblo II times. In addition, the sites relate to Chimney Rock and the rare, unique, and exemplary astronomical knowledge of the Anasazi about the northern lunar standstill event. The sites near the river are thought to be dwellings and farming sites for the population that supported the ceremonies at the kiva sites near the Chimney Rock spires.

Existing and Potential Land Uses

This stream system crosses many of the USFS management themes. At the lowest end, the corridor is within a special management area focused on the cultural resources near Chimney Rock and some areas for natural landscapes with limited management. This is compatible with protection of the cultural resource ORV.

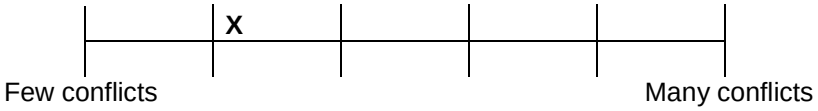
The next section upstream parallels the recreation corridor along County Road 622 and is mostly in the Piedra Area or adjacent areas to be managed for wild characteristics. This is compatible with the recreation and scenery ORVs. The Piedra Area was established by the 1993 Colorado Wilderness Act to preserve its wilderness character, but does not include the entire stream segment and lacks the implied water rights protection of areas designated as wilderness.

Approximately 1.2 miles of the stream channel, accounting for 270 acres of private land, are within Hinsdale County. According to the Lake City and Hinsdale County Community Plan (Hinsdale County 2005), this land is in the agricultural residential cluster, which allows one dwelling per 25 acres. Primary uses include agriculture and ranching, single-family dwellings, churches and places of worship, home

occupations, as well as normal and customary accessory uses, bed and breakfasts, outfitters and guides. Larger parcels may also be used for guest ranches and campgrounds.

The remaining private land along the stream corridor is in Archuleta County. According to the Archuleta County Community Plan (Archuleta County 2001), the existing use on this land is mostly agricultural. Along Highway 160 there are other uses, including general commercial, single-family, vacant land, and tribal. The land use code and Archuleta County Community Plan (2001) lists most of the private land in the river corridor as agricultural ranching with a base density of one dwelling per 35 acres. Land use in the agricultural ranching district is encouraged to provide for the maintenance of agricultural production and preservation of associated lifestyles, with new residential development encouraged to proceed through the rural land use preservation subdivision process. Commercial uses are generally limited to those associated with agricultural uses. Near the junction of the Piedra River with Highway 160 there is a small area classified as agricultural estate. This area has a base density of one dwelling per 5-acre lot to one dwelling per 35-acre lot. Residential development in the agricultural estate district is encouraged to be designed in a way that provides for the preservation and protection of irrigated croplands, rangelands, watershed, and wildlife habitats. Commercial uses are generally limited to home occupations and those associated with non-intensive agricultural operations. This type of development would not interfere with the recreational classification of the river.

Potential for conflict with existing and potential land uses

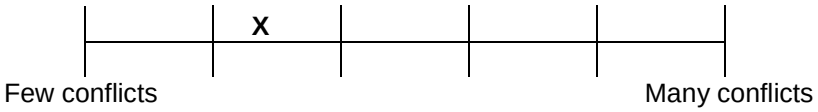


Mineral Potential

Upper portions in the wilderness are favorable for epithermal veins. The very upper portion of East Fork has potential for quartz-alunite gold deposits. There has been no development and there is no current production.

Oil and gas potential varies. The lowest portion of the Piedra River is within the Northern San Juan Basin coalbed methane production area (Ignacio-Blanco field), with high potential and current production. From a point approximately 5 miles north of Highway 160 to approximately the forks, there is no oil and gas potential. The Middle Fork and the East Fork then go through a zone of moderate potential and some high to moderate potential within the wilderness. There is no oil and gas production in these areas.

Potential for conflict with minerals



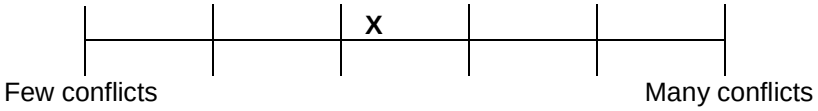
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 22 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 64.431 cfs. Much of this is in the portion south of Highway 160.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 7 cfs.
3. The SWSI report shows four conditional water rights on tributaries of this stream. The CWCB has also mapped a potential reservoir site on the stream and two sites on tributaries, but these have not been verified for feasibility. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

South of the Lower Piedra Campground to the end of the segment at the SJNF boundary, there is occasional riprap on the outside of bends to protect fields and gravel roads from erosion. There are minor amounts of riprap in the developed area around Piedra Campground near the forks. The rest of the section has little if any channel modification.

Potential for conflict with water resources development

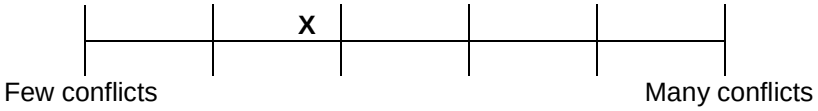


Transportation and Facilities

The Piedra River corridor has 16.8 miles of road concentrated in three areas: 2.5 miles near the forks and the Piedra Picnic ground, 8.0 miles near the First Fork Trailhead and immediately north of Highway 160 by the Lower Piedra Campground, and 3.3 miles south of Highway 160, all of which are maintained for passenger cars. Highway 160 is also located in the river corridor for 0.9 mile. The remaining 2.0 miles of road are portions of side roads not maintained for passenger cars.

In addition to the roads there are also 15.6 miles of trail, the Piedra picnic ground, the First Fork Trailhead, and the Lower Piedra Campground within the river corridor.

Potential for conflict with transportation and facilities

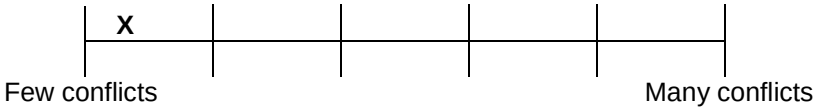


Recreation and Other Resource Activities

This area has rafting and kayaking of Class IV and V waters through two box canyons. This river also offers exceptionally beautiful and varied wild trout fishing for large fish, and the area is used for hunting, backpacking, horse riding/packing, showshoeing, and skiing.

Other activities that may occur in this area include agriculture and livestock grazing.

Potential for conflict with recreation and other resources



Special Areas

A small portion of the corridor is in the Chimney Rock Archeological Area. Much of the corridor is within the Piedra Area, which was established by the 1993 Colorado Wilderness Act to preserve its wilderness character, but lacks the implied water rights protection of areas designated as wilderness.

The portion of the river north of Highway 160 was also previously recommended for WSR designation.

Socioeconomic Environment

The main part of the segment is located in Archuleta County. According to the social and economic assessment completed for the LRMP and captured in sections 3.29, 3.30, and 3.31 of the FEIS, the major part of the economic base in Archuleta County is tourism (37%). This consists mainly of resorts. The second highest segment of the economic base is funds coming in to retirees.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The portion of the eligible segment of the Piedra River upstream of Highway 160 is determined to be suitable under the Preferred Alternative. This segment was found suitable in previous studies and this most recent review has found ORVs in addition to those leading to that earlier finding of suitable. Portions of the Piedra River receive some protection from the adjacent Piedra Area established in the 1993 Colorado Wilderness Act, but those protections do not extend to the entire segment and, for much of this stream segment, are limited to the western side of the Piedra drainage. There are several instream flows along this portion of the Piedra River, held by the Colorado Water Conservation Board. These flows provide some protection of the ORVs, but would not fully address the identified ORVs.

There are a number of private water rights held on the mainstem and forks of the Piedra River above this segment. Comments heard during the development of the Draft LRMP revision point out a concern for river protections interfering with the continued viability of agricultural in the middle reaches of the Piedra River. The concerns center on whether downstream restrictions that could result from a WSR designation by Congress could inhibit the use of water for agriculture and, thereby, have the unanticipated effect of accelerating the conversion of farms and ranches into housing subdivisions or other uses. Reviewers of the Draft EIS were encouraged to provide additional information to assist in exploring the potential for such unintended consequences should this segment be found suitable in the final analysis.

The portion of the Piedra downstream (south) of Highway 160 was determined not to be suitable. It has higher conflicts with private land and water uses. NFS land only occasionally touches the river. The cultural resources falling on NFS lands in this portion are now highlighted and protected by the Chimney Rock National Monument designation made in 2012.

Comments received on the Draft EIS included concerns that WSR suitability would attract too many visitors, which would result in additional resource impacts; that additional restrictions would be imposed on permitted outfitters; that the portion flowing through private lands on the lower end of the segment should be removed from consideration; that old growth ponderosa pines should be included as an ORV; and that the Piedra Area established through the Colorado Wilderness Act provides sufficient protection.

The Piedra River was first found suitable in 1979. It is not likely that a revised determination of suitability would greatly change patterns or levels of use. Designation, should Congress choose to do so, may increase notoriety and resulting use, but changing demographics and recreational interests are probably bigger factors in predicting use levels. Future management of the river, regardless of WSR designation, would require that attention be paid to excessive use levels.

No specific guidelines are identified in Forest Service Handbook 1909.12 Chapter 80 pertaining to restrictions on permitted outfitters, but the USFS is required to take actions within our authority to protect the identified ORVs. For the portion of the stream segment found suitable, those ORVs are recreation, scenery, and geology. Scenery and geology would not be protected through restrictions on outfitters. The recreation ORV highlighted whitewater boating and fishing, both of which can be enhanced by the services provided by outfitters.

The portion of the study segment below Highway 160 that contains a great percentage of private land has not been found suitable.

Old growth ponderosa pine along the Piedra River undoubtedly adds to the scenery component, but is not itself dependent on the presence of the river and has not been added as an ORV.

The Piedra Area provides for protection of the wilderness characteristics of 61,850 acres. Some of this area includes the Piedra River and would indeed provide certain protections for the identified ORVs. However, only a portion of the study segment falls within the Piedra Area, with much of the remainder falling adjacent to the designated Piedra Area.

WSR designation for portions of the Piedra River is determined to be the best form of protection of both the ORVs and the stream's free-flowing character. Past suitability study of the Piedra River reached the same conclusion and the review presented in the Draft EIS and here found additional ORVs to be considered. Existence of the Piedra Area designation under the Colorado Wilderness Act of 1993 does provide some protection from large dam construction, but does not fully protect the ORVs or the free-flowing character of the stream because portions of the river could still be subject to large-scale water diversions.

A community-based Piedra River Workgroup was formed in October 2011 to consider potential river protections and alternatives to WSR designation. At the time of writing this analysis, the Piedra River Workgroup has not yet finished its review nor published a report. When the workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

East Fork Piedra River

Location: The stream and associated corridor (0.25 mile on either side) was studied from the headwaters to its confluence with the Middle Fork Piedra River. The entire stream was found eligible. The total length of river studied and found eligible was 16.54 miles. Within the wilderness the East Fork was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Below the wilderness the stream is over-appropriated, causing lower flows.

Wild and Scenic Classification: The stream classification is split between wild and recreation (Table D.51). The upper section, within the wilderness, is classified as wild because it can only be accessed by trail. The lower portion is classified as recreation due to the roads along both sides of the stream making it readily accessible.

Table D.51: Miles by Classification

Wild	Scenic	Recreation	Total
9.37	0	7.16	16.53

Land Ownership: Land ownership is split between NFS and private land. Table D.52 is a breakdown of land ownership along this segment in river miles.

Table D.52: Miles by Ownership

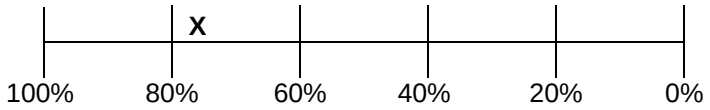
NFS	Private	Total	% NFS
12.25	4.29	16.54	74.1%

Table D.53 is a breakdown of the ownership within the river corridor in acres.

Table D.53: Acres by Ownership

NFS	Private	Total	% NFS
3,668.70	1,023.89	4,692.59	78.2%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

The East Fork was previously studied and recommended for WSR designation. The ORVs determined in the 1979 study were scenery, recreation, and geology. Inclusion of part of the river in the Weminuche wilderness and the management of the remainder in a 10D management area (WSR management) under the previous LRMP have maintained those values.

Fish: In addition, the current study also identified a fishery ORV. This stream is one of 12 sites within the SJNF that contain genetically pure strains of Colorado River cutthroat trout, and thus is an important producer of resident fish species and is of particular significance because of the presence of wild stocks. Colorado River cutthroat trout are a species of special concern because they are a sensitive native species and qualify as wild stocks and/or federal or state listed or candidate threatened, endangered, or sensitive species. The species is on the USFS sensitive species list and is considered by CPW as a species of special concern. Under the Conservation Agreement and Strategy for Colorado River Cutthroat Trout in the States of Colorado, Utah, and Wyoming(Tri-State Agreement), the State of Colorado has agreed to the goal of establishing two self-sustaining meta-populations, each consisting of five separate, viable but interconnected sub-populations, in each GMU within the historic range. The San Juan watershed is one of 14 GMUs in the Tri-State Agreement. The East Fork of the Piedra River was selected as one of our two best cutthroat fisheries in the San Juan watershed (along with the Hermosa) with pure genetics to accomplish this goal.

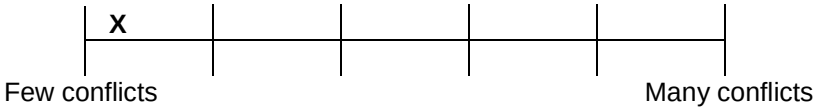
Scenery: The stream segment is also listed as eligible for scenery based on the impressive waterfalls along the stream.

Existing and Potential Land Uses

After a short portion near the forks that are in a recreation management corridor, the East Fork is in an area of natural landscapes with limited management, and then enters the Weminuche wilderness. This is compatible with the scenery and fisheries ORVs.

Approximately 2.4 miles of the stream channel, accounting for 733 acres of private land, are within Hinsdale County. According to the Lake City and Hinsdale County Community Plan (Hinsdale County 2005) this land is in the agricultural residential cluster, which allows one dwelling per 25 acres. Primary uses include agriculture and ranching, single-family dwellings, churches and places of worship, home occupations, as well as normal and customary accessory uses, bed and breakfasts, outfitters and guides. Larger parcels may also be used for guest ranches and campgrounds. These uses would not interfere with the recreational classification of the river. The remainder of the private land is within Mineral County, which does not have a land use plan.

Potential for conflict with existing and potential land uses

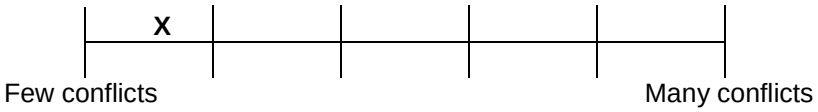


Mineral Potential

Upper portions in the wilderness are favorable for epithermal veins. The very upper portion of East Fork has potential for quartz-alunite gold deposits. There has been no development and there is no current production.

The East Fork is in a zone of oil and gas moderate potential and some high to moderate potential within the wilderness. There is no oil and gas production in these areas.

Potential for conflict with minerals



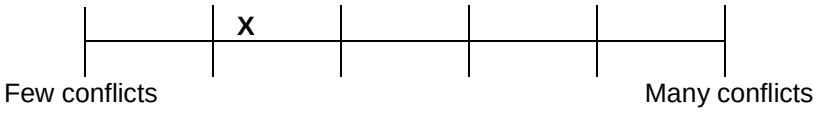
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists nine diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 50 cfs. Below the wilderness the stream is over-appropriated.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 50 cfs.
3. The SWSI report shows one conditional water right in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There may be minor sections of riprap associated with these diversions, and with road crossings and protection of fields on the outside of some bends on private land. There has been river restoration work with rocks and logs on the upstream-most private land. These do not detract from the free-flowing character of the river.

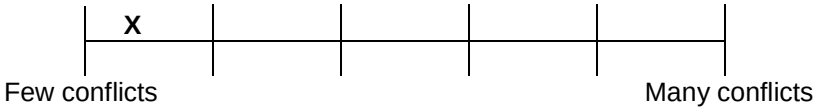
Potential for conflict with water resources development



Transportation and Facilities

The river corridor of the East Fork Piedra River has 3.0 miles of road, 2.2 of which are maintained for passenger cars. There are also 3.9 miles of trail.

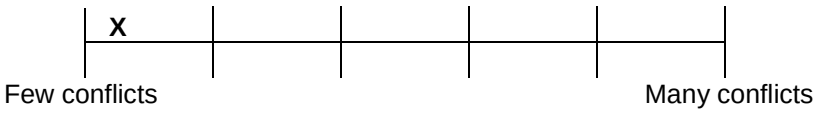
Potential for conflict with transportation and facilities



Recreation and Other Resource Activities

Recreation uses are predominantly hiking, camping, fishing, hunting, backpacking, horse riding/packing, and snowmobiling. There has been timber harvest in the area. Other activities in the area consist of agriculture, livestock grazing, and potential for mining and oil and gas production.

Potential for conflict with recreation and other resources



Special Areas

Most of the stream is within the Weminuche wilderness.

Socioeconomic Environment

The majority of the private land in the East Fork is in Hinsdale County. According to the Lake City and Hinsdale County Community Plan (2005), Hinsdale County encompasses 1,118 square miles. Hinsdale is one of the least-populated counties in Colorado and the 15th-lowest in the nation, with less than one person (0.7) per square mile—96% of its acreage is public land, 46% of which is wilderness. The majority of county residents live in Lake City or within a 15-mile radius. The county was built on mining, ranching, and recreation.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The portion of the East Fork River upstream of the Weminuche wilderness boundary is found suitable under the Preferred Alternative. This stream segment was included in earlier findings of suitability for the ORVs of scenery, recreation, and geology. Those ORVs remain intact. This updated review finds that an additional ORV of outstanding Colorado River Cutthroat trout fishery exists. While there are a number of streams in southwest Colorado containing pure strains of the Colorado River cutthroat trout, the East Fork of the Piedra River and Hermosa Creek, found suitable under the discussion above, have been found to be the best native trout fisheries and are very important to the long-term conservation of the species in this part of the trout's range. Wilderness designation does provide a great deal of protection for this stream segment, particularly for the scenery, recreation, and geology aspects, but WSR designation could provide additional protections of the stream's free-flowing character and would add focus to maintaining the Colorado River cutthroat fishery.

The segment found suitable is limited to the East Fork of the Piedra River upstream of the Weminuche wilderness boundary due to private ownership downstream of this boundary and the intense agricultural use of water—and substantial seasonal dewatering of the stream—between the wilderness boundary and the downstream confluence with the Middle Fork of the Piedra.

Comments on the Draft EIS specific to the East Fork of the Piedra River expressed concerns with attracting more visitors. Please see the response provided for the mainstem of the Piedra presented above.

A community-based Piedra River Workgroup was formed in October 2011 to consider potential river protections and alternatives to WSR designation. At the time of writing this analysis, the workgroup has not yet finished its review nor published a report. When the workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Middle Fork Piedra River

Location: The stream was studied from its headwaters to its confluence with the East Fork Piedra River. The entire stream was found eligible. The total length of river studied and found eligible was 18.75 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: The stream classification is split between wild and recreation (Table D.54). The upper section, within the wilderness, is classified as wild because it can only be accessed by trail. The lower portion is classified as recreation due to the NFS road along the stream making it readily accessible.

Table D.54: Miles by Classification

Wild	Scenic	Recreation	Total
11.75	0	7.03	18.77

Land Ownership: Land ownership is split between NFS and private land. Table D.55 is a breakdown of land ownership along this segment in river miles.

Table D.55: Miles by Ownership

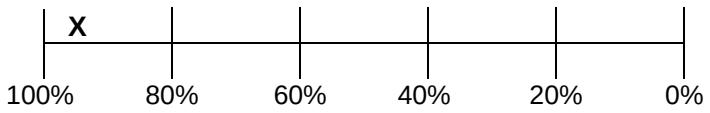
NFS	Private	Total	% NFS
17.93	0.84	18.77	95.5%

Table D.56 is a breakdown of the ownership within the river corridor in acres.

Table D.56: Acres by Ownership

NFS	Private	Total	% NFS
5,218.70	235.22	5,453.92	95.7%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

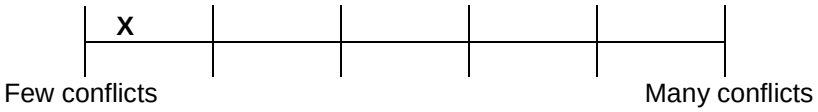
The Middle Fork was previously studied and recommended for WSR designation. The ORVs determined in the 1979 study were scenery, recreation, and geology. Inclusion of part of the river in the Weminuche wilderness, and the management of the remainder in a 10D management area (WSR management) in the previous LRMP has maintained those values.

Existing and Potential Land Uses

After a short portion near the forks managed as a recreation corridor, the Middle Fork of the Piedra River is in an area of natural landscapes with limited management. Then it enters the Weminuche wilderness. This is compatible with the scenery, geology, and recreation ORVs.

The small amount of private land is within Hinsdale County. According to the Lake City and Hinsdale County Community Plan (2005), this land is in the agricultural residential cluster, which allows one dwelling per 25 acres. Primary uses include agriculture and ranching, single-family dwellings, churches and places of worship, home occupations, as well as normal and customary accessory uses, bed and breakfasts, outfitters and guides. Larger parcels may also be used for guest ranches and campgrounds. These uses would not interfere with the recreational classification of the river.

Potential for conflict with existing and potential land uses



Mineral Potential

Upper portions in the wilderness are favorable for epithermal veins. The very upper portion of East Fork has potential for quartz-alunite gold deposits. There has been no development and there is no current production.

Oil and gas potential varies. The Middle Fork goes through a zone of moderate potential and some high to moderate potential within the wilderness. There is no oil and gas production in these areas.

Potential for conflict with minerals

X				

Few conflicts — Many conflicts

Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists five diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 20.75 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows no conditional water rights.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There may be minor sections of riprap associates with diversions, and with road crossings, but these do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

X				

Few conflicts — Many conflicts

Transportation and Facilities

There are 5.1 miles of road that are maintained for passenger cars and 5.2 miles of road that are not maintained for passenger cars, as well as 5.0 miles of trail within the river corridor. The Middle Fork Trailhead and a recreation residence are in the corridor.

On the private lands, there could be additional development of agriculture, including irrigation structures, grazing, and roads.

Potential for conflict with transportation and facilities

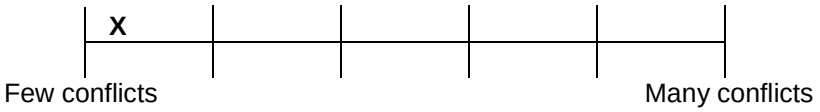
X				

Few conflicts — Many conflicts

Recreation and Other Resource Activities

Recreation uses are predominantly camping, fishing, hunting, backpacking, horse riding/packing, snowmobiling, and skiing. Other activities in the area consist of agriculture, livestock grazing, timber harvest, and potential for mining and oil and gas production.

Potential for conflict with recreation and other resources



Special Areas

Most of the stream is within the Weminuche wilderness. This river was also previously recommended for WSR designation.

Socioeconomic Environment

According to the Lake City and Hinsdale County Community Plan (2005), Hinsdale County encompasses 1,118 square miles. Hinsdale is one of the least populated counties in Colorado and the 15th-lowest in the nation, with less than one person (0.7) per square mile—96% of its acreage is public land, 46% of which is wilderness. The majority of county residents live in Lake City or within a 15-mile radius. The county was built on mining, ranching, and recreation.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The Middle Fork of the Piedra River is found suitable for inclusion in the National Wild and Scenic Rivers System under the Preferred Alternative. This reach of river was also found suitable in previous studies in recognition of the scenery, recreation, and geology ORVs. These ORVs remain. The segment found suitable extends from the boundary of NFS lands upstream of the confluence with the East Fork, to the headwaters of the river, and includes area both inside and outside the Weminuche wilderness. While the Middle Fork does not contain the ORV of Colorado River cutthroat trout (unlike the East Fork of the Piedra), the ORVs of scenery, recreation, and geology do not receive the protections of designated wilderness along a sizeable portion of the stream reach. WSR protections, therefore, would add a significant level of protection for the ORVs and the free-flowing character of the stream.

Comments received on the Draft EIS specific to the Middle Fork of the Piedra River expressed concerns with attracting additional visitors, restrictions placed on livestock grazing permits, hindering releases for instream flows to benefit habitat, and impacts on agricultural water users. Please see the discussion for the mainstem of the Piedra for responses to increased visitation.

For segments classified as wild, Forest Service Handbook 1909.12 Chapter 80 states: “Domestic livestock grazing should be managed to protect identified river values. Existing structures may be maintained. New facilities may be developed to facilitate livestock management so long as they maintain the values for which a river was found eligible or suitable, including the area’s essentially primitive character.” For segments classified as recreational, the guidance states: “Domestic livestock grazing should be managed to protect identified river values. Existing structures may be maintained. New facilities may be developed to facilitate livestock management so long as they maintain the values for which a river was found eligible or suitable.”

There are no known conflicts between WSR suitability and the ability to provide for instream flows to support habitat. If designated, there would be a federal reserved right junior to existing rights. This federal reserved right itself would be to protect the ORVs, which include fishing; this right should be consistent with purpose of maintaining habitat. Agricultural water uses downstream of a federal reserved water right should benefit by protected flows. The analysis presented here, and the accompanying FEIS,

acknowledge the concern for interactions between federal reserved rights and senior water rights when changes to those senior rights are proposed.

A community-based Piedra River Workgroup was formed in October 2011 to consider potential river protections and alternatives to WSR designation. At the time of writing this analysis, the workgroup has not yet finished its review nor published a report. When the Piedra River Workgroup publishes a summary report, it would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Suitability Determination

Miles found suitable by classification are provided in Table D.57 and are illustrated on Figure D-5 Piedra River and Tributaries.

Table D.57: Miles Found Suitable

	Wild	Scenic	Recreation	Total
East Fork Piedra River-North of wilderness boundary	9.4	0	0	9.4
Middle Fork Piedra River	11.7	0	7.6	19.3
Piedra River-North of Highway 160 to forks	14.1	0	8	22.1
Piedra River Totals	35.2	0	15.6	50.8
* Segments adjusted to exclude roads from wild segments.				

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wild and Scenic Rivers
Piedra River and Tributaries
San Juan National Forest and Tres Rios Field Office
Figure D-5

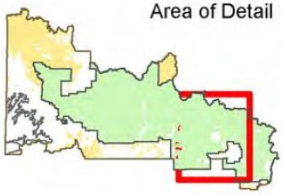
Legend

Suitable Wild & Scenic River Classification

- Recreation
- Wild
- San Juan National Forest
- Chimney Rock Natio
- Tres Rios Field Offic
- State & Federal High
- Bureau of Land Man
- National Forest

0 2.5 5 10 Miles

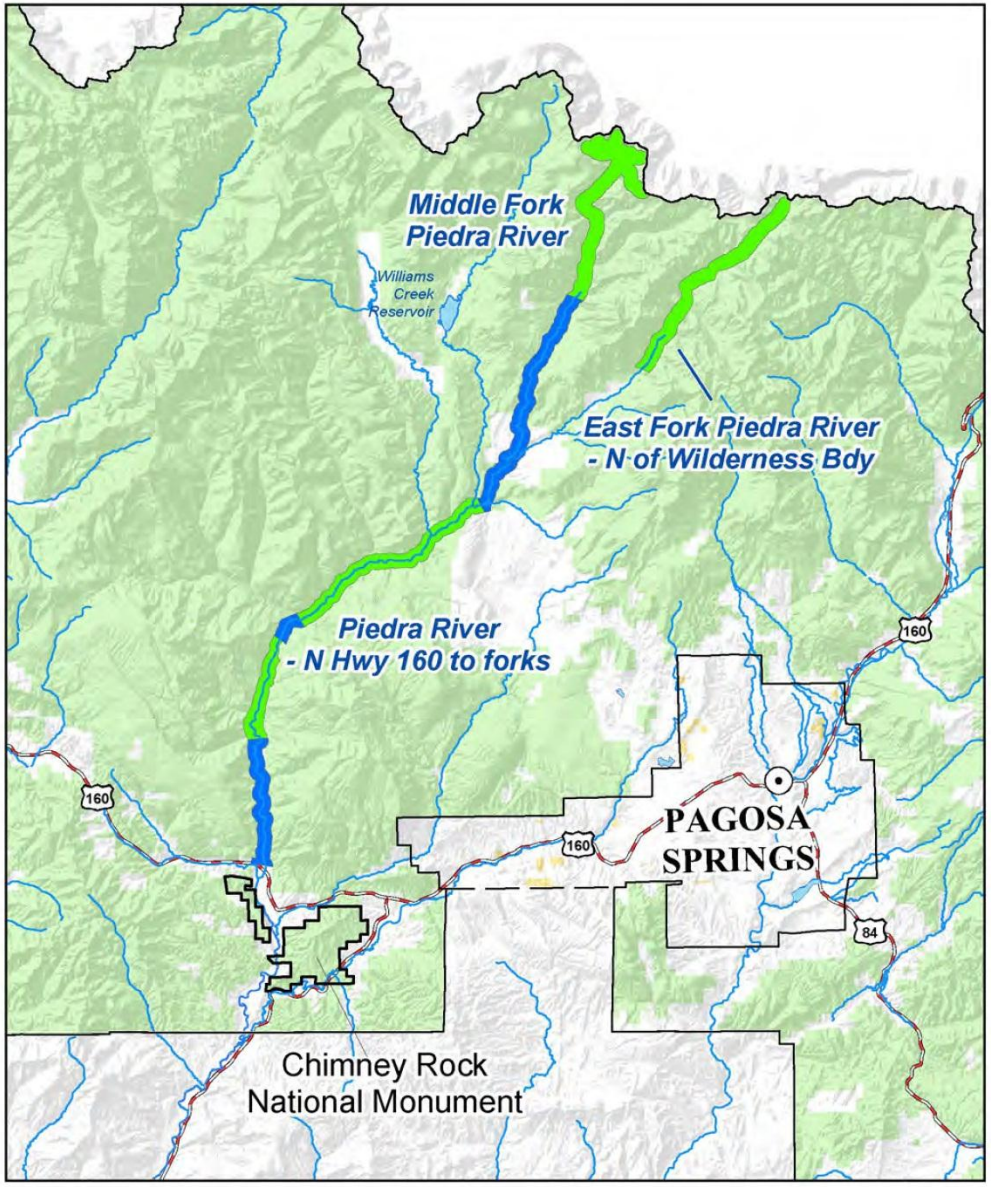
Area of Detail



The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs without notification.

N

MDR
NAD 83, Polyconic Projection
May 30, 2013



San Juan River System

Eligible portions of the San Juan River and tributaries, and their classification, are as follows. Details for each segment are below (Table D.58).

Table D.58: Miles per Eligible Segments

	Wild	Scenic	Recreation	Total
West Fork of the San Juan River	8.60	0	8.70	17.30
Wolf Creek and Falls Creek	0	0	7.75	7.75
East Fork of the San Juan River	0	0	13.12	13.12
San Juan Totals	8.60	0	29.57	38.17

West Fork of the San Juan River

Location: The stream was studied from its headwaters to its confluence with the East Fork of the San Juan River, where they combine to form the San Juan River. The entire stream was found eligible. The total length of river studied and found eligible was 17.29 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This segment is split between a wild and a recreation classification (Table D.59). The breakdown of the number of miles in each category can be seen in the following table. The upper portion of the stream is classified as wild because it is located in the Weminuche wilderness and can only be accessed by trail. The lower section of the stream is classified as recreation due to the presence of a road along most of this segment and a designated campground along the stream.

Table D.59: Miles by Classification

Wild	Scenic	Recreation	Total
8.60	0.00	8.70	17.30

Land Ownership: Land ownership is split between National Forest and private land. Table D.60 is a breakdown of land ownership along this segment in river miles.

Table D.60: Miles by Ownership

NFS	Private	Total	% NFS
10.67	6.62	17.29	61.7%

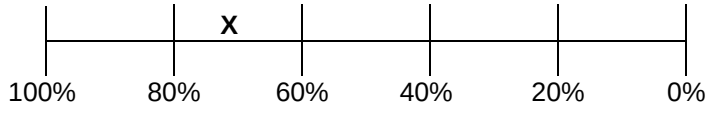
Table D.61 is a breakdown of the ownership within the river corridor in acres.

Table D.61: Acres by Ownership

NFS	Private	Total	% NFS
3,440.99	1,784.74	5,225.73	65.8%

The private lands are concentrated in the lower 4 miles of the corridor. In this portion, the NFS lands are small slivers that do not touch the stream

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

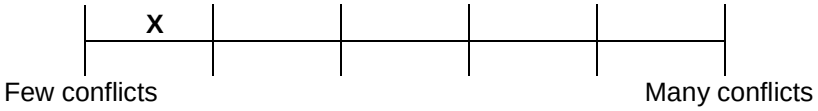
Geology: The West Fork of the San Juan River has geological significance. The river has carved through a complex of Tertiary Oligocene pyroclastics (ash flows, tuffs and lava flows) emplaced during the creation of the San Juan volcanic field, a time of possibly the most violent volcanic explosions (caldera eruptions) of the last 4 billion years. Erosion by the river has left on the valley side walls exposures of massive layers of pyroclastics and volcaniclastics that are “textbook” cross sections of the distal zones of the San Juan volcanic field in Colorado. Also in the river valley, the post-glacial failure of support in the volcanic cliff walls has generated massive ongoing landslides, classic examples of slope failure, gravity slumping, and colluvial movement, hosting outstanding groves of aspen that thrive on such disturbed ground. Recreational driving and hiking benefit from the colorful exposures of volcanic ash, which rival those of Yellowstone National Park’s Little Grand Canyon.

Existing and potential land uses

The West Fork of the San Juan River is mostly within the Weminuche wilderness. The lower portion is within a recreation management area. This is compatible with the geologic ORV.

Approximately 1.9 miles of the stream channel, accounting for 450 acres of private land, are within Archuleta County. According to the Archuleta County Community Plan (Archuleta County 2001), the existing use on this land is agricultural and the future land use code lists the area as very low-density residential. The base density in this area is 35 acres per dwelling. This type of development would not interfere with the recreational classification of the river. The remainder of the private land is within Mineral County, which does not have a land use plan.

Potential for conflict with existing and potential land uses

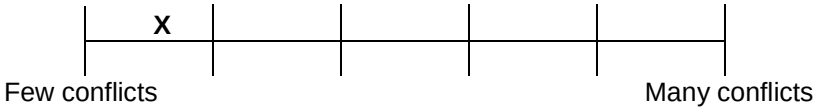


Mineral Potential

The upper portion in the wilderness is favorable for epithermal veins of locatable minerals. There has been no development and there is no current production.

The river flows through an area of high to moderate oil and gas potential. There is no current production in this area.

Potential for conflict with minerals



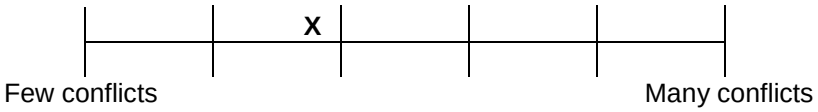
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 29 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 127.355 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 103.15 cfs and 35,797 acre-feet. One of the reservoir sites could inundate NFS lands. Most of the other water rights are on private land in the lower 4 miles of the corridor, where NFS lands seldom touch the river
3. The SWSI report shows one conditional water right in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There may be minor sections of riprap associated with these diversions, and with road crossings and protection of fields on the outside of some bends on private land, but these do not detract from the free-flowing character of the river.

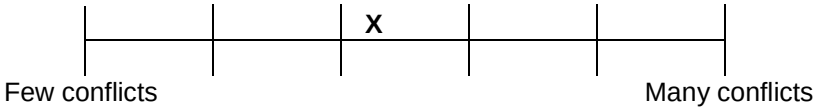
Potential for conflict with water resources development



Transportation and Facilities

Highway 160 is within the river corridor for 3 miles. There are an additional 2.9 miles of road maintained for passenger cars and 1.1 miles of road not maintained for passenger cars within the river corridor. There are also 11.1 miles of trail. The West Fork Campground and three recreation residences are in the river corridor.

Potential for conflict with transportation and facilities

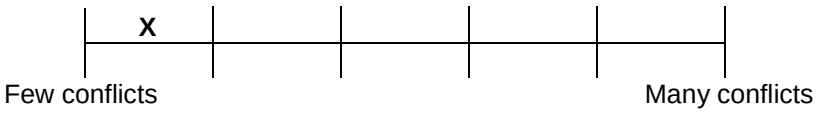


Recreation and Other Resource Activities

There is one developed campground in the area. Hiking, camping, backpacking, horse riding/packing, skiing, and using hot springs are popular.

Other activities that may occur include agriculture, mining, and livestock grazing.

Potential for conflict with recreation and other resources



Special Areas

The upper portion of the stream is within the Weminuche wilderness.

Socioeconomic Environment

An economic study was not conducted for Mineral County, so statistics comparable to those quoted for other counties are not readily available.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The portion of the West Fork of the San Juan River upstream of where the river enters a large continuous block of private lands, immediately downstream of the USFS West Fork Campground, is found suitable

for designation under the WSRA in the Preferred Alternative. The determination of suitability is based on the ORV of geology, which in turn lends to the scenic and recreational value of the area. The geology of the West Fork of the San Juan corridor stands out because of the way in which it displays the variety of formative influences resulting in the San Juan Mountain range. WSR designation is determined to be the best form of protection of the ORV and free-flowing character of this stream segment.

This determination of suitability differs from the preliminary finding presented in the Draft EIS by removing the private land segment downstream of NFS lands. This would result in the inclusion of slightly more than 0.5 mile of suitable river crossing private lands near Born Lake, removing about 6.0 miles from the river mileage determined to be suitable. The downstream terminus of the suitable reach is now the boundary of NFS lands immediately downstream of the USFS West Fork Campground. This change was made in response to comments on the Draft EIS that raised concerns regarding potential impacts to private lands and rights. The Draft EIS noted the potential conflicts with private lands and expressly asked for comments on this issue. Comments were received on this topic citing concerns for impacts to private rights and that much of the private land is already protected through conservation easements. As a result, most of the private portion of the studied segment has been removed from the suitability determination. The result of this adjustment is that some of the diversity of the identified geology ORV would not be protected, but public comments on the Draft EIS highlighted that existing conservation easements on much of the private land on the lower portion of the study reach was already protected from major changes in land use through existing conservation easements, affording substantial protection to the ORV.

The San Juan River Workgroup was initiated in February 2010 and resulted in a report published in July 2011. This effort was conducted outside the USFS's WSR review process but initiated, in part, in response to the findings presented in the Draft EIS. The workgroup and its report focused on potential management actions for both the West Fork and East Fork of the San Juan River. The final report of the workgroup was not completed prior to the close of the comment period for the Draft EIS and could not be fully addressed here. It does, however, include a number of findings and suggestions that could assist federal, state, and local governments, as well as private landowners, in future management of the river and surrounding watershed.

The final report of the San Juan River Workgroup would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wolf Creek and Falls Creek

Location: This is a branched segment that includes Wolf Creek from approximately 2 miles below Wolf Creek Pass to the confluence with the West Fork of the San Juan River, plus small portions of Falls Creek and Lake Creek to encompass the waterfalls. The entire segment was found eligible. The total length of river studied and found eligible was 7.75 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: This entire stream segment is a recreational classification. This classification is based on the fact that Highway 160 follows the stream for the length of the segment. There is also a designated campground near the lower end of the segment.

Land Ownership: Land ownership is split between NFS and private land. Table D.62 is a breakdown of land ownership along this segment in river miles.

Table D.62: Miles by Ownership

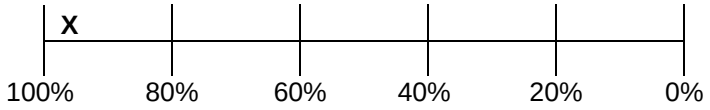
NFS	Private	Total	% NFS
7.21	0.55	7.76	92.9%

Table D.63 is a breakdown of the ownership within the river corridor in acres.

Table D.63: Acres by Ownership

NFS	Private	Total	% NFS
2,231.44	137.87	2,369.31	94.2%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

Wildlife: Wolf Creek and Falls Creek contain five waterfalls occupied by black swifts, a bird that is vulnerable in Colorado. The black swift worldwide breeding distribution is limited to a narrow portion of the Rocky Mountains from Mexico to British Columbia, and a narrow band along sea cliffs overlooking the Pacific coast from California to Alaska. The black swift builds nests only at waterfalls. The nests are made of moss and require mist from the waterfall to remain intact. The SJNF provides a significant contribution to the species' worldwide breeding distribution by providing a core breeding population and by providing critical connectivity within the southern Rocky Mountains portion of its range. Of the 10 streams studied on the SJNF that have black swift nest sites, three were chosen as outstandingly remarkable because they contained the best clusters of nests.

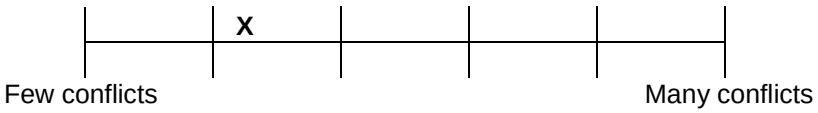
Scenery: Treasure Falls is also located in the segment on Falls Creek. This waterfall is just off Highway 160 and is one of the easiest waterfalls to visit within the planning area. Due to its proximity to the highway it is visited by people from all over the world.

Existing and Potential Land Uses

These streams are mostly within the recreation management corridor along Highway 160. The small portion that is outside is a management where natural processes dominate. This is compatible with the wildlife and scenery ORVs.

There is a small amount of private land in Mineral County, and a land use plan is not available

Potential for conflict with existing and potential land uses

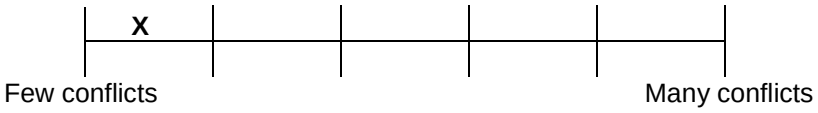


Mineral Potential

There is no production or potential for locatable minerals.

The river flows through an area of high to moderate oil and gas potential. There is no current production in this area.

Potential for conflict with minerals



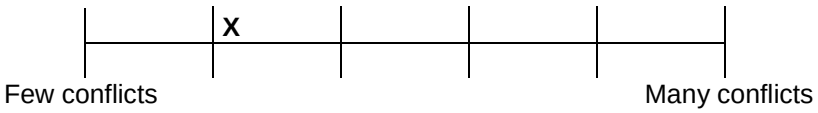
Water Resources Development

Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists four diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 2.68 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 3.07 cfs.
3. The SWSI report shows no conditional water rights in this stream. None of the future projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river.

There may be minor sections of riprap associated with road crossings and protection of Treasure Falls parking lot, but these do not detract from the free-flowing character of the river.

Potential for conflict with water resources development

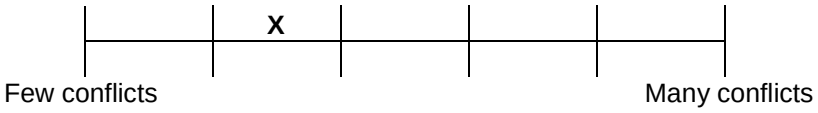


Transportation and Facilities

There are11.8 miles of road within the river corridor. Highway 160, a paved three-lane highway, contributes 6.4 miles, most of which are on the valley side slope and not immediately adjacent to the stream; 2.6 miles are gravel roads and the remaining 3.8 miles are dirt roads not suitable to passenger cars.

Treasure Falls has a 0.2-mile hiking trail and a roadside rest area. The Wolf Creek Campground is also within the river corridor but has been closed.

Potential for conflict with transportation and facilities

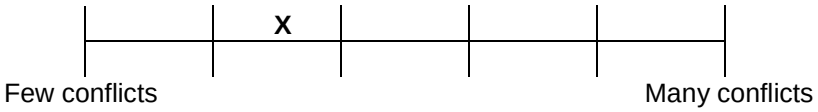


Recreation and Other Resource Activities

The recreational activities in this area include camping, hiking, hunting, backpacking, horse riding/packing, skiing, snowmobiling, ice climbing, and scenic driving along Highway 160. Wolf Creek ski area is just over the Continental Divide.

Other activities that may occur in the area include livestock grazing and oil and gas development.

Potential for conflict with recreation and other resources



Special Areas

There is a small portion of Lake Creek within the Weminuche wilderness.

Socioeconomic Environment

An economic study was not conducted for Mineral County, so statistics comparable to those quoted for other counties are not readily available.

Wolf Creek ski area is a major economic draw for the communities of Pagosa Springs and South Fork.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

Wolf Creek and Fall Creek are not found suitable under the Preferred Alternative. Two ORVs, wildlife and scenery, were identified in the development of this LRMP. The wildlife ORV pertains to the existence of black swift nests. Elsewhere in the unit under this plan, streams containing black swift nests have been found suitable. The quality of black swift nesting habitat along Wolf Creek and Fall Creek justifies protection, but adequate protection can be achieved under the recreation management corridor identified under the Preferred Alternative and through other means such as securing sufficient flows to protect the waterfalls and swift nesting sites under the Colorado instream flow program. Likewise, the scenery ORV can readily be protected through the recreation management corridor proposed under the Preferred Alternative.

Comments received on Wolf Creek and Falls Creek opposed designation due to concerns for private property rights, potential increased use of the area, the desire to preserve potential reservoir sites, and questions regarding water quality on portions of the segment.

East Fork of the San Juan River

Location: The stream and associated corridor (0.25 mile on either side) was studied from where it became a third-order stream to its confluence with the West Fork of the San Juan River, where they combine to form the San Juan River. The entire stream was found eligible. The total length of river studied and found eligible was 13.12 miles. The segment was determined to be sufficiently free-flowing and to possess sufficient water quality to support the ORVs.

Wild and Scenic Classification: The entire stream has a recreation classification. There are roads that closely follow the entire length of the stream making it readily accessible.

Land Ownership: Land ownership is split between NFS and private land. Table D.64 is a breakdown of land ownership along this segment in river miles.

Table D.64: Miles by Ownership

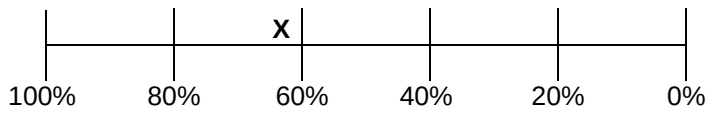
NFS	Private	Total	% NFS
7.28	5.84	13.12	55.5%

Table D.65 is a breakdown of the ownership within the river corridor in acres.

Table D.65: Acres by Ownership

NFS	Private	Total	% NFS
2,412.77	1,376.68	3,789.45	63.7%

Amount of federally owned land within the river corridor



Outstandingly Remarkable Values

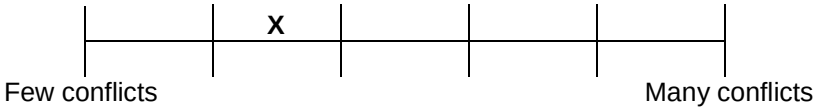
Geology: This stream is a “textbook” example in the San Juan Mountains of a multiple advance-and-retreat alpine glacial-fluvial system in a setting of recent volcanic geology, ranging from sculpted headwaters through glaciated valley to narrow outwash canyons. There are abundant post-glacial features, including braided stream system, terminal and lateral moraines, the dramatic “gateway” entrance to the glacial valley, hanging valleys, and waterfalls. The entire reach of the river is a document of the most recent planetary glacial age, which may not yet be over, through geologic terrain that was fresh when the glaciation began and has been little altered since it ended, a valuable “classroom” for study of a phenomenon of planetary importance that is poorly understood today. The valley’s dramatic glaciated and floodwater-carved landscapes have attracted recreational use and development proposals since the settlement of this part of the state.

Existing and Potential Land Uses

This stream is mostly within a recreation management corridor. The upper one-third that is on NFS land would be managed for natural landscape with limited management. This is compatible with the geologic ORV.

Approximately 0.5 mile of the stream channel, accounting for 204 acres of private land, is within Archuleta County. According to the Archuleta County Community Plan (Archuleta County 2001) the existing use on this land is agricultural; the future land use code lists the area as very low-density residential. The base density in this area is 35 acres per dwelling. This type of development would not interfere with the recreational classification of the river. The remainder of the private land is within Mineral County, which does not have a land use plan.

Potential for conflict with existing and potential land uses

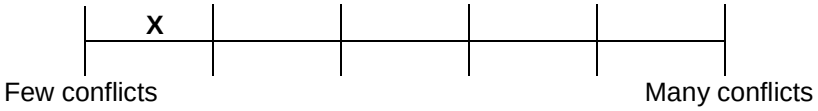


Mineral Potential

Upper terminus is close to an area favorable for stockwork molybdenum and porphyry-copper molybdenum, and the upper portion is in an area favorable for epithermal veins. There had been historic exploration, but there is no current production.

The river flows through an area of high to moderate oil and gas potential. There is no current production in this area.

Potential for conflict with minerals



Water Resources Development

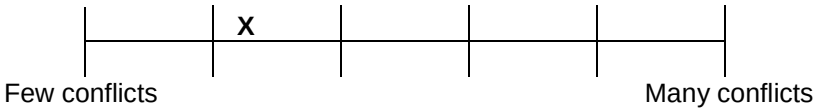
Three sources were used to describe existing and possible future water resources development:

1. The State of Colorado Water Rights Database (HydroBase) lists 10 diversions in the corridor of this stream. For those with decreed capacity listed, the total diversion is 15.313 cfs.
2. The Colorado Division of Water Resources Division 7 Engineer shows conditional water rights totaling 158.35 cfs and 35,706 acre-feet, some of which may be abandoned or expired.
3. The SWSI report shows two conditional water rights in this stream. The CWCB has also mapped two potential reservoir sites, but these have not been verified for feasibility. None of the future

projects listed in SWSI Section 6 (Identified Projects and Processes) impact this river. The Dry Gulch reservoir site is several miles downstream.

Portions of East Fork Road 667 have road fill that borders and encroaches on the stream. There are minor sections of riprap associated with road crossings. Bioengineered stream habitat and stability work on the private land have made some channel changes. These do not detract from the free-flowing character of the river.

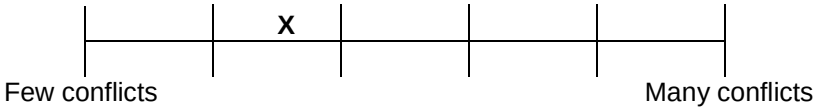
Potential for conflict with water resources development



Transportation and Facilities

The East Fork of the San Juan River corridor contains 11.3 miles of gravel road and 0.9 mile of four-wheel-drive road. There are also 2.6 miles of trail and 7.6 miles of winter trail (road groomed for skiing or snowmobiling). The East Fork Campground and Silver Falls guard station are located within the river corridor.

Potential for conflict with transportation and facilities

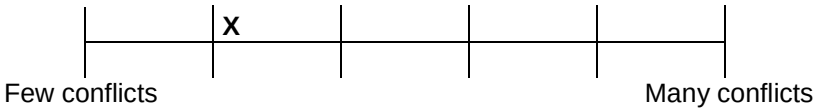


Recreation and Other Resource Activities

Recreational opportunities within this area include camping, hiking, hunting, backpacking, horse riding/packing, rafting, kayaking, four-wheel-drive driving, ATV driving, skiing, and snowmobiling.

Other activities that may occur in this area include agriculture, livestock grazing, mining, and oil and gas development.

Potential for conflict with recreation and other resources



Socioeconomic Environment

An economic study was not conducted for Mineral County, so statistics comparable to those quoted for other counties are not readily available.

Current Administration and Funding Needs

Finding this stream suitable for WSR designation would not dramatically change the use or management in this area; therefore, the costs associated with the management of this river segment would not greatly increase. If Congress or the Secretary of the Interior were to designate this as a WSR, the increased attention and public presence might increase management costs.

Benefits and Impacts of Wild and Scenic and Other Methods and Suitability Determination

The East Fork of the San Juan contains the ORV of geology and, like the West Fork of the San Juan, presents tremendous examples of the factors leading to the formation and subsequent alterations of the San Juan Mountains. The East Fork is found to be suitable for designation under the Preferred Alternative, from where it becomes a third order stream downstream to the boundary of NFS lands near the USFS East Fork Campground. This represents a change from the preliminary finding of not suitable presented in the Draft EIS and slightly shortens the study segment by removing consideration of private lands near the confluence with the West Fork of the San Juan River. Comments received on the Draft EIS noted that conservation easements were being prepared for the block of private lands in the middle portion of the reach, and that some of the water rights had been abandoned, thereby removing some of the private property conflicts. Adjusting the downstream terminus to the boundary of NFS lands further reduces private land conflicts.

Comments were also received supporting inclusion of the East Fork in our suitability findings due to the outstanding opportunities to observe geologic features, the related educational benefits, and how WSR suitability could complement the nearby South San Juan wilderness. A comment was also provided that cited that the East Fork was not found eligible in past reviews, but did not provide any evidence that the findings of eligibility in this appendix were inaccurate.

Based on the analysis presented in the Draft EIS and comments received on the preliminary finding and rationale, WSR designation is determined to be the best form of enduring protection of the ORV and free-flowing character of the stream.

The San Juan River Workgroup was initiated in February 2010 and resulted in a report published in July 2011. This effort was conducted outside the USFS's WSR review process but initiated, in part, in response to the findings presented in the Draft EIS. The workgroup and its report focused on potential management actions for both the West Fork and East Fork of the San Juan River. The final report of the workgroup was not completed prior to the close of the comment period for the Draft EIS and could not be fully addressed here. It does, however, include a number of findings and suggestions that could assist federal, state, and local governments, as well as private landowners, in future management of the river and surrounding watershed.

The final report of the San Juan River Workgroup would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Suitability Determination

Miles found suitable by classification are provided in Table D.66 and are illustrated on Figures D-6 West Fork of the San Juan River and Tributaries and D-7 East Fork San Juan River and Tributaries.

Table D.66: Miles Found Suitable

	Wild	Scenic	Recreation	Total
West Fork of the San Juan River	8.60	0	0	8.6
Wolf Creek and Falls Creek	0	0	0	0
East Fork of the San Juan River	0	0	13.2	13.2
San Juan Totals	8.60	0	13.2	21.8

Outstanding Issues and Conflicts to be Resolved

The Southwest Basin Roundtable continues to prepare a needs assessment and to identify potential water projects as directed by Colorado H.B. 05-1177. Reports of this roundtable would be made available as additional information to be reviewed if the WSR recommendation is made to Congress.

Wild and Scenic Rivers
West Fork San Juan River
San Juan National Forest and Tres Rios Field Office
Figure D-6

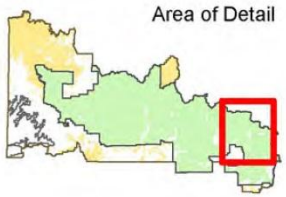
Legend

Suitable Wild & Scenic River Classification

- Recreation
- Wild
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 2 4 8 Miles

Area of Detail



The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs without notification.

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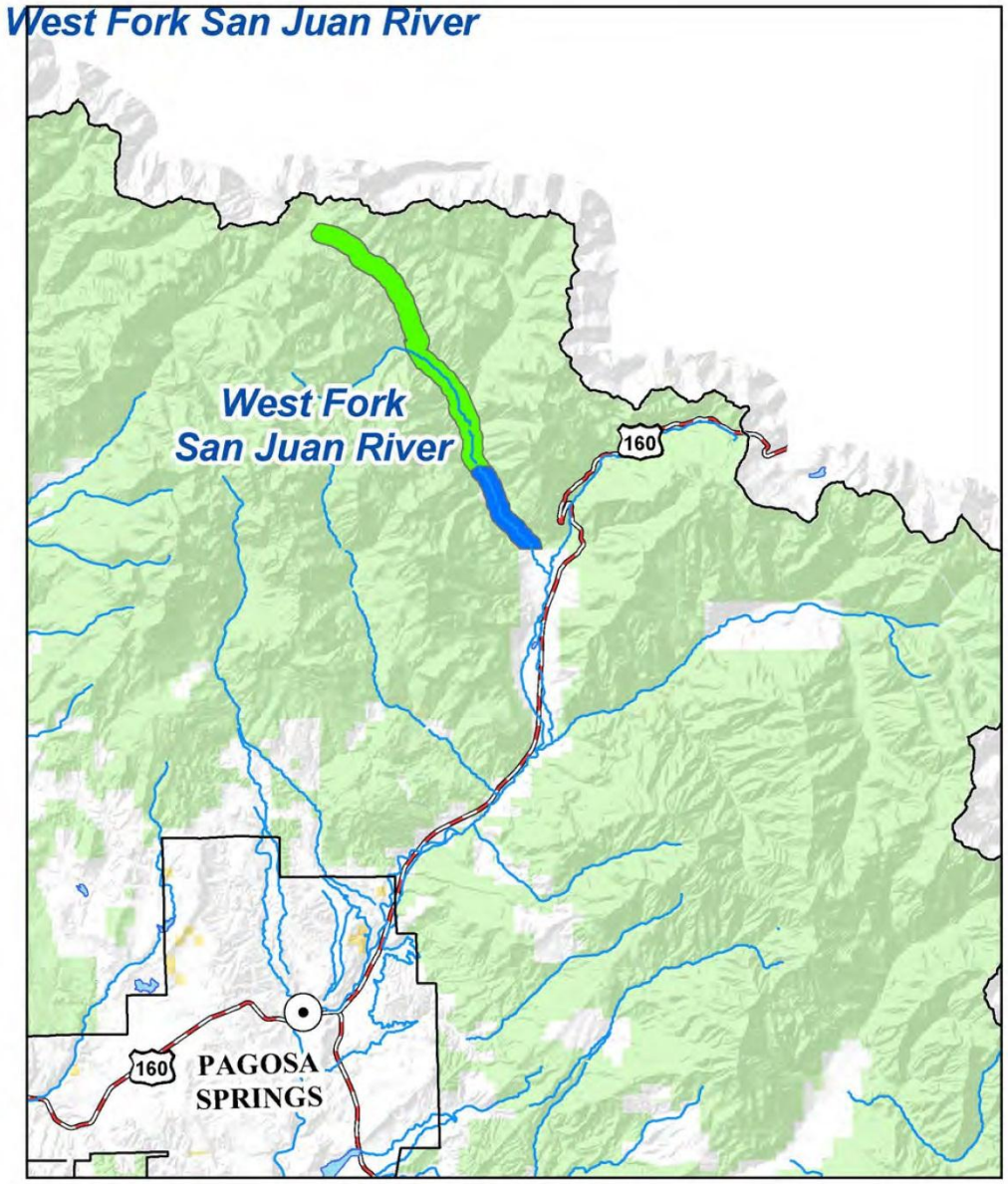
MDR
NAD 83, Polyconic Projection
May 30, 2013



Wild and Scenic Rivers
East Fork San Juan River
San Juan National Forest and Tres Rios Field Office
Figure D-7

Legend

Suitable Wild & Scenic River Classification

- Recreation
- San Juan National Forest
- Tres Rios Field Office
- State & Federal Highways
- Bureau of Land Management
- National Forest

0 2 4 8 Miles

Area of Detail

The USFS and BLM attempt to use the most current and complete geospatial data available. Geospatial data accuracy varies by theme on the map. Using this map for other than their intended purpose may yield inaccurate or misleading results. The USFS and BLM reserve the right to correct, update or modify geospatial inputs without notification.

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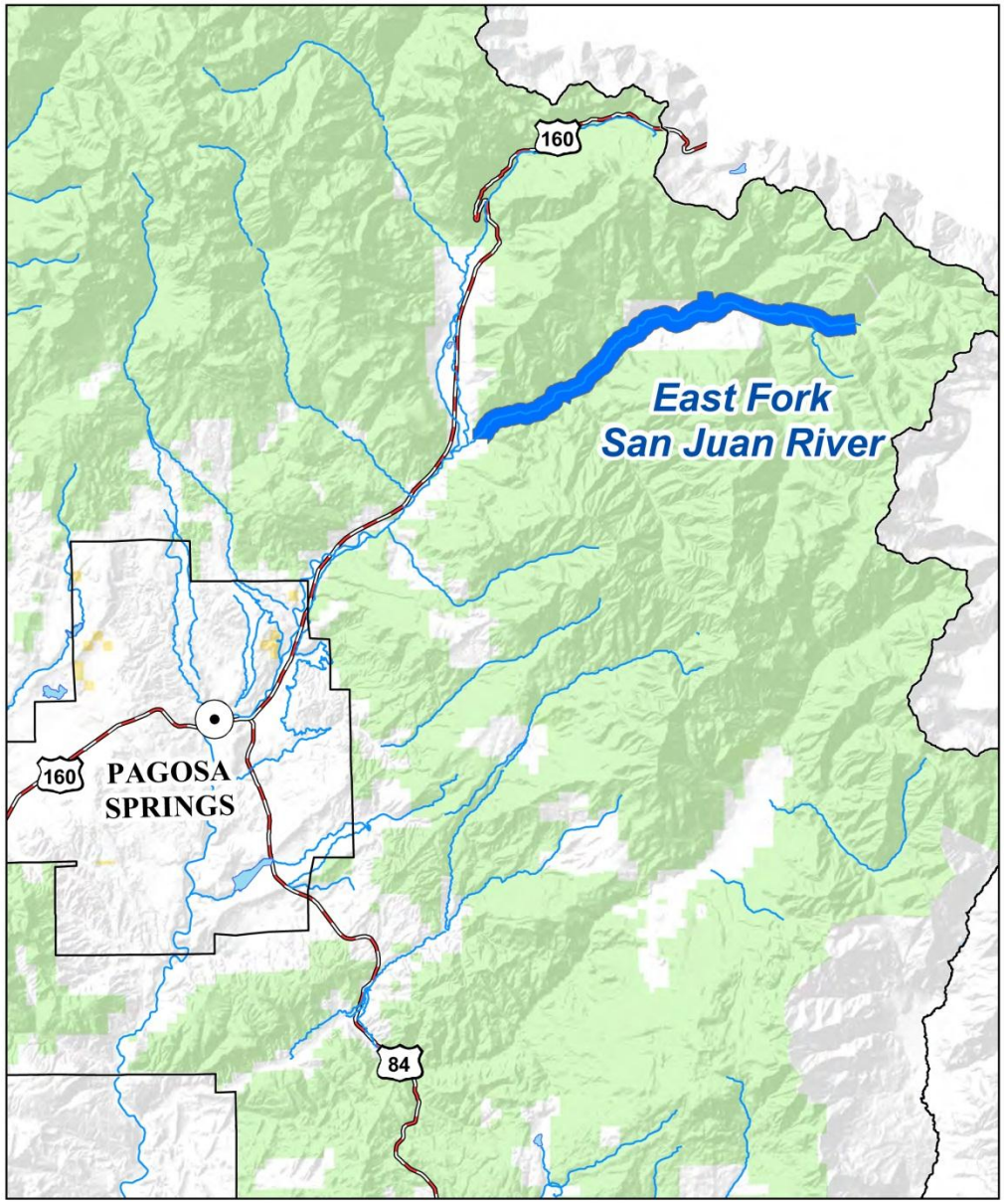

WILD AND SCENIC RIVER ANALYSIS

List of Streams Initially Evaluated for Eligibility

The WSRs analysis considered primarily third-order and larger streams located on the SJNF and TRFO. Some smaller order streams for which subject matter experts identified a potential ORV were added.

Table D.67 lists all the streams that were evaluated. This WSR suitability appendix describes the results of this evaluation.

Table D.67: All Streams Evaluated

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Upper Dolores River	Barlow Creek
Upper Dolores River	Bean Canyon
Upper Dolores River	Bear Creek
Upper Dolores River	Beaver Creek
Upper Dolores River	Bell Creek
Upper Dolores River	Big Canyon
Upper Dolores River	Big Canyon
Upper Dolores River	Big Gypsum Creek
Upper Dolores River	Big Spring Gulch
Upper Dolores River	Boggy Draw
Upper Dolores River	Bull Canyon
Upper Dolores River	Cabin Canyon
Upper Dolores River	Canyon Creek
Upper Dolores River	Calf Creek
Upper Dolores River	Carver Canyon
Upper Dolores River	Chicken Aspen Canyon
Upper Dolores River	Clear Creek
Upper Dolores River	Cottonwood Creek
Upper Dolores River	Coyote Wash
Upper Dolores River	Dawson Draw
Upper Dolores River	Dawson Draw Canyon East
Upper Dolores River	Desert Claim Arroyo
Upper Dolores River	Disappointment Creek
Upper Dolores River	Disappointment Creek, upper
Upper Dolores River	Dolores River (McPhee Dam to Taylor)
Upper Dolores River	Dolores River, above Taylor
Upper Dolores River	Dolores River, Big Gypsum to La Sal Cr
Upper Dolores River	Dolores River, La Sal Cr to Bedrock
Upper Dolores River	Dolores River, McPhee Res to Disappointment
Upper Dolores River	Dolores River, Disappointment to Big Gypsum
Upper Dolores River	Dry Canyon
Upper Dolores River	East Branch Pine Arroyo
Upper Dolores River	East Paradox Creek
Upper Dolores River	Far Draw
Upper Dolores River	Ferris Canyon
Upper Dolores River	Fish Creek
Upper Dolores River	Doe Canyon
Upper Dolores River	Glade Canyon
Upper Dolores River	Glade Point Canyon
Upper Dolores River	Hop Creek

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Upper Dolores River	Horse Creek
Upper Dolores River	Falls Creek
Upper Dolores River	Hunt Creek
Upper Dolores River	Indian Valley
Upper Dolores River	Johnny Bull Creek
Upper Dolores River	Leach Creek
Upper Dolores River	Lion Creek
Upper Dolores River	Little Gypsum Creek
Upper Dolores River	Long Draw
Upper Dolores River	(tributary to Plateau)
Upper Dolores River	(tributary to Beaver)
Upper Dolores River	Lost Canyon
Upper Dolores River	Marguerite Creek
Upper Dolores River	Mavreeso Creek
Upper Dolores River	May Canyon
Upper Dolores River	McIntyre Canyon
Upper Dolores River	McJunkin Creek
Upper Dolores River	McKinney Draw
Upper Dolores River	Morgan Gulch
Upper Dolores River	Morrison Creek
Upper Dolores River	Narraguinnep Canyon
Upper Dolores River	Groundhog Creek
Upper Dolores River	Near Draw
Upper Dolores River	Nicholas Wash
Upper Dolores River	Pat Canyon
Upper Dolores River	Peeled Pine Canyon
Upper Dolores River	Plateau Creek
Upper Dolores River	Pole Creek
Upper Dolores River	Priest Gulch
Upper Dolores River	Rabbit Creek
Upper Dolores River	Rio Lado
Upper Dolores River	Roaring Forks Creek
Upper Dolores River	Rock Spring Creek
Upper Dolores River	Ryman Creek
Upper Dolores River	Ryman Creek
Upper Dolores River	Scotch Creek
Upper Dolores River	Secret Canyon
Upper Dolores River	Silver Creek
Upper Dolores River	Spring Canyon
Upper Dolores River	Spring Creek
Upper Dolores River	Spruce Water Canyon
Upper Dolores River	Stoner Creek
Upper Dolores River	Sulphur Creek
Upper Dolores River	Summit Canyon
Upper Dolores River	Taylor Creek
Upper Dolores River	Tenderfoot Creek
Upper Dolores River	Turkey Creek
Upper Dolores River	West Dolores River (includes Lizardhead wilderness)
Upper Dolores River	Wild Bill Canyon
Upper Dolores River	Wild Steer Canyon
Upper Dolores River	Wildcat Creek (Ryman Creek by Scotch Creek)

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Upper Dolores River	Wildcat Creek
Upper Dolores River	Wildcat Creek
Upper Dolores River	Willow Draw
Upper Dolores River	Wolf Den Canyon
San Miguel River	Brewster Creek
San Miguel River	Dead Horse Creek
San Miguel River	Desert Claim Arroyo
San Miguel River	Dry Creek
San Miguel River	East Naturita Creek
San Miguel River	Hamilton Creek
San Miguel River	Hamilton Creek
San Miguel River	Log Corral Creek
San Miguel River	Log Corral Creek
San Miguel River	Log Corral Creek
San Miguel River	Middle Naturita Creek
San Miguel River	Naturita Creek
San Miguel River	Nelson Creek
San Miguel River	Spectacle Creek
San Miguel River	West Fork Dry Creek
San Miguel River	West Naturita Creek
Piedra River	Archuleta Creek
Piedra River	Bull Creek
Piedra River	Cimarrona Creek
Piedra River	Cimarrona Creek tributary
Piedra River	Coldwater Creek
Piedra River	Deadman Creek
Piedra River	Deep Canyon
Piedra River	Devil Creek
Piedra River	Devil Creek tributary
Piedra River	East Fork Piedra River
Piedra River	First Fork
Piedra River	Goose Creek
Piedra River	Gordon Creek
Piedra River	Horse Creek
Piedra River	Ignacio Creek
Piedra River	Indian Creek
Piedra River	Little Sand Creek
Piedra River	Martinez Creek
Piedra River	Middle Fork Piedra River
Piedra River	Mosca Creek
Piedra River	Pagosa Creek
Piedra River	Piedra River
Piedra River	Porphry Gulch
Piedra River	Sand Creek
Piedra River	Sheep Canyon
Piedra River	Sheep Creek
Piedra River	Skull Canyon
Piedra River	Squaw Creek
Piedra River	Vega la Juana Creek
Piedra River	Weminuche Creek
Piedra River	West Fork Devil Creek

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Piedra River	Williams Creek
Montezuma River	Chico Creek
Montezuma River	Dove Creek
Montezuma River	Monument Canyon
Montezuma River	North Branch Chico Creek
Middle San Juan River	Cottonwood Creek
Middle San Juan River	La Plata River, above Mayday
Mancos River	Box Canyon
Mancos River	Chicken Creek
Mancos River	East Fork Mud Creek
Mancos River	East Mancos River
Mancos River	Horse Creek
Mancos River	Middle Mancos River
Mancos River	West Fork Mud Creek
Mancos River	West Mancos River
Animas River	(tributary E of Junction Creek Campground)
Animas River	(Florida tributary N of Stump Canyon)
Animas River	Animas River, Deer Park to Animas Forks
Animas River	Animas River, Deer Park to Bakers Bridge
Animas River	Bear Creek
Animas River	Bear Creek
Animas River	Big Bend Creek
Animas River	Big Lick Creek
Animas River	Buck Creek
Animas River	Canyon Creek
Animas River	Cascade Creek
Animas River	Castle Creek
Animas River	Cement Creek
Animas River	Cherry Gulch
Animas River	Cinnamon Creek
Animas River	Clear Creek
Animas River	Coon Creek
Animas River	Corral Creek
Animas River	Corral Draw
Animas River	Cunningham Creek
Animas River	Deep Creek
Animas River	Deer Creek
Animas River	Deer Park Creek
Animas River	Dutch Creek
Animas River	East Fork Hermosa Creek
Animas River	Elbert Creek
Animas River	Elk Creek
Animas River	Elk Creek
Animas River	Engine Creek
Animas River	Euraka Gulch
Animas River	Falls Creek
Animas River	Flagler Fork
Animas River	Florida River through Lemon Reservoir
Animas River	Florida River tributary off SJNF
Animas River	Freed Canyon
Animas River	Goulding Creek

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Animas River	Hermosa Creek
Animas River	Ice Lake Creek
Animas River	Junction Creek
Animas River	Lightner Creek
Animas River	Lime Creek
Animas River	Maggie Gulch
Animas River	McClure Canyon
Animas River	Middle Fork Mineral Creek
Animas River	Mill Creek
Animas River	Miller Creek
Animas River	Mineral Creek
Animas River	Minnie Gulch
Animas River	Missouri Gulch
Animas River	Molas Creek
Animas River	Mud Spring Creek
Animas River	Needle Creek
Animas River	No Buck Creek
Animas River	Noname Creek
Animas River	Red Creek
Animas River	Sawmill Canyon
Animas River	Shearer Creek
Animas River	Shep Springs Gulch
Animas River	South Fork Animas River
Animas River	South Fork Hermosa Creek
Animas River	South Fork Lightner Creek
Animas River	South Fork Mineral Creek
Animas River	Spring Creek
Animas River	Stevens Creek
Animas River	Tank Creek
Animas River	Tenmile Creek
Animas River	True Creek
Animas River	Virginia Gulch
Animas River	West Cross Creek
Animas River	West Fork Animas River California Gulch
Animas River	West Virginia Gulch
Animas River	Young Canyon
Upper San Juan River	(unnamed by Wallace Gulch)
Upper San Juan River	Augustora Creek
Upper San Juan River	Beaver Creek
Upper San Juan River	Beaver Creek (tributary to West Fork of the San Juan)
Upper San Juan River	Burns Canyon
Upper San Juan River	Captain Beal Gulch
Upper San Juan River	Cimarron Creek
Upper San Juan River	Coal Creek
Upper San Juan River	Crater Creek
Upper San Juan River	Dead Horse Creek
Upper San Juan River	Dry Creek
Upper San Juan River	East Fork of the San Juan River
Upper San Juan River	El Canon Pescar
Upper San Juan River	Elwood Creek
Upper San Juan River	Falls Creek

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Upper San Juan River	Fawn Gulch
Upper San Juan River	Fish Creek
Upper San Juan River	Flint Creek
Upper San Juan River	Fourmile Creek
Upper San Juan River	Grimes Creek
Upper San Juan River	Halfway Canyon
Upper San Juan River	Himes Creek
Upper San Juan River	Homer Canyon
Upper San Juan River	Indian Canyon
Upper San Juan River	Jackson Creek
Upper San Juan River	Johnson Creek
Upper San Juan River	Cave Basin Creek
Upper San Juan River	Lake Creek
Upper San Juan River	Leche Creek
Upper San Juan River	Leviathan Creek
Upper San Juan River	Lion Creek
Upper San Juan River	Little Bear Creek
Upper San Juan River	Los Pinos tributary (Lake Creek)
Upper San Juan River	Los Pinos, above Vallecito Reservoir
Upper San Juan River	Los Pinos, in Vallecito Reservoir
Upper San Juan River	Lost Creek
Upper San Juan River	Mill Creek
Upper San Juan River	Navajo River
Upper San Juan River	North Fork Fish Creek
Upper San Juan River	North Fork Texas Creek
Upper San Juan River	Quartz Creek
Upper San Juan River	Rainbow Creek
Upper San Juan River	Red Creek
Upper San Juan River	Rincon La Osa
Upper San Juan River	Rio Blanco
Upper San Juan River	Rito Blanco
Upper San Juan River	Rock Creek
Upper San Juan River	Sand Creek
Upper San Juan River	Sauls Creek
Upper San Juan River	Sheep Cabin Creek
Upper San Juan River	Sheep Draw
Upper San Juan River	Sierra Vandera Creek
Upper San Juan River	Silver Creek
Upper San Juan River	Snowball Creek
Upper San Juan River	South Fork Texas Creek
Upper San Juan River	Spring Creek
Upper San Juan River	Spring Gulch
Upper San Juan River	Squaretop Creek
Upper San Juan River	Summit Creek
Upper San Juan River	Sunlight Creek
Upper San Juan River	Turkey Creek
Upper San Juan River	Valle Seco
Upper San Juan River	Vallecito Creek
Upper San Juan River	Wallace Gulch

4th level Hydrologic unit River Watershed Name	Streams evaluated for eligibility for WSRs
Upper San Juan River	Weasel Skin Creek
Upper San Juan River	West Fork of the San Juan River
Upper San Juan River	Willow Draw
Upper San Juan River	Wolf Creek and Falls Creek

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