

River Protection Workgroup



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

River Protection Workgroup Information Sheet

San Juan River -- East Fork and West Fork
<http://ocs.fortlewis.edu/riverprotection>

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

Area of Focus: The Area includes the watersheds of the East Fork and West Fork of the San Juan River and all their tributaries down to where they join to form the San Juan River. The East Fork of the San Juan River basin includes over 2,810 acres of private land, with numerous decreed water rights. The West Fork of the San Juan basin includes 3,980 acres of private land, with numerous decreed water rights and spans Archuleta, Hinsdale and Mineral Counties. Please refer to the last page of this document for a map.

Both the East Fork and West Fork were found to be “eligible” for Wild and Scenic Rivers (“WSR”) designation by the United States Forest Service (USFS) and the West Fork was found to be “preliminarily suitable.”

Values (in alphabetical order):

Economic: agriculture; livestock grazing; municipal water supplies; outfitting businesses (water-related, hunting, fishing, etc.); public access; timber-related industries and firewood gathering; and water and water rights

Fish: see below

Flora: There is a population of a USFS Sensitive Species, Smith’s whitlow grass (or Smith’s draba), on the lower portion of the East Fork (refer to list of USFS Sensitive Species).

Healthy Natural Landscape: These two watersheds are valuable because they represent a diverse ecosystem that encompasses a diversity of life zones starting with ponderosa pine up to alpine. They are healthy and in-tact and are wildlife movement corridors. Due to their overall “in-tactness”, as well as the presence of Wilderness and Roadless Areas within the drainages, they maintain a wild quality.

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ocs.fortlewis.edu/riverprotection

History: Born's Lake is one of the first fisheries in the area. Homesteading, cattle ranching, mining and the timber industry are part of the history and culture of the area.

Private Property: There are private lands in the watersheds. Residents value their privacy, access, water, land and ability to make a living off the land.

Recreation: The area is used for a wide variety of recreational activities including:

- artistic endeavors (e.g., landscape painting, photography, etc.)
- backpacking
- fishing and float fishing
- hiking
- horseback riding
- hot springs use
- hunting
- mountain-biking
- motorized use (Off Highway Vehicles)
- mushrooming and other plant viewing/gathering activities
- quiet use of the public lands
- recreational geology (rock hounding and gold prospecting)
- skiing (cross country)
- snowmobiling
- whitewater boating
- wildlife viewing (e.g. bird watching)

Scenery: The area is very beautiful. The West Fork is the gateway, many believe, to all of Southwest Colorado when traveling down off Wolf Creek Pass from the east.

Terrestrial wildlife: Some of the wildlife species common in the area include: elk, mule deer, black bear, coyote, bobcat, mountain lion, beaver, snowshoe hare, and Merriam's turkey. In addition, the USFS identifies "Sensitive Species" some of which are known or likely to occur in the area. The Colorado Division of Wildlife's (CDOW) *State Wildlife Action Plan* identifies species most in need of pro-active conservation measures. The CDOW Plan identifies a 2-tiered list of Species of Greatest Conservation Need, with Tier I species having the most urgent need. A handout is available that provides more information.

Fish: Species in the East Fork and West Fork of the San Juan River mainstem and many of the tributaries include but are not limited to cutthroat, rainbow, brown and brook trout and the mottled sculpin. The Colorado Division of Wildlife ("CDOW") has fishing regulations in place on Himes Creek and Beaver Creek, including the use of artificial flies and lures only, and catch-and-release only for all cutthroat trout. There is a multi-agency Aquatic Management Plan in place for the San Juan River Basin. According to the Colorado Division of Wildlife (CDOW), there are many wild-trout tributary streams in the Focus Area, including Quartz Creek and Sand Creek. Also, there are several Conservation Populations of Colorado River cutthroat trout including Himes, Beaver, and Elk creeks tributaries to the West Fork. A Conservation Population of cutthroat trout is generally defined as being 90% or more genetically pure. Brook, rainbow, and brown trout are common in the upper San Juan. Brook trout become increasingly common as one moves into the smaller tributaries. There is also a robust population of native suckers starting several miles above Pagosa Springs and extending to Navajo Reservoir. Bluehead suckers are the most abundant native sucker above Pagosa Springs. However, some flannelmouth suckers also occupy this reach. Suckers are not sport fish but are natives. Mottled sculpin and specked dace are common in the lower reach, and mottled sculpin occupy most of the basin until stream gradients become too steep in the tributaries.

Most high-elevation lakes that feed the East and West Forks are stocked with Colorado River cutthroat trout fingerlings. A number of these lakes contain brook-trout populations as well. More

information on fish in the East and West Forks of the San Juan River can be obtained from the Colorado Division of Wildlife (CDOW).

USFS-Identified Outstandingly Remarkable Values or “ORVs”

As part of its evaluation of rivers for Wild and Scenic River (WSR) eligibility, the USFS analyzes rivers for any river-related values that are unique, rare, or exemplary, and that are significant on a regional or national scale. These features are identified as “Outstandingly Remarkable Values.” What follows is a description of the ORVs for the East and West Forks taken from the San Juan Public Lands Center’s 2007 Draft Land Management Plan:

San Juan River East Fork – Geology	San Juan River West Fork – Geology, Wildlife and Scenery
<p>The reach is valuable as a visible geologic “classroom” where people can see and study a phenomenon of planetary importance that is poorly understood today. 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. 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.</p> <p>The importance of this ORV, according to the USFS, is that people can view and experience the geology because of its accessibility.</p>	<p>The reach has geologic significance because the dramatic events recorded in the rocks are so exposed and visible for study and appreciation by people. 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 visible on the valley side walls exposures of massive layers of pyroclastics and volcanoclastics 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 which 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.</p> <p>The importance of this ORV, according to the USFS, is that people can view and experience the geology because of its accessibility.</p> <p>The Wolf Creek and Falls Creek Areas were found to be eligible for WSR because of the ORVs of wildlife and scenery. The Wolf Creek and Falls Creek branched segment contains five waterfalls occupied by nesting black swifts, a bird of conservation concern. Black swifts will nest only at waterfalls, and the species' world-wide breeding distribution is limited to a narrow portion of the Rocky Mountains from Mexico to Canada, and another small band encompassing sea cliffs along the Pacific coast from California to Alaska. The area contains a core breeding population of the bird and provides population and habitat connectivity to the southern portion of the species' range.</p> <p>Treasure Falls, on Falls Creek and just off Highway 160, is one of the easiest waterfalls to visit within the San Juan Public Lands. It is visited by people from all over the world.</p>

Land and Water Protections Currently in Place

Conservation Easements:

East Fork.	West Fork
<p>Recently, a conservation easement was secured by the Southwest Land Alliance (SLA) for approximately 1,000 acres of the McCarthy property. Additional lands may also be conserved.</p>	<p>There are two easements on the West Fork drainage. Southwest Land Alliance (SLA) holds one (1) easement at approximately 358 acres.</p> <p>Colorado Open Lands (COL) holds one (1) easement at approximately 1,072 acres.</p> <p>Approximately 1.5 river miles of the West Fork flow through the SLA easement. The river does not flow through the COL easement.</p> <p>Overall, 6.62 miles of the West Fork of the San Juan River flows through private land.</p>

Roadless Area: Most of the National Forest lands in the area are in Inventoried Roadless Areas, including Treasure Mountain and South San Juan Adjacent, with a total of 26,600 acres in the East Fork watershed, Turkey Creek and Treasure Mountain with a total of 16,400 acres in the West Fork watershed. The 2001 Roadless Area Conservation Rule (36 CFR 294) prohibits road construction and timber harvest, with limited exceptions, in Inventoried Roadless Areas. The 2001 rule is currently in litigation with different courts issuing conflicting decisions. It seems very likely that some version of a roadless rule – although it is not clear which one (the Colorado Rule or the Federal Rule) – will be in place in the future with restrictions on road construction and timber harvesting.

USFS management: Large portions of the upper East and West Forks of the San Juan River drainage area are managed by the USFS. The chart below provides more information:

San Juan River - East Fork	San Juan River - West Fork
<p>The San Juan Public Lands Center's 2007 <i>Draft Land Management Plan</i> allocates the area on the south side of the East Fork to Management Area (MA) 1, "Natural Processes Dominate", other than a small corridor along the river and Forest Road 667 which acknowledges high recreational use (MA 4). Much of the higher elevations on the south side of the drainage are in the South San Juan Wilderness. The area on the north side of the drainage is allocated to MA 3, "Natural Landscapes with Limited Management."</p> <p>Much of the area surrounding the East Fork, other than the strip along the river, is within an Inventoried Roadless Area (see below). The Draft Plan would remove the downhill-ski-area land allocation that is in the current plan for the old East Fork Ski Area proposal on the south side of the river, changing that area from its former classification as the equivalent of MA 8, "Highly Developed Areas", to MA 1 or MA 3.</p> <p>The East Fork was found to be eligible for Wild and Scenic Rivers consideration, with a recreation river classification, with outstandingly remarkable geologic values. It was not found preliminarily suitable, mostly because of the mixed ownership of the river corridor and the numerous water appropriations. The area would continue to be managed similarly to how it has been in the past if the <i>Draft Plan's</i> recommendations are made final.</p>	<p>The San Juan Public Lands Center's 2007 Draft Land Management Plan allocates most of the area in the West Fork drainage to Management Area (MA) 1, "Natural Processes Dominate", or MA 3, "Natural Landscapes with Limited Management." Much of the higher elevation land is in the Weminuche Wilderness, and much of the area surrounding the West Fork, other than the corridor along Forest Road 648, is within an Inventoried Roadless Area.</p> <p>The corridor is allocated to MA 4, "High Use Recreation." The Draft Plan would remove the downhill-ski-area land allocation that is in the current plan for the old Wolf Creek Valley Ski Area proposal, changing the area from its former classification as the equivalent of MA 8, "Highly Developed Areas", to a 1 or MA 3.</p> <p>The West Fork was found to be eligible for Wild and Scenic Rivers consideration, with the upper half classified as a wild river and the lower half as a recreation river, with outstandingly remarkable geologic values, and found preliminarily suitable for designation. The area would continue to be managed similarly to how it has been in the past if the <i>Draft Plan's</i> recommendations are made final.</p>

Wilderness: Portions of two Wilderness Areas are in the watersheds including the Weminuche and the South San Juan (26,600 acres in the East Fork and 37,700 in the West Fork).

In-Stream Flows – East Fork: (An In-Stream Flow is an in-channel appropriation of non-consumptive water between two specific points and is appropriated by the Colorado Water Conservation Board for the purpose of protecting the natural environment to a reasonable degree.)

Stream Name	Case No.	Amounts/Dates Cubic Feet Second (CFS)	Appropriation Date
Silver Creek	7-80CW034	2.0	01/30/1980
Lane Creek	7-80CW036	1.0	01/30/1980
Waterfall Creek	7-80CW033	1.0	01/30/1980
Quartz Creek	7-80CW035	8.0	01/30/1980
East Fork of the San Juan River (Upper)	7-87CW045	6.0 (09/01 to 03/31) 12.0 (04/01 to 08/31)	05/15/1987
East Fork of the San Juan River (Middle)	7-80CW029	8.0 (09/01 to 03/31) 15.0 (04/01 to 08/31)	01/30/1980
East Fork of the San Juan River (Lower)	7-80CW037	12.0 (09/01 to 03/31) 25.0 (04/01 to 08/31)	01/30/1980
Crater Lake	7-W1485	621.0 Acre-Feet (AF)	03/17/1976
Sand Creek	7-80CW038	4.0 (09/01 to 03/31) 10.0 (04/01 to 08/31)	01/30/1980

In-Stream Flows – West Fork: (An In-Stream Flow is an in-channel appropriation of non-consumptive water between two specific points and is appropriated by the Colorado Water Conservation Board for the purpose of protecting the natural environment to a reasonable degree.)

Stream Name	Case No.	Amounts (dates) (CFS)	Appropriation Date
Falls Creek	7-80CW032	1.0	01/30/1980
Wolf Creek	7-80CW031	6.0 (09/01 to 02/29) 11.0 (03/01 to 08/31)	01/30/1980
West Fork of the San Juan River (Upper)	7-80CW030	8.0 (09/01 to 02/29) 14.0 (03/01 to 08/31)	01/30/1980
West Fork of the San Juan River (Lower)	7-80CW041	14.0 (09/01 to 03/31) 25.0 (04/01 to 08/31)	01/30/1980

Important Water Information

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

Municipal Water: The West Fork is the source of the PAWSD (Pagosa Area Water and Sand District) municipal raw water supply.

Potential Consumptive Uses: The potential for additional consumptive use on the private land exists. The private land that adjoins the Area includes water rights both conditional and absolute, and development of the conditional rights would result in additional consumptive use. Snowmaking for ski areas is a potential consumptive use. However, given the abundance of snowfall in the Area, is not considered likely. There are conditional water rights for a dozen wells, with snowmaking a use on the East Fork.

Potential Water Diversion and Storage Locations:

SWSI site — The State Water Supply Initiative ("SWSI") lists the East Fork Reservoir for potential development of 35,200 acre-feet already decreed and up to a potential storage capacity of 147,000 acre-feet .However, the 35,200 acre-feet right was abandoned by the SWCD in 2003. SWSI also identified two additional potential reservoir sites, one on the West Fork and one on the East Fork, but there are no high-priority projects in the watershed. SWSI was a basin-by-basin study conducted by the Colorado Water Conservation Board to examine Colorado's water uses, water-supply needs, and future water-planning efforts. SWSI focused on using a common technical basis for identifying and quantifying water needs and issues. SWSI catalogued the specific projects, plans, and processes that local water suppliers have identified and are undertaking as components of their own water-supply planning efforts to meet the needs they themselves have identified. In addition, pursuant to House Bill 1117 and the Water for the 21st Century Act, the Southwest Water Roundtable is evaluating the consumptive and non-consumptive needs in the basin. For more information, go to: <http://cwcb.state.co.us/IWMD/> (then go to the SWSI I and SWSI II).

Dry Gulch Project — The San Juan Water Conservancy District and Pagosa Area Water and Sanitation District are currently purchasing land, pursuing water rights and planning for storage to secure future water supplies with the Dry Gulch Project. Currently, the districts are planning to construct a 19,000-acre-foot reservoir. The point of diversion for this project is approximately seven miles downstream of the confluence of the East and West Forks. The San Juan Water Conservancy District also owns conditional water rights on the West Fork. The West Fork Canal water right is decreed for 70 cfs and was to deliver water from the West Fork to Four Mile Creek. The West Fork Reservoir has a conditional right with a decreed amount of 35,797 acre-feet. Both of these conditional rights remain valid, with a 1968 adjudication date, but no physical work has been done on either structure. The water rights for the Dry Gulch Project have been the subject of two recent Colorado Supreme Court decisions, and there is ongoing debate regarding the districts' future water needs and the size of the Dry Gulch Project.

The Southwest Water Conservation District abandoned their 35,200 AF storage right for the East Fork Reservoir. A 6,300 AF conditional water right for the proposed Dry Gulch Reservoir, held by SJWCD (San Juan Water Conservation District), is a decreed right (1968 adjudication) but it is downstream of the East and West Forks. Both PAWSD and SJWCD have acquired 666 acres of the Running Iron Ranch and Weber properties.

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

<u>Gauge Site Number</u>	<u>Site Name</u>	<u>Dates of Operation</u>
09340500	WF SAN JUAN R AB BORNES LAKE NR PAGOSA SPR.	1937-1953
09340800	W FK SAN JUAN R AT W FK CAMPGR NR PAGOSA SPR.	1984-1995
09341200	WOLF CREEK NEAR PAGOSA SPRINGS	1968-1975
09341300	WOLF CR AT WOLF CR CAMPGR NR PAGOSA SPR.	1984-1999
09341350	WINDY PASS CR NR PAGOSA SPR.	1984-1987
09339900	EF SAN JUAN R AB SAND CREEK NR PAGOSA SPR.	1956-2003
09340000	EAST FORK SAN JUAN RIVER NR PAGOSA SPR.	1935-1980
09341500	WEST FORK SAN JUAN RIVER NR PAGOSA SPR.	1935-1998
09342500	SAN JUAN RIVER AT PAGOSA SPR.	1935-present

Note: Stream-flow data for each of these gauges is available in a variety of formats on the U.S. Geological Survey Water Data Web site at: <http://waterdata.usgs.gov/nwis/>

Water Rights: The following chart shows water. There are both direct flow water rights and storage water rights on the East and West Forks of the San Juan River. Please refer to the Glossary of Terms (handed out at the meetings and also on the Web site) to understand the various types of water rights presented in the tables below.

DIRECT FLOW WATER RIGHTS	Total # of Rights	Total CFS (Cubic feet per second)
<i>EAST FORK</i>		
Absolute water rights	19	18
Conditional water rights	16	10
<i>WEST FORK</i>		
Absolute water rights	75	145
Conditional water rights	18	264

STORAGE WATER RIGHTS	Total # of Rights	Total AF (Acre-feet)
<i>EAST FORK</i>		
Absolute water rights	1	2.9
Conditional water rights	5	391
<i>WEST FORK</i>		
Absolute water rights	4	124
Conditional water rights	1	35,797

Note: A vast majority of the decreed structures on the East and West Forks of the San Juan have irrigation as a use, and many have other uses including, but not limited to, domestic, stock, fish, and recreation.

Water Quality: There is not one single classification or “rating” for assessing and reporting water quality on the San Juan East and West Forks. The Colorado Water Quality Control Commission is the administrative agency responsible for developing specific state water quality policies in a manner that implements the broader policies set forth by the Legislature in the Colorado Water Quality Control Act. The Commission adopts water quality classifications and standards for surface and ground waters of the state, as well as regulations aimed at achieving compliance with those classifications and standards. There are various categories that apply to measuring water quality. Basic standards are the general water quality standards that apply to all surface waters of the state. Other stream-specific categories that apply to the San Juan River include temperature and uranium. For more detail on water quality standards, please refer to the handouts at the meeting and/or the State of Colorado’s Water Quality Control Division.

Wild and Scenic River (WSR) Information: Both the East Fork and West Fork were found to be “eligible” for Wild and Scenic Rivers (“WSR”) designation by the United States Forest Service (USFS) and the West Fork was found to be “preliminarily suitable.”

Stream Segment	Segment	Classification	Length	ORVs	Eligible (E) or Suitable (S)
East Fork San Juan River	Confluence of Elwood and Crater Creeks to its confluence with the West Fork	Recreation	13.12 mi	Geology	E = Yes S = No
West Fork San Juan River	Headwaters to Weminuche Wilderness Boundary	Wild	8.6 mi	Geology	E = Yes S = Yes
	Weminuche Wilderness Boundary to Confluence with East Fork	Recreation	8.7 mi	Geology	E = Yes S = Yes
Wolf Creek and Falls Creek	Wolf Creek from 2mi below Wolf Creek Pass to confluence with West Fork, and portions of Lake Creek and Falls Creek to include waterfalls.	Recreation	7.75 mi	Wildlife, Scenery	E = Yes S = No

Source: San Juan Public Lands Center, 2007 *Draft Land Management Plan*, Wild and Scenic River evaluation of the San Juan River.

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

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

Other Important Information

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

Reasonably Foreseeable Economic Development:

Logging - There is very little land near the East or West Forks that is available for logging due to wilderness designation, Forest Plan direction and roadless policy. There has been timber cutting in the past near Wolf Creek Pass. The spruce bark beetle is increasingly spreading from the east side of the Continental Divide. Renewable Forest Energy LLC (RFE) is proposing to lease land from Archuleta County and run a 4 megawatt power plant for the purpose of converting woody biomass into electricity to be used at the local level. This company hopes to have Turkey Springs ready for a demonstration in the spring of 2010. If this is successful they will proceed with construction of the power plant.

Oil, gas, and mineral development – There are two patented mining claims on the East Fork. No mining activity is currently occurring on these patented mining claims. There are historic mining areas on the East Fork, but no mining activity is currently occurring. There are several unpatented mining claims near Treasure Mountain. Prospecting activity is occurring on these claims. There may be other unpatented mining claims. A type of copper (known as Molybdenum/porphyry) is present in epithermal veins. There is moderate to high oil and gas potential on the San Juan Sag, but no oil or gas drilling is currently occurring. Designated Wilderness Areas are withdrawn from mineral entry, including oil and gas leasing. There is gravel mining occurring on private lands within the Area.

Private land development – A potential for residential development exists on the private lands in the water shed.

Ski areas — The McCarthy property along the East Fork and the National Forest lands south of that were part of the old proposed East Fork Ski Area. Some of the Boot Jack Ranch property and the National Forest lands east of Highway 160 near the West Fork were part of the old proposed Wolf Creek Valley Ski Area. Neither ski area proposal is currently considered feasible. The San Juan Public Lands Center's 2007 *Draft Land Management Plan* would change the land allocations for both areas from one emphasizing downhill-ski-area development to Management Areas 1 and 3, which would not allow ski area development.

Wolf Creek Ski Area has proposed an expansion of the existing ski area on the Rio Grande National Forest to include a portion of the San Juan National Forest. Some of that area includes tributaries of the East Fork of the San Juan River. This proposed expansion is not in the preferred alternative presented in the *Draft Land Management Plan*.

Transportation: There are several Forest Service Roads open to public use within the area, as well as U.S. Highway 160.

San Juan River - East Fork	San Juan River - West Fork
<p>The East Fork San Juan River corridor contains gravel roads and 4WD roads. There are trails and winter trails (road groomed for skiing or snowmobiling). The East Fork Campground and Silver Falls Guard Station are within the river corridor. A gravel road follows the East Fork, mostly along the north side, but it does cross the river in at least two sections. The entire length of the road is a Forest Service Road (FH 667) almost to Summitville (via Elwood Pass/Elwood Creek). A recurrent landslide reactivated May 2, 2008, and crossed FH 667 2 miles east of Highway 160. The road was closed to full-size motor vehicles until August 28, 2009, but is now open seasonally following a temporary gravel surfacing project. In winter it is closed to all motor vehicles except snowmobiles operating on snow; it is reopened when conditions warrant in spring. A main gas pipeline located along the roadway and operated by Xcel Energy ruptured during the slide and has been reconstructed several times since.</p>	<p>Highway 160 is within the West Fork San Juan River corridor for 3 miles. There is an additional stretch of road maintained for passenger cars and a road not maintained for passenger cars within the river corridor. There are also trails. The West Fork Campground is in the river corridor.</p>

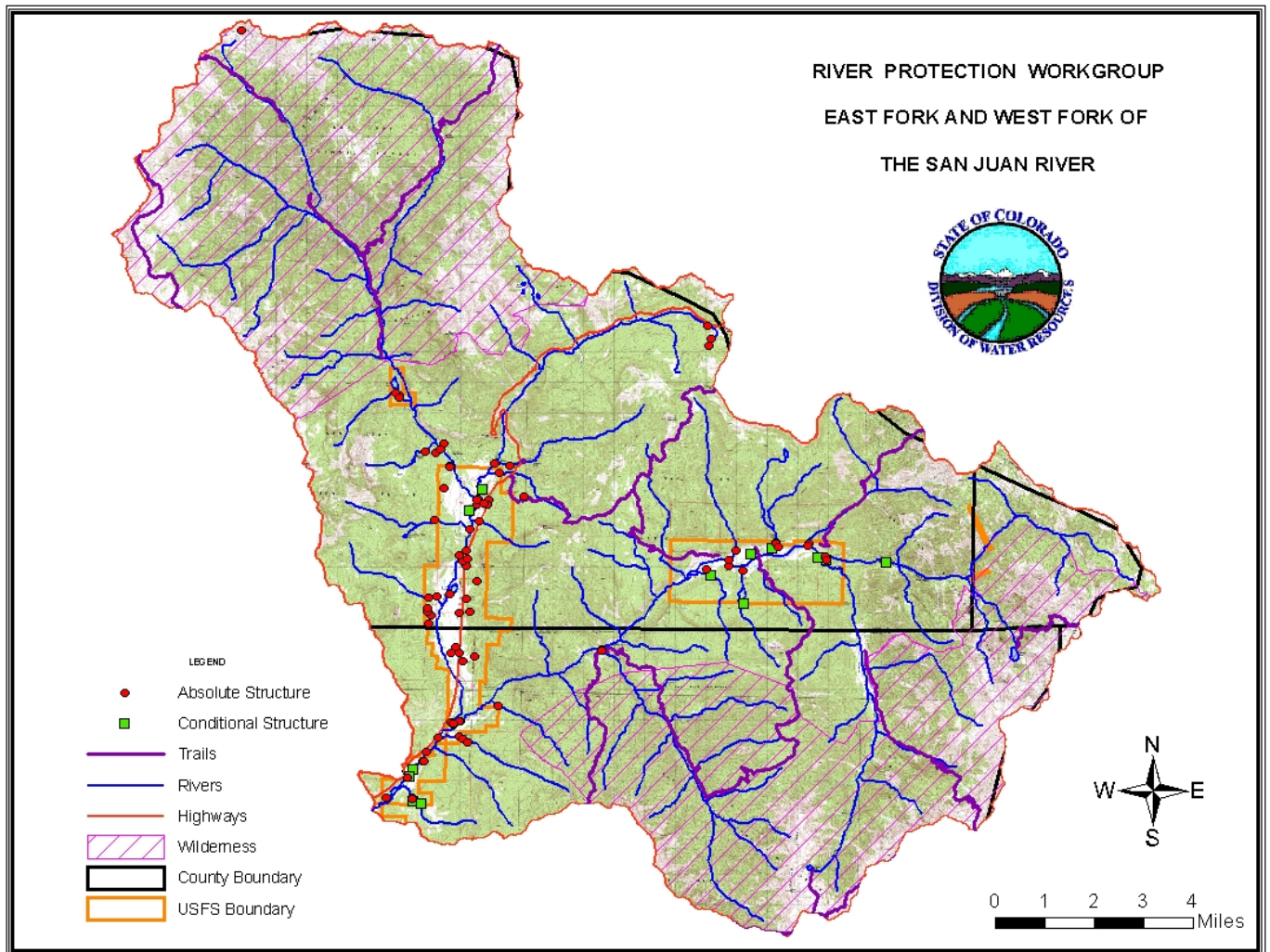
U.S. Highway 160 cuts through portions of the East Fork and West Fork basins. There are numerous trails and Forest Service roads in the Area. Motorized travel on the USFS Pagosa Ranger District is restricted to designated roads and trails other than, in some areas, snowmobiles operating over snow.

Uses That Require Special Permits: Most uses of USFS lands require permits issued. A list of major uses in the Area that require a permit includes:

- commercial outfitters (mountain-biking, fishing, hunting, and snowmobiling)
- livestock grazing (there are two active cattle allotments within the two watersheds)
- timber harvesting
- recreational cabins

Weeds: Based on the San Juan National Forest's noxious weed inventory, the following noxious weeds are present in the East and West Fork watersheds: yellow toadflax, Canada thistle, musk thistle, oxeye daisy, and bull thistle. These weeds are primarily located along road corridors (East Fork Road, Quartz Meadow Road, Wolf Creek roads, Falls Creek Road, and West Fork Road). The watersheds as a whole are largely lacking noxious weeds, but where they are present along the road corridors, they are abundant in places.

Map (see next page)



Map: Colorado Division of Water Resources (CDWR)

Additional information available at the meetings or on the Web site (as requested by the Workgroup):

- Detailed water quality information handout
- Maps
- Source Water Protection Plan
- USFS list of sensitive species
- Wildlife Handout

As of May 2010

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