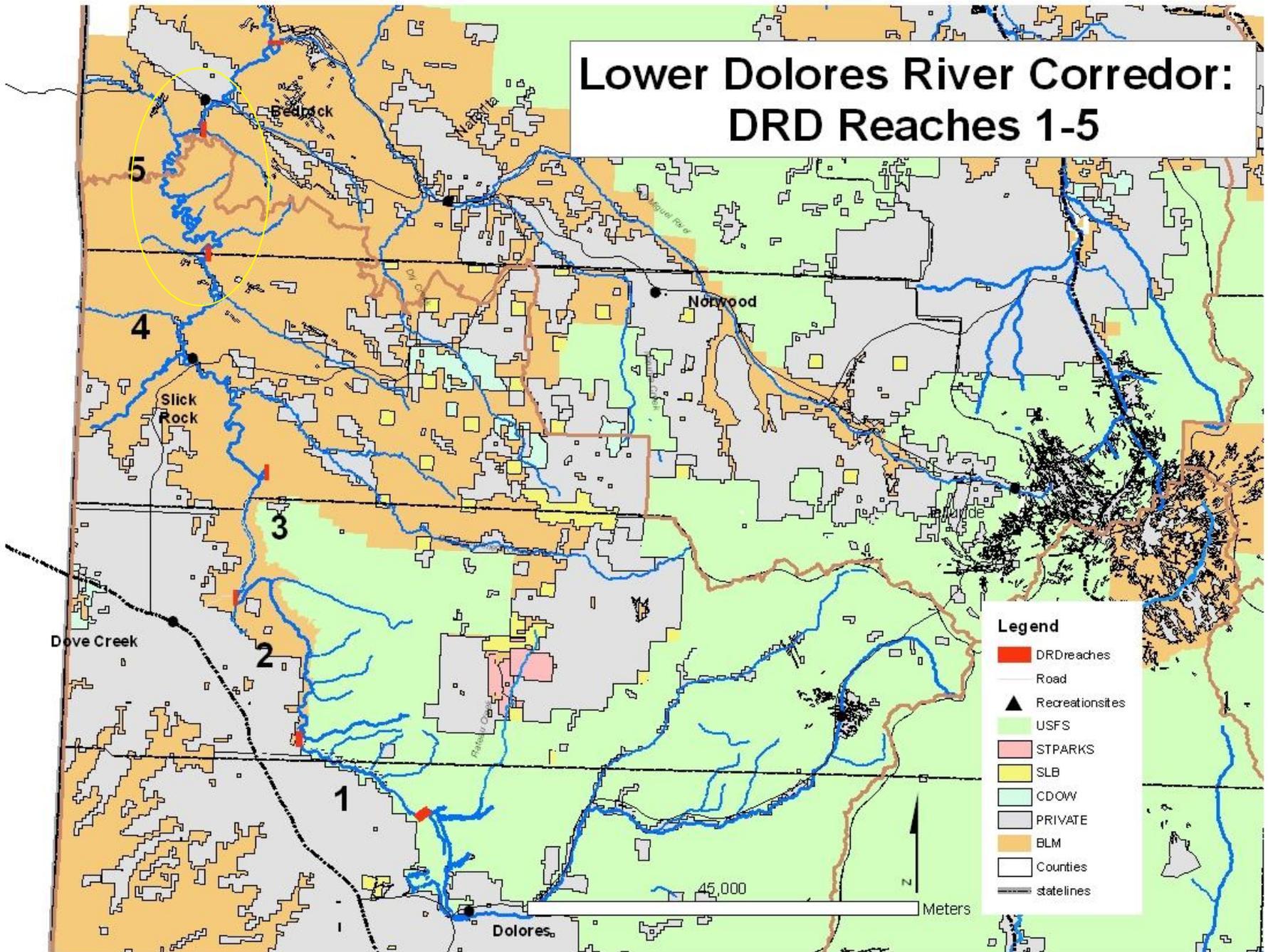
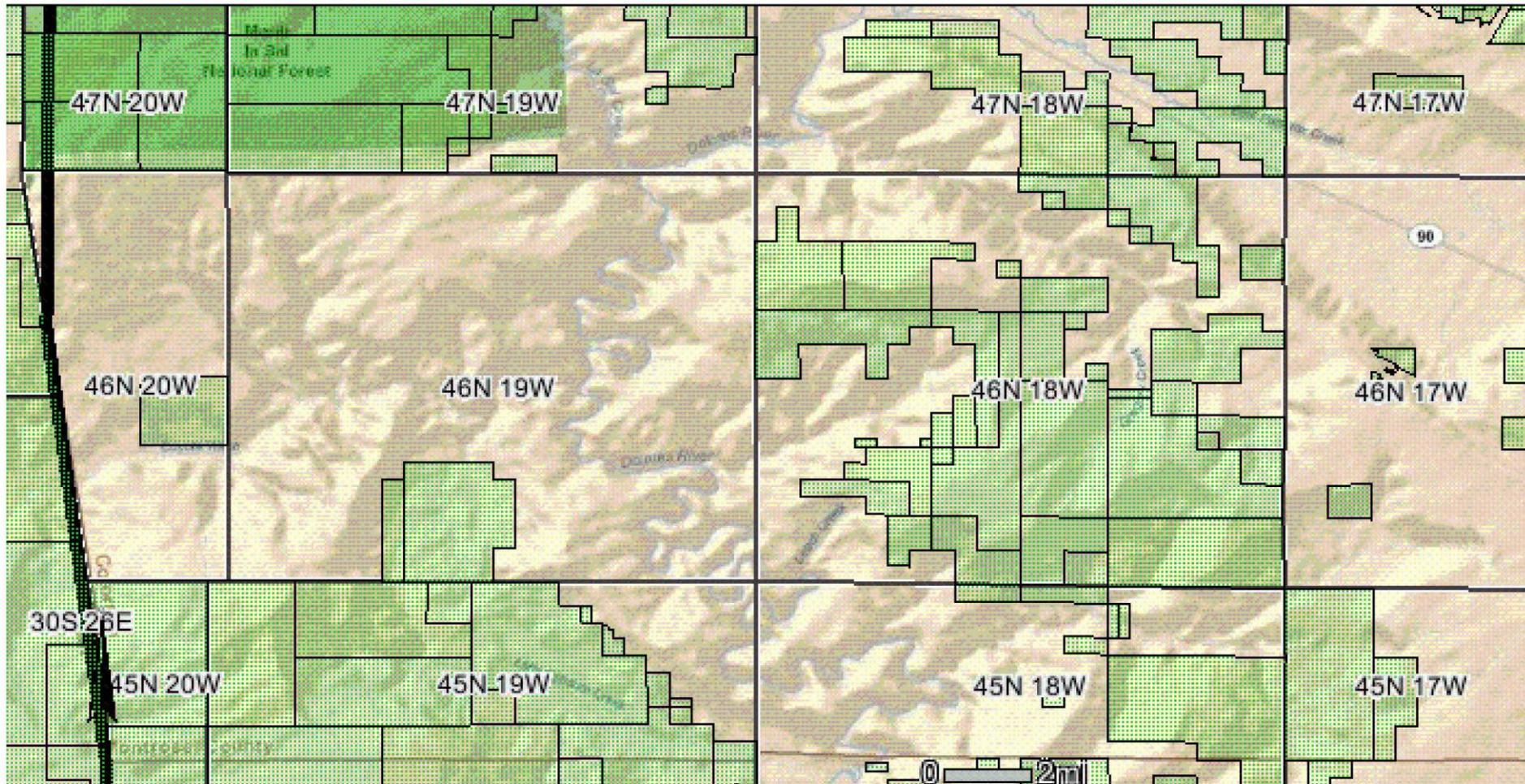


Lower Dolores River Corridor: DRD Reaches 1-5



Reach 5: Federal Oil and Gas Leases



(www.geocommunicator.gov/blmMap/ as of 9/6/09)



9/6/2009



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Reach 5: Current Management, Status and Concerns

Big Gypsum Valley Bridge to Wild
Steer Canyon

1990 Dolores River Corridor Plan

Overall Goals and Objectives

1. Protect and enhance the natural and cultural resources of the Corridor while allowing compatible uses.
2. Maintain or improve the existing quality of riparian and wildlife habitat by identifying and implementing management opportunities and strategies. Determine the present condition and ecological structure of riparian and aquatic communities. Identify areas which provide unique habitat features for species considered relic or unusual to region.
3. Provide full protection to threatened and endangered species. Determine distribution of and identify all areas that provide habitat for federally listed, state listed, and BLM sensitive species to ensure the continued existence of such species and the conservation of their habitats.
4. Coordinate with CDOW for management of wildlife and fisheries resources within the corridor.
5. Protect and enhance cultural resource values by identifying significant cultural resources and paleontological sites and performing necessary documentation. Identify and implement appropriate management actions.
6. Conduct planning for the Dolores River within a “regionalized system of rivers” context.
7. Maximize availability of impounded water released for river management opportunity by coordinating with DWCD.
8. Provide for recreational opportunities in the fall and winter seasons in addition to standard spring/summer activities.
9. Maintain primitive and semi-primitive experience opportunities by limiting and/or distributing visitor use and commercial guide/outfitter use.
10. Protect those public lands which are utilized intensively as recreational sites by exploring the need for and feasibility of withdrawing from mineral entry.
11. Develop recreation sites as prescribed in the Dolores Project ES, the Dolores River Downstream Site Report (as modified) and in accordance with BLM's MOU with BOR and USFS.
12. Minimize potential conflicts with recreational use of public lands by working closely with private landowners and users. Maintain options to develop BOR funded sites if private enterprise chooses to close area to public.
13. Ensure consistent and/or complementary management of adjacent lands, especially in terms of commercial use and facility maintenance/management by coordinating with the US Forest Service and the Lone Dome Mgt. Plan
14. Reaffirm BLM's support for the inclusion of the Dolores River into the Wild and Scenic Rivers System (as per recommendation in the 1976 Dolores River Wild and Scenic River Report). ***this objective was mistakenly omitted in the original handout***

Reach 5: DRD Science

Overview

- Within Dolores Canyon Wilderness Study Area (WSA) (28,539ac)
- Low gradient
- Highly sinuous
- Steep canyon walls
- Most only accessible by foot or boat
- Few to no trout
- Just upstream of Coyote Wash, riparian becomes dominated by tamarisk
- Cottonwoods not a major part of the main channel plant community

Summary:

- Irregular sediment transport (due to reduced high flows) reduces habitat and productivity of native warm water fish.
- Riparian changes at Coyote Wash: above - natives dominate, below- tamarisk dominates
- Warm water fish, both native and non-native, are difficult to monitor due to irregular flows. Management for “monitoring flows” important to improve understanding of composition, age class structure, recruitment, and population viability.

Top Research Needs:

- What is the community composition of fish populations in the canyon?
- How does sediment input from upstream affect habitat for native species?
- Are strategies for habitat improvements from Big Gypsum Valley applicable to the lower end of Reach 5?

Recent Partner Efforts:

- 2007 CDOW fish sampling through canyon
- 2009 Dolores River Restoration Partnership Implementation Plan

Reach 5: Wild and Scenic Eligibility Classifications

- **Reach 5 (Little Gypsum Bridge to where river exits the WSA) = “Wild”**
- **End of Reach 5 to Bedrock (~2.5 miles) = “Recreational”**
- **Coyote Wash (lower 7.6 miles) = “Wild”**
- **Bull Canyon (lower 1.4 miles) = “Wild”**
- **(upper 4.9 miles) = “Scenic”**

- **Recreational.** This type is most impacted by human activity. It is readily accessible by roads or railroads and may have had some impoundment or diversion in the past.
- **Scenic.** This type has had no impoundments. It is largely primitive and undeveloped. Nearby roads generally cross it and do not run parallel to it.
- **Wild.** This is the most natural WSR. There are no dams or impoundments. The water is unpolluted and the shoreline is primitive. Generally there are only trails in the corridor, not roads.

Outstandingly Remarkable Values (ORVs)

- ORV = a unique, rare or exemplary feature that is significant at a regional or national scale.
- Eligible streams = free-flowing and possess one or more ORV.

Reach 5: ORVs and Top Management Topics

- Recreation ORVs:
 - Rafting
 - Hike to pools (Bull Canyon segment)
 - Hike sandy wash (Coyote Wash segment)
- Archeology ORV
- Fish ORV
 - Roundtail Chub
- Ecological ORV
 - NM Privet
 - Eastwood's Monkey flower
 - Kachina Daisy (Coyote Wash segment)
- Scenary ORV (cliffs and linear canyons)
- Geology ORV (linear canyons)

- Significance
- Specific Goals/Objectives
- Current Management
- Status/Trends
- Problems/Concerns

Reach 5:

Questions for Consideration

- What is your input on the management goals and objectives? Are there goals or management objectives missing?
- What are your groups' ideas about how the DPLO should manage this reach?

Specifically address:

1. Similar to all reaches, should the outfitter and guide permits have reserved campsites?
 2. Should we withdraw lands in the Dolores River Wilderness Study Area from mineral entry? (this means they would no longer be available for oil/gas, uranium or other mineral exploration and extraction) or is a No Surface Occupancy Stipulation enough protection?
 3. Should the Big Gypsum Recreation site be maintained as is, improved, or decommissioned? This is one of the main boat launches servicing Reach 5.
 4. How should the Dolores Office coordinate river management with the downstream offices (Uncompahgre BLM (Montrose) and Grand Junction BLM)?
 5. If (when) tamarisk is removed from the main Dolores and associated tributaries; how active (or passive) should the subsequent restoration efforts be?
 6. How should the illegal OHV access into the Dolores Wilderness Study Area be managed/enforced? Coyote Wash, Bull Canyon, and areas west of Silvey's Pocket are being impacted.
 7. How should the cultural sites currently being impacted from rafters be protected?
 8. Should there be additional interpretation at Indian Henry's Cabin located in Bull Canyon?
 9. According to the 1990 Dolores River Corridor Plan, water managers is to provide a minimum raftable release of 800 cfs. How should the water managers balance both rafting with flushing flows for management of other resources (riparian, fisheries, etc.)?
 10. If you were granted one wish for the Dolores River, what would it be?
- Overall, what management/protection tools might be recommended in these reaches? (Especially "so as not to diminish" the ORV's)

Reach 5:

Current Management Objectives (1990 Plan)

- To be essentially free from human evidence.
- Motorized vehicle use prohibited in WSA.
- To maintain high probability of experiencing isolation from the sights and sounds of others, with not more than 3 group encounters per day between users.
- To ensure an environment which offers a high degree of risk and challenge, closeness to nature, and self-reliance.
- Backcountry use levels and management of resources will be dependent upon maintaining natural ecosystems which allow for natural ecological changes.
- Consumption of renewable resources will be managed subject to the protection of backcountry recreation values.
- Recreational activities occurring in this unit include river running, fishing, hiking, backpacking, horseback riding, hunting, picnicking, camping, viewing scenery, photography, and nature study.
- Frequency of managerial contact with users is very low.
- No-surface-occupancy stipulations.
- Will be managed consistent with criteria used to recommend “Wild” classification status as per the findings in the 1976 Dolores River Wild and Scenic Rivers Study Report.
- Management actions should consider potential impacts to future Wild and Scenic River Act designation possibilities.
- Continue to manage the Dolores River Canyon Wilderness Study Area consistent with BLM’s “Wilderness Interim Management Policy and Guidelines for Lands Under Wilderness Review” (IMP) until such time as Congress decides upon final wilderness designation or non-designation.

Rafting

Significance

- One of most popular and beautiful rafting areas in SW CO. Contains Class II and III rapids.
- Regionally significant for boating based on actual use and interviews with commercial providers.

Goals and Objectives Specific to Reach

- Maintain a high probability of experiencing isolation from the sights and sounds of others.
- Not more than 3 group encounters per day between users.
- Ensure an environment which offers a high degree of risk and challenge, closeness to nature and self reliance.

Current Management

- Resource Protection
 - Require all recreationists pack out their trash and use porta-potties.
 - Require fire pans and pack out ashes. No collecting of firewood, or driftwood for fires.
 - Continually monitor the river corridor during boating season; periodic patrols the rest of the year.
 - Implement temporary closure, rehabilitation, or rotation of use for campsites suffering abuse/resource damage.
 - Control non-native invasive plants along the river.
- Visitor Services
 - Intensive education/information to get voluntary compliance with carrying capacity guidelines.
 - Provide the Dolores River hot-line service and periodic news releases during boating season.
 - Cooperative agreements with local search/rescue groups to provide prompt, efficient attention to emergencies.
 - Require all boaters to register at put-ins.
 - Limit groups floating from Gypsum Valley to 16 persons.
 - 1 WSA float thru trip (launching above Slick Rock) of 16-25 persons allowed per week.
 - Campsites “first come/first serve”; with voluntary sign-up for campsites at river registers.
 - Groups must not enter the WSA portion of the canyon on a Friday or Saturday.
- Permits/Allocation of Use
 - Commercial outfitters permitted. Private boaters permits not required.
 - **Whitewater Season (April 1-June 18)**
 - Total weekly commercial allotment = 4 launches, with no >1 launch per day. Commercial launches assigned BLM ; allocated among 18 multi-year outfitters and 18 annual outfitters. No outfitter assigned >1 launch on any day.
 - 3 daily common pool launches available.
 - If resource damage occurs or carrying capacity limits are exceeded >20% of the days of the use season, private permits to be initiated.
 - **Low Water Season (June 19-March 31)**
 - Guaranteed weekly commercial allotment = 4 launches, with no >1 launch per day. Commercial launches assigned by BLM.
- No competitive events within the WSA.

Rafting

Current Management (continued)

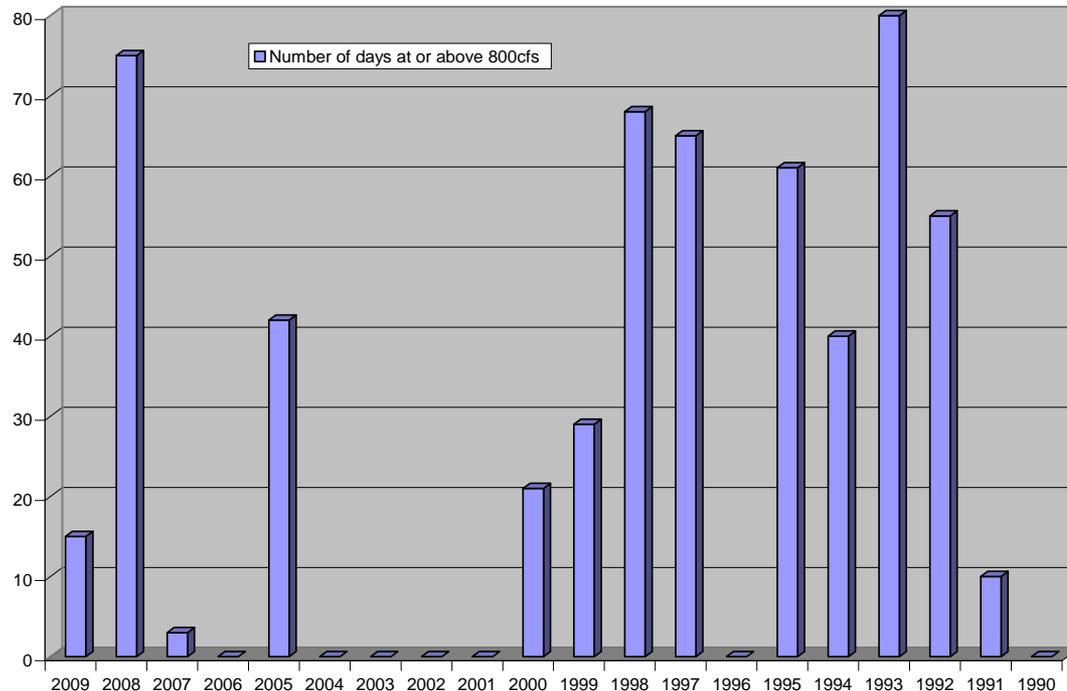
- Bureau of Reclamation
 - Fill reservoir when possible.
 - Manage excess supply for rafting
 - Provide a minimum raftable release of 800cfs as long as possible
 - Time peak cfs over Memorial Day
 - Managed spill ends when inflow = demand.
 - Use ramping to avoid stranding rafters

Status/Trends

- In 2008 (good rafting year):
 - Gypsum Valley had 114 launches (2nd only to Bradfield Bridge with 303). Slickrock: 139, Dove Creek Pumps: 74.
 - Seemed to be more campsites downstream of Coyote Wash.
 - Several reports/complaints of drunkenness, noise and late nights.
 - Several reports by large commercial groups of small groups using bigger sites and not being able to find commercial campsites.
- Changes in view of what constitutes a rafting day: BLM counts a rafting day as flow at or above 800cfs, some private rafters define a rafting day as 1000cfs with 2 weeks notice, etc.
- 16 commercial multi-year permits. Down from 31 in 1990 and 18 after implementation of 1990 plan. Surpasses demand.
- Level of river use very related to predictability (ie. 2005, 2008 good years for predictability = high spill years).
- Campsites tend to have time to recuperate (within a season and between seasons). Some even disappear due to changes in channel and changes in vegetation.

Rafting

Status/Trends



Problems/Concerns

- Social Carrying Capacity of the river: people being nice and ability to find campsites. Can reach “saturation” on weekends and holidays in a predictable flow year and in certain places, especially in WSA and at Bedrock take-out.
 - Coyote Wash one day there were seven groups camping, all in sight and sound of one another.
 - Complaints about loud parties and drinking, fireworks, and dogs running loose.
- Reports and observations of ATV use in Coyote Wash (within WSA): impacting pools and vegetation.
- Small groups using limited number of large campsites best suited to large (16 people) commercial trips.
- Historically, the attempt was made to provide the greatest flows on Memorial Day weekend. Scheduling peak releases prior to Memorial Day may help to alleviate overcrowding and the associated social and environmental impacts on Memorial Day (Ryan 2008).
- The boat takeout at Bedrock needs improvement.

Hiking in Bull Canyon and Coyote Wash

Significance

Bull Canyon

- Portions of Bull Canyon are within the WSA, offering outstanding recreation in an undeveloped setting.
- Pothole pools are unique and draw rafters to hike from the Dolores up to the pools.

Coyote Wash

- Flat sandy bottom of the wash, with the vertical canyon walls, offers a rare hiking experience in SW Colorado.
- Attracts hikers from nearby camping areas in Colorado (Silvey's Pocket) and Utah.
- Significant use by rafters who camp at the mouth of Coyote Wash and hike upstream in Coyote Wash.

Goals and Objectives Specific to Reach

- Maintain a high probability of experiencing isolation from the sights and sounds of others.
- Not more than 3 group encounters per day between users.
- Ensure an environment which offers a high degree of risk and challenge, closeness to nature and self reliance.

Current Management

- Lower portion of Bull Canyon is in Wilderness Study Area, and will be managed to retain its wilderness character.
- Resource Protection
 - Require all recreationists to pack out trash and use porta-potties.
 - Require fire pans and pack out ashes. No collecting of firewood, or driftwood for fires
 - Continually monitor the river corridor during boating season; periodic patrols the rest of the year.
 - Implement temporary closure, rehabilitation, or rotation of use for campsites suffering abuse/resource damage.
- Visitor Services
 - Intensive education/information to get voluntary compliance with carrying capacity guidelines.
 - Provide the Dolores River hot-line service and periodic news releases during boating season.
 - Cooperative agreements with local search/rescue groups to provide prompt, efficient attention to emergencies.
 - Require all boaters to register at put-ins.
 - Limit groups floating from Gypsum Valley to 16 persons.
 - 1 WSA float thru trip (launching above Slick Rock) of 16-25 persons allowed per week.
 - Campsites “first come/first serve”; with voluntary sign-up for campsites at river registers.
 - Groups must not enter the WSA portion of the canyon on a Friday or Saturday.

Hiking in Bull Canyon and Coyote Wash

Current Management (continued)

- Permits/Allocation of Use
 - Commercial outfitters permitted. Private boaters permits not required.
- **Whitewater Season (April 1-June 18)**
 - Total weekly commercial allotment = 4 launches, with no >1 launch per day. Commercial launches assigned BLM ; allocated among 18 multi-year outfitters and 18 annual outfitters. No outfitter assigned >1 launch on any day.
 - 3 daily common pool launches available.
 - If resource damage occurs or carrying capacity limits are exceeded >20% of the days of the use season, private permits to be initiated.
- **Low Water Season (June 19-March 31)**
 - Guaranteed weekly commercial allotment = 4 launches, with no >1 launch per day. Commercial launches assigned by BLM.
- No competitive events within the WSA.

Status/Trends

- Bull Canyon corridor contains 7.68 miles of local roads that are not maintained for passenger cars. (DLMP)
- Bull Canyon is within the Uravan mineral belt, but outside the Slickrock uranium district. There is active uranium-leasing in the vicinity. (DLMP)
- Oil and gas potential is high at the upper (non WSA) reaches of both Coyote Wash and Bull Canyon (DLMP)

Problems/Concerns

- “Social carrying capacity” : people being nice and ability to find campsites. These places can reach “saturation” on weekends and holidays in a predictable flow year.
- Careless OHV use is destroying pools and vegetation near Coyote Wash (issue voiced during LDPWG meeting)
- OHV drivers coming into WSA from Utah side.

Archeological Resources

Significance

- Rare and exemplary prehistoric archeological sites.
- At least 11,000 years of connection between the Dolores river and humans.
- Sacred sites (e.g. rock art panel at the mouth of Bull Canyon) .

Goals/Objectives Specific to Reach 5

- None.

Current Management

General

- Identify and evaluate all significant cultural resources along river and where access brings increased recreation.
- Protect from damage (e.g. visitation, trampling, camping, removal, or vandalism).
- Protect from effects of erosion or fluctuations in river flow.
- Develop and interpret for public education, enjoyment, and resource protection.
- Periodically monitor to assess cumulative impacts and track site condition.
- 1990 Corridor Plan outlined the following **Interim** management measures, pending completion of field work for an intensive inventory and development of a Cultural Resource Project Plan to present “specific site management prescriptions” and a Cultural Resource Synthesis report.

Reach Specific

- Shaman Cave (5MN72) needs to be tested to determine if intact subsurface deposits exist and what impact camping in this rock shelter has had. This is a popular protected campsite and has been recently vandalized. Pictographs and petroglyphs in the shelter need to be interpreted and a protective message conveyed to recreationalists.
- Large petroglyph panel (5MN3195) near Bull Canyon is near high-use campsite; should be interpreted and protected.
- Smiling Scorpion Shelter (5 MN73): take protective measures to reduce the levels of abrasion to petroglyphs. Poison ivy has grown into the shelter area and should be allowed to continue as a protective measure. Monitor to determine if natural forces will adequately protect site or if restrictions on visitation are needed.
- Coyote Wash campsite: interpret sites, including a small rock shelter and rock art site. Nearby lithic scatter (5MN75) is not suitable for interpretation, but should be mapped and collected to prevent damage from unauthorized removal. Establish a hiking trail up Coyote Wash to provide opportunities to view and interpret other cultural areas.
- Near Muleshoe Bend: petroglyph panel (5MN3249) and prehistoric campsite (5MN3202) should be interpreted and a protective message conveyed to visitors. Map and collect Site 5MN3202. Rock shelter area at 5MN3202 needs to be tested as it receives considerable recreation use as a campsite.
- La Sal Creek Petroglyphs (5MN439) need to be protected from continued abrasion from visitors and erosion, and intensively recorded using enhanced photographic techniques as many are barely visible now.

Archeological Resources

Status/Trends

- As of Toll 1977:
 - Little Gypsum Creek to La Sal Creek: 6 sites total: Site density lower here than anywhere else in the canyon. Two large overhang sites with rock art; 2 Anasazi sherds from different locations.
 - La Sal Creek to (+2.5km): 5 sites total: 2 with rock art.
- Cultural Resource Inventory, Cultural Resource Project Plan and Cultural Resource Synthesis report have not been completed due to lack of sufficient funding.
- Funding now secured to complete the field surveys, and field work began this season.
- In general, they are finding sites along the river corridor where they did not anticipate finding any (e.g. top of Andy's Mesa).

Problems/Concerns

- Impacts from recreaters and impacts from cattle.
- Disappearance of artifacts from both major and minor sites: at some sites, all the surface artifacts listed in site documents from 10 years ago have now vanished (McMillan 2009).
- Limited funding.
- Lack of thorough systematic survey (only ~3.6% of the 91 miles of Reaches 1-5 (McMillan 2009)).
- Lack of consistent monitoring (for many sites the most recent documentation was Toll 1977)

New Mexico Wild Privet

Significance

- G2 S2 rank (www.natureserve.org): Only known to occur in CO and UT. CO: only in Dolores River Basin.

Goals/Objectives Specific to Reach (1990 Plan)

- None

Current Management (1990 Plan)

General

- Inventory all riparian habitat.
- Initiate restoration activity on all degraded sites with good restoration potential.
- Apply stipulations and mitigating measures to all BLM actions to prevent /mitigate habitat degradation.
- Identify essential wildlife habitat in the corridor and monitor to ensure downward trends in condition do not develop.
- Cooperate with the recreation program to develop interpretive material and signs.

Specific: Riparian

- Evaluate and prioritize for future mgt. actions and monitoring.
- Monitor key riparian sites.
- Change management on all sites showing downward trend.
- Work with recreation program to inventory and document disturbance at heavily used sites.
- Determine acceptable levels and kinds of use at each site.
- Use appropriate management actions to improve riparian condition (e.g. designating campsites, trail closures).
- Manage grazing to maintain or improve the condition of the riparian community.

Status/Trends

- Common,
- Trends in condition/extent unknown.

Problems/Concerns

- Requires high water table (Lyon 2006)
- Changes in water table (Lyon 2006)
- Invasives (tamarisk and Russian knapweed)

Eastwood's Monkey Flower

Significance

- G3S1 (www.natureserve.org)
- Only found in canyon lands of the 4 Corners on Gunnison, Dolores, Colorado, and San Juan Rivers
- Known occurrences: CO ~ 8 with ~5000 plants; AZ ~ 5; UT ~ 10; Navajo ~ 1 discovered in 2002.
- BLM Sensitive Species

Goals/Objectives Specific to Reach (1990 Plan)

- None.

Current Management

- No specific management program.

Status/Trends

- Status: 2 occurrences in Reach 5: Coyote Wash and Slick Rock Canyon at Anderson Mesa
 - Slick Rock Canyon at Anderson Mesa = poor condition in 1999: only 6 plants (Lyon 1999).
- Trends: Unknown
- “Many hanging gardens in the Navajo Nation have been documented to be drying out; while this species is among the longest lasting plants in drought-stressed hanging gardens, continued drying will eventually cause extirpations (D. Roth, pers. comm. 2008). www.natureserve.org/

Problems/Concerns

- Difficult to access for monitoring.
- Drying of seeps supporting hanging gardens. Activities such as mining, energy development, water projects etc. could affect water supplies to habitat (www.natureserve.org).
- Invasive species, introduction on hiker's boots, etc.
- Disturbance of gardens by hikers climbing up washes and by subsequent erosion.

Kachina Daisy

Significance

- G2 S1 (www.natureserve.org)
- Estimated total number of plants: ~ 7600
- 12 occurrences from Manti-La Sal National Forest, UT (Franklin 1991); 3 from Colorado.
- BLM Sensitive Species
- Coyote Wash hosts CO's largest population

Goals/Objectives Specific to Reach (1990 Plan)

- None.

Current Management (1990 Mgt Plan)

- *Inventory and determine the distribution of federally and state listed species and candidates within the corridor.*
- *Monitor key habitat for federally and state listed species to determine if ongoing activities are having any impact.*
- *Monitor all known sites where federal candidate plant species have been documented.*
- *When funding is available, conduct inventories to determine distribution of candidate plant species.*
- However: as of 1993, no longer an ESA candidate species.

Status/Trends

- Status: 1 occurrence in Reach 5 in Coyote Wash
- Trends: unknown

Problems/Concerns

- Difficult to access for regular monitoring.
- Extremely small population size – low seed set (Allphin 2002).
- Drying of seeps supporting hanging gardens. Activities such as mining, energy development, water projects etc. could affect water supplies to habitat (www.natureserve.org).
- Invasive species, introduction on hiker's boots, etc.
- Disturbance of gardens by hikers climbing up washes and by subsequent erosion.

Roundtail Chub

Significance

- Absent from ~45% of historical range in upper Co River Basin (Bezzerrides and Bestsger 2002)
- BLM Sensitive Species List, State Species of Special Concern.
- Rangewide Conservation Agreement and Strategy by 5 States completed in 2006
- ESA petitions/finding

Goals/Objectives Specific to Reach

- CDOW
- BLM – none specific to reach

Current Management

General

- Inventory aquatic and riparian habitats to the Montrose District Boundary
- Identify essential wildlife habitat areas throughout corridor; monitor to ensure that downward trends do not develop.

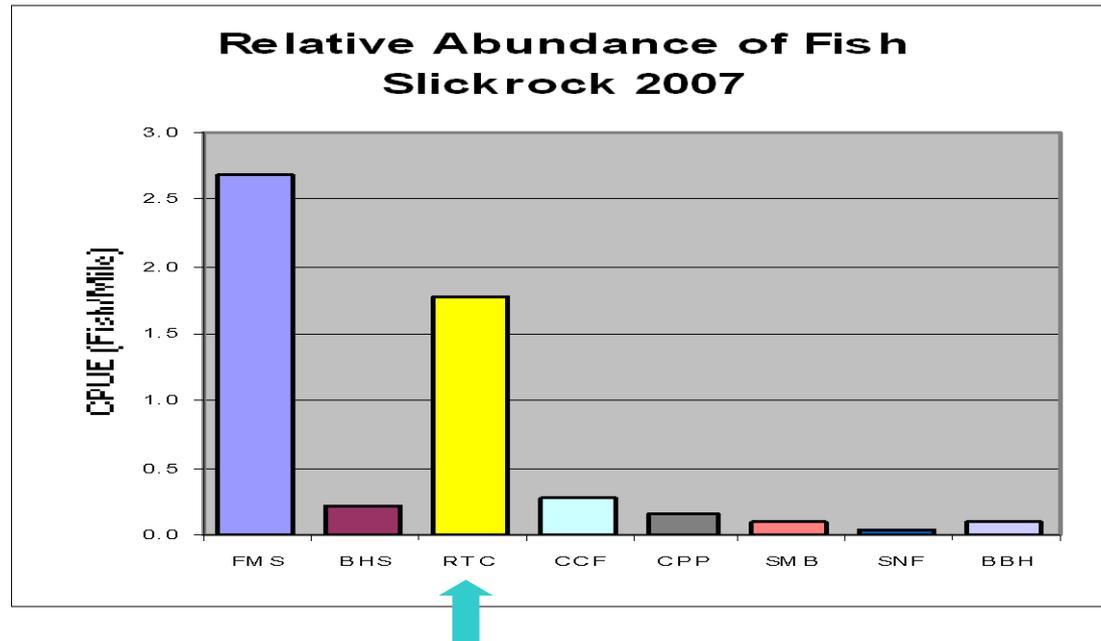
Specific to Aquatic Wildlife

- Inventory fishery habitat.
- Establish permanent aquatic habitat monitoring sites. At least 2 sites in warm water sections. Monitor at least once every 5 years.
- Develop agreement with CDOW to sample fish populations in the Dolores every 5 yrs

Roundtail Chub

Status/Trends

- Reach 5 ~ CDOW's Slickrock Canyon sampling reach (32 miles)
 - 2007 Inventory was a 1-pass effort conducted by Dan Kowalski (CDOW) in early June
 - Abundance of natives low but species composition was mostly native fish.



Problems/Concerns

- Difficult to monitor: Boat electrofishing is a poor estimator of RTC because relatively small and difficult to catch.
- Where are they spawning and what flows support success?
- Shortened spills and reduced baseflows are a concern. Water is the key to suitable habitat (deeper pools) and appropriate spawn timing (early summer).
- Predation by non-native fishes (e.g. small mouth bass)
- Declining native fish species in the Dolores River. Their needs must be addressed or there could be a federal Endangered Species listing.

Canyon Tree Frog

Significance

- Colorado Species of Special Concern
- BLM Sensitive Species
- Breed in canyon bottom pools often bounded by solid rock.

Goals/Objectives Specific to Reach

- BLM – none specific to reach

Current Management (1990 Plan)

General

- Inventory aquatic and riparian habitats to the Montrose District boundary.
- Identify essential wildlife habitat areas throughout the corridor and monitor them to ensure that downward trends in condition do not develop.

Specific to Aquatic Wildlife

- Establish permanent aquatic habitat monitoring sites. At least 2 sites in warm water sections. Monitor at least once every 5 years.

Status: 4 occurrences mapped in Reach 5

Trend: Unknown in Reach 5. Global Short Term Trend: No quantitative data but likely stable.
www.natureserve.org.

Problems/Concerns

- Specialist with narrow environmental requirements: needs temporary or permanent pools
www.natureserve.org.
- Amphibians can be sensitive to contaminants in water.

Geology

Significance

- Dramatic Cretaceous (dinosaur age) sandstone cliffs.
- Northerly flow is rare within the region and documents the uplift of Colorado Plateau and subsidence of the Paradox Basin.
- Action of the Dolores River to penetrate the caprock of the present-day cliffs and the linear flow pattern of its canyon demonstrate unusual rapidity of the area's tectonic processes and the speed of the corresponding downward cutting of the river.

Goals/Objectives

- Conduct paleontological overview of geological formations to determine scientifically important and interpretable fossil remains. Remains that are significant scientifically would be protected from unauthorized collection.

Current Management

- No surface occupancy stipulations for mineral leasing.
- Dinosaur tracks near La Sal Creek Rapid could be interpreted easily and are visited at moderate levels. Monitoring is also needed to evaluate impacts from visitation and if fossils are impacted. Protective measures may be needed.

Status/Trends

- Sheer-walled Wingate Sandstone, Kayenta Formation, and Navajo Sandstone with some Entrada Sandstone; and Morrison Formation above (Toll 1971)
- Geologic time...

Problems/Concerns

- Any?

Scenery

Significance

- Scenic values enhance and drive recreation.
- Cliffs, canyons

Goals/Objectives Specific to Reach

- none

Current Management

- No-surface-occupancy stipulations for mineral leasing
- No OHV use.
- No commercial gravel removal operations within the planning area.
- Control incompatible mineral exploration/extraction at Gypsum Valley and Bedrock recreation sites.

Status/Trends

- No sig. man-made changes to the scenery since 1990.

Problems/Concerns

- Incompatible mineral exploration/extraction at Bedrock rec. site.