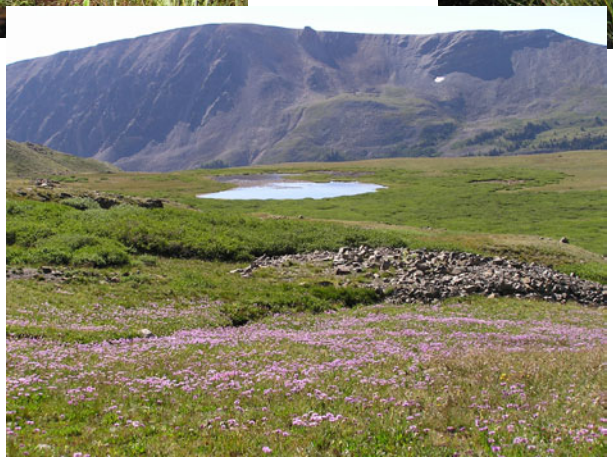
Survey of Critical Wetlands
Bureau of Land Management Lands
South Park, Park County, Colorado
2003-2004



Prepared for the
Royal Gorge Field Office
3170 East Main Street
Cañon City, CO 81212

September 2004

Colorado Natural Heritage Program
College of Natural Resources
8002 Campus Delivery
Colorado State University
Fort Collins, Colorado 80523-8002

Natural Heritage Program COLORADO

Colorado State University
Knowledge to Go Places

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Cover photographs: South Branch Creek, Link Ditch, and American Flats. Photos taken by Denise Culver

Acknowledgments

First and foremost I would like to thank Dave Gilbert and Jim Backstrand, Royal Gorge Field Office for their financial and technical support, as well as all of their hard work in the field (see opposite).

Secondly, I would like to express my gratitude for the opportunity to work in one of my favorite places. South Park is an extraordinary place from unique wetlands to high quality grasslands to the bristlecone pine forests to its alpine endemics. It is South Park's beauty and uniqueness that beckons even a reluctant ecologist to travel the backcounty "roads" seeking out its ecological treasures.

"*If ever there was a land of subtle, magnetic harms, South Park is that place."*
Virginia McConnell Simmons, *Bayou Salado.*

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Introduction

In 2003, the Colorado Natural Heritage Program (CNHP) and Colorado State University received funding from the Bureau of Land Management (BLM), Royal Gorge Field Office to survey critical wetlands located on BLM lands in South Park, Colorado. This report, *Survey of Critical Wetlands, Bureau of Land Management, South Park Colorado* is designed to serve as an addendum to *Mapping and Characterization of Mires and Fens in South Park, Park County, Colorado* (Johnson and Gerhardt 2002) conducted in the summer of 2001.

The rate of wetland loss in South Park is difficult to quantify, it is clear that many wetlands have been lost or profoundly altered from their pre-settlement state. Grazing, residential development, reservoirs, water diversions, and peat, mineral, and gravel mining have had many impacts on wetlands throughout South Park. Such activities have eliminated or altered some wetlands, and created other wetlands very different from those in existence prior to European settlement. South Park has been intensively studied due to the presence of unique and high quality wetland types, e.g., extreme rich fens (Cooper 1990, Sanderson and March 1996, Johnson 2000, Johnson and Gerhardt 2002, Johnson and Steingraber 2003), riparian areas (Kittel et al. 1998, Spackman et al. 1996), and playa wetlands. The goal of this project was to survey remaining parcels from the 2001-2002 project that were identified wetland/riparian areas so that proactive planning by land managers might prevent further loss or degradation of wetland/riparian habitat. During the field seasons of 2003 and 2004, CNHP surveyed a total of 31 parcels; nine were in Proper Functioning Condition, seven were Functioning At Risk, and 15 were Nonfunctional. A total of 498.15 acres were in Proper Functioning Condition, 121.99 acres were Functioning At Risk with a downward trend, and 160.88 acres were Nonfunctioning. Three globally vulnerable (G3) plant associations and six common (G4 and G5) plant associations were documented on 12 of the 31 parcels surveyed.

Methods

The Royal Gorge Field Office supplied updated maps and a list of prioritized parcels to be surveyed in 2003-2004 (Figure 1). A Proper Functioning Condition (PFC) form was completed for every parcel according to Process for Assessing Proper Functioning Condition for Lotic and Lentic Riparian-Wetland Areas (U.S.D.I. BLM 1994 and 1998). Colorado Division of Wildlife Riparian classification maps (Colorado Division of Wildlife 2004) and CNHP data (Colorado Natural Heritage Program 2004) were also used to prioritize BLM wetland and riparian parcels.

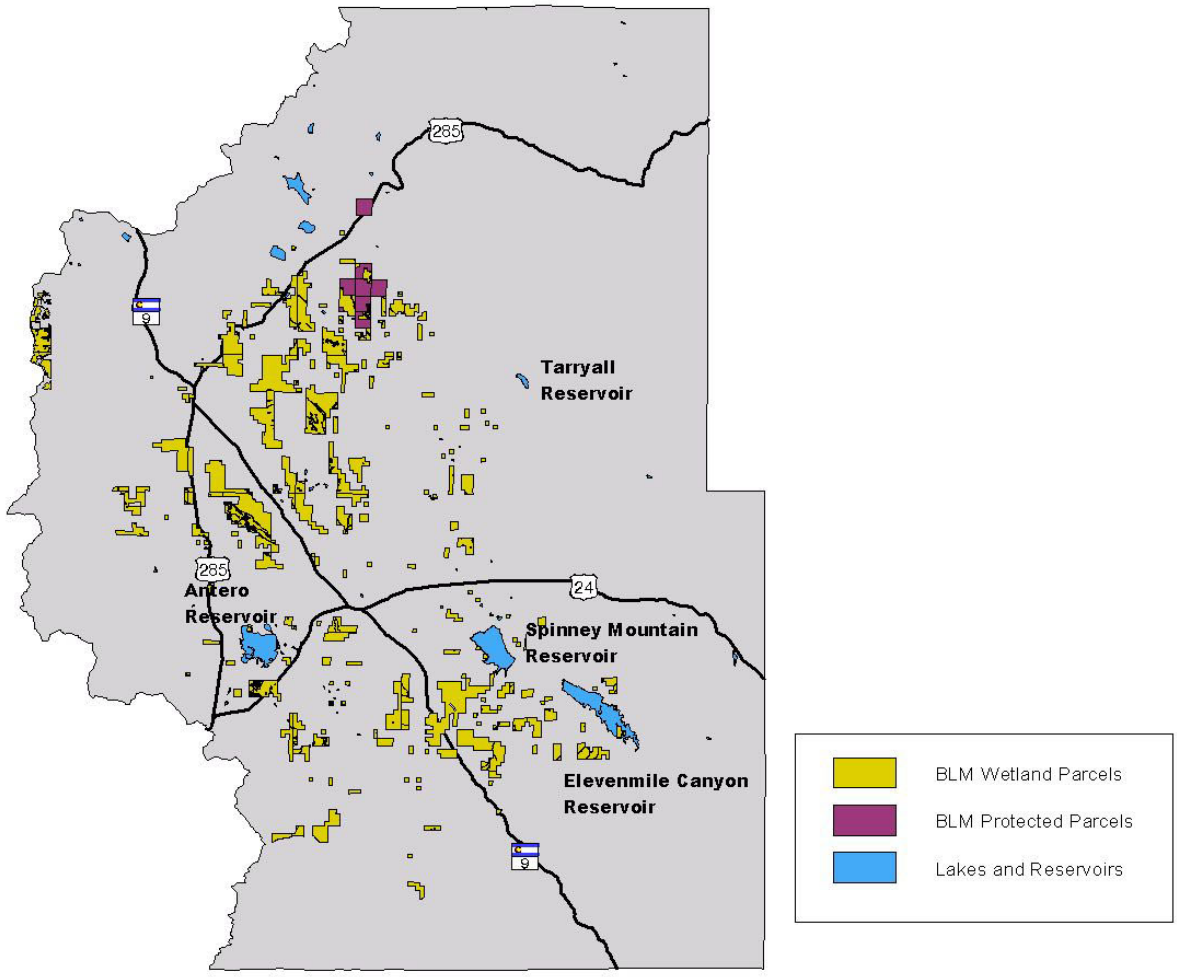

Figure 1. BLM wetland and riparian parcels located in South Park.

Information collected at each parcel included the items listed below. Each item is further described in the following sections.

1. PFC data;
2. General description of parcel and if a wetland/riparian habitat was present, a description of ecological processes, physical and biological disturbances, developments, use by wildlife or livestock and threatened, endangered and sensitive plants and noxious weeds were noted;
3. Classification of wetland and riparian plant associations (Carsey et al. 2003);
4. Classification of riparian vegetation class (Colorado Division of Wildlife 2004);
5. Stream channel classification (Rosgen 1996); and
6. Wetland indicator plants (U.S. Fish and Wildlife Service 1988).

Proper Functioning Condition

Proper Functioning Condition is a qualitative method for assessing the condition of riparian-wetland areas. It enables a consistent approach for considering hydrology, vegetation, and erosion attributes to assess riparian health. (U.S.D.I. BLM 1993). This method categorized wetlands-riparian areas into three major types:

- **Proper Functioning Condition (PFC)**— a wetland area that supports adequate vegetation, unaltered hydrology, and erosion/deposition features to dissipate floodwaters, stabilize streambanks, etc.
- **Functioning At Risk (FAR)**— a wetland area that is in functional condition but an existing soil, water, or vegetation attribute makes it susceptible to degradation.
- **Nonfunctional (NF)**— a wetland area that does not provide adequate vegetation, landform attributes to dissipate floodwaters, improve water quality, etc.

Colorado Natural Heritage Program Wetland and Riparian Plant Association Classification

The Comprehensive Statewide Wetlands Classification and Characterization (CSWCC) and the Field Guide to the Wetland and Riparian Plant Associations of Colorado (Carsey et al. 2003) are based on dominant vegetation. The CSWCC follows the U.S. National Vegetation Classification System, the national standard for classification and inventory (Anderson et al. 1998; Maybury 1999).

At each parcel that supported a PFC or FAR wetland or riparian area, the CSWCC was used to classify the plant association (element), designate the global and state rarity rank, and determine its element occurrence rank.

The Natural Heritage Ranking System

Key to the functioning of Natural Heritage Programs is the concept of setting priorities for gathering information and conducting inventories. The number of possible facts and

observations that can be gathered about the natural world is essentially limitless. The financial and human resources available to gather such information are not. Because biological inventories tend to be under-funded, there is a premium on devising systems that are both effective in providing information that meets users' needs and efficient in gathering that information. The cornerstone of Natural Heritage inventories is the use of a ranking system to achieve these twin objectives of effectiveness and efficiency.

Ranking species and ecological associations according to their imperilment status provides guidance for where Natural Heritage Programs should focus their information-gathering activities. For species deemed secure, only general information needs to be maintained by Natural Heritage Programs. Fortunately, the more common and secure species constitute the majority of most groups of organisms. On the other hand, for those species that are by their nature rare, more detailed information is needed. Because of these species' rarity, gathering comprehensive and detailed population data can be less daunting than gathering similarly comprehensive information on more abundant species.

To determine the status of species within Colorado, CNHP gathers information on plants, animals, and plant associations. Each of these elements of natural diversity is assigned a rank that indicates its relative degree of imperilment on a five-point scale (for example, 1 = extremely rare/imperiled, 5 = abundant/secure) (Table 1). The primary criterion for ranking elements is the number of occurrences (in other words, the number of known distinct localities or populations). This factor is weighted more heavily than other factors because an element found in one place is more imperiled than something found in twenty-one places. Also of importance are the size of the geographic range, the number of individuals, the trends in both population and distribution, identifiable threats, and the number of protected occurrences.

Element imperilment ranks are assigned both in terms of the element's degree of imperilment within Colorado (its State-rank or S-rank) and the element's imperilment over its entire range (its Global-rank or G-rank). Taken together, these two ranks indicate the degree of imperilment of an element.

Global imperilment ranks are based on the range-wide status of a species. State imperilment ranks are based on the status of a species in an individual state. State and Global ranks are denoted with an "S" or a "G" respectively, followed by a number or letter. These ranks should not be interpreted as legal designations.

Table 1. Definition of natural heritage imperilment ranks.

G/S1	Critically imperiled globally/state because of rarity (5 or fewer occurrences in the world/state; or 1,000 or fewer individuals), or because some factor of its biology makes it especially vulnerable to extinction.
G/S2	Imperiled globally/state because of rarity (6 to 20 occurrences, or 1,000 to 3,000 individuals), or because other factors demonstrably make it very vulnerable to extinction throughout its range.
G/S3	Vulnerable through its range or found locally in a restricted range (21 to 100 occurrences, or 3,000 to 10,000 individuals).
G/S4	Apparently secure globally/state, though it may be quite rare in parts of its range, especially at the periphery. Usually more than 100 occurrences and 10,000 individuals.
G/S5	Demonstrably secure globally/state, though it may be quite rare in parts of its range, especially at the periphery.
G/SX	Presumed extinct globally, or extirpated within the state.
G#?	Indicates uncertainty about an assigned global rank.
G/SU	Unable to assign rank due to lack of available information.
GQ	Indicates uncertainty about taxonomic status.
G/SH	Historically known, but usually not verified for an extended period of time.

Element Occurrences and their Ranking

Actual locations of elements, whether they are single organisms, populations, or plant associations, are referred to as element occurrences. The element occurrence is considered the most fundamental unit of conservation interest and is at the heart of the Natural Heritage Methodology. Whenever sufficient information is available, an element occurrence rank (EO-Rank) is assigned according to the ecological quality of the occurrences to prioritize element occurrences for a given species. This ranking system is designed to indicate which occurrences are the healthiest and most ecologically viable, thus focusing conservation efforts where they will be most successful. The EO-Rank is based on three factors:

- **Size**–a measure of the area or abundance of the element's occurrence, relative to other known, and/or presumed viable, examples. Takes into account factors such as area of occupancy, population abundance, population density, population fluctuation, and minimum dynamic area (which is the area needed to ensure survival or re-establishment of an element after natural disturbance).

- **Condition/Quality**–an integrated measure of the composition, structure, and biotic interactions that characterize the occurrence. This includes factors such as

reproduction, age structure, biological composition (such as the presence of non-native versus native species), structure (for example, canopy, understory, and ground cover in a forest community), and biotic interactions (such as levels of competition, predation, and disease).

- **Landscape Context**–an integrated measure of two factors: the dominant environmental regimes and processes that establish and maintain the element, and connectivity. Dominant environmental regimes and processes include herbivory, hydrologic and water chemistry regimes (surface and groundwater), geomorphic processes, climatic regimes (temperature and precipitation), fire regimes, and many kinds of natural disturbances. Connectivity includes such factors as a species having access to habitats and resources needed for life cycle completion, fragmentation of ecological associations and systems, and the ability of the species to respond to environmental change through dispersal, migration, or re-colonization.

Each of these three factors is rated on a scale of A through D, with A representing an excellent grade and D representing a poor grade. These grades are then averaged to determine an appropriate EO-Rank for the occurrence. If not enough information is available to rank an element occurrence, an EO-Rank of E is assigned. EO-Ranks and their definitions are summarized in Table 2.

CNHP tracks all natural communities, however only the best known or highest quality occurrences of common plant communities (G4 and G5) will be prioritized for data entry (Table 3).

Table 2. Element occurrence ranks and their definitions.

A	Excellent viability.
B	Good viability
C	Fair viability.
D	Poor viability.
H	Historic: known from historical record, but not verified for an extended period of time.
X	Extirpated (extinct within the state).
E	Extant: the occurrence does exist but not enough information is available to rank.
F	Failed to find: the occurrence could not be relocated.

Table 3. Element tracking guidelines for plant communities.

	Element Occurrence Rank to be Tracked			
Global Rank	A	B	C	D
G1,G2,G3,GU,G?	■	■	■	■
G4,G5	▭	▭	▭	▭

■ = Track All EO's

▭ = Track only if it is the highest ranking occurrence known in the study area.

Colorado Division of Wildlife Riparian Classification

In 1998, the Colorado Division of Wildlife mapped South Park's wetland and riparian vegetation in collaboration with CNHP (Hupalo et al. 1999). These maps were used during this survey as additional tools for identification of wetland and riparian habitats located on BLM lands.

For each vegetation class (Table 4), a single label indicates that the class is dominant and comprises at least 75% or more of the vegetation. Other vegetation may be present but at less than the Minimum Mapping Unit (MMU) of 1/2 acre. Mixed communities consist of classes that are less than 75% cover with a lesser amount of one or more vegetation classes. The dominant type is annotated first with the lesser type following. For example, if a polygon is attributed as RT1/RS1, the vegetation in the area is less than 75% dominant of any particular class but is a mixed community of Aspen and Willow with Aspen dominant between the two classes. A forward slash (/) is used to separate the dominant/subdominant classes both on the hard copy and within the digital data (Colorado Division of Wildlife 2004).

Table 4. Riparian Mapping Classification (CDOW 2004).

CATEGORY	MAP CODE
RIPARIAN DECIDUOUS TREES	
Riparian Deciduous Tree-General	RT
Riparian Deciduous Tree-Aspen	RT1
Riparian Deciduous Tree-Cottonwood	RT2
Riparian Deciduous Tree—Russian Olive	RT3
Riparian Deciduous Tree-Birch	RT4
Riparian Deciduous Tree-Boxelder	RT5
Riparian Deciduous Tree-Green Ash	RT6
Riparian Deciduous Tree-Mulberry	RT7
RIPARIAN EVERGREEN	
Riparian Evergreen Tree-General	RE
Riparian Evergreen Tree-Blue Spruce	RE1
Riparian Evergreen Tree-Engelmann Spruce	RE2
Riparian Evergreen Tree-Douglas Fir	RE3
Riparian Evergreen Tree—Lodgepole Pine	RE4
Riparian Evergreen Tree-Spruce/Fir	RE5
Riparian Evergreen Tree-Ponderosa Pine	RE6
Riparian Evergreen Tree-Cedar/Juniper	RE7
Riparian Evergreen Tree-Pinon/Juniper	RE8
RIPARIAN SHRUBS	
Riparian Shrub-General	RS
Riparian Shrub-Willow	RS1
Riparian Shrub-Tamarisk	RS2
Riparian Shrub-Alpine Willow	RS3
Riparian Shrub-Gambels Oak	RS4
Riparian Shrub-Sagebrush	RS5
RIPARIAN HERBACEOUS	
Riparian Herbaceous-General	RH

CATEGORY	MAP CODE
Riparian Herbaceous-Cattails/Sedges/Rushes (with permanent standing water	RH1
Riparian Herbaceous-Sedges/Rushes/Mesic Grasses (Waterlogged or Moist Soils)	RH2
WATER BODIES	
Open Water-Standing	OW1
Open Water-Riverine	OW2
Open Water-Canal	OW3
OTHER RIPARIAN	
Unvegetated	NV
Sandbar	SB
NON-RIPARIAN	
Upland Tree	UT
Upland Shrub	US
Upland Grass	UG

Rosgen Stream Classification

The Rosgen Stream Classification System (Rosgen 1996) was used on parcels supporting riparian habitats. The Classification System categorizes streams based on channel morphology so that consistent, reproducible, and quantitative descriptions can be made (Figure 2).

The Rosgen stream classification consists of four levels of detail ranging from broad qualitative descriptions to detailed quantitative assessments. Figure 2 illustrates the hierarchy (Levels I through IV) of the Rosgen classification inventory and assessment.

- **Level I--**a geomorphic characterization that categorizes streams as A, B, C, D, DA, E, F, or G.
- **Level II--**called the morphological description and requires field measurements. For this project, Level I classification was used to classify the stream for riparian areas.
- **Level II--**assigns a number (1 through 6) to each stream type describing the dominant bed material. Level III is an evaluation of the stream condition and it's stability. This requires an assessment and prediction of channel erosion, riparian condition, channel modification, and other characteristics.
- **Level IV**--verification of predictions made in Level III and consists of sediment transport, stream flow, and stability measurements.

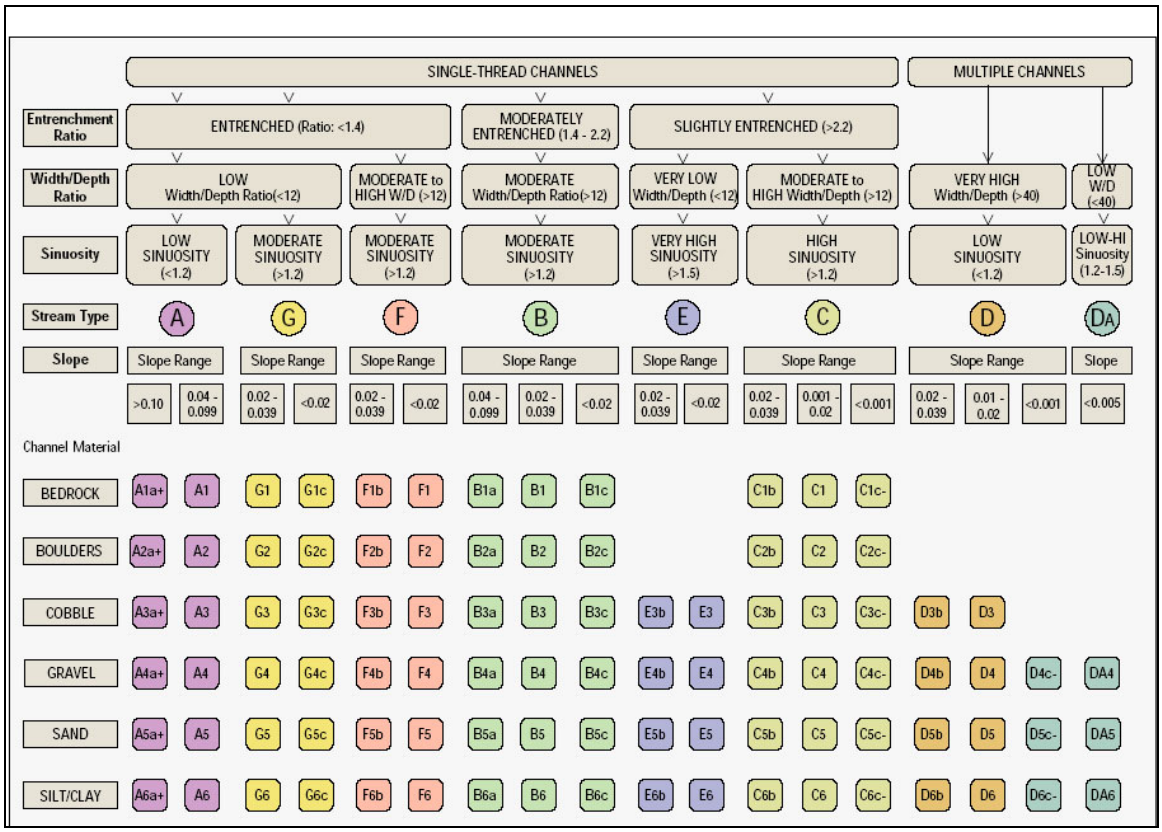

Figure 2. Flow chart for Rosgen Stream Classification (Rosgen 1996).

U.S. Fish and Wildlife Service Wetland Indicator Status

Each parcel that supported wetland or riparian habitat, a list of dominant, wetland-dependent plants were noted and assigned a Wetland Indicator Status (Table 5) (U.S. Fish and Wildlife Service 1988). Wetland Indicator Status reflects the range of estimated probabilities (expressed as a frequency of occurrence) of a species occurring in wetlands versus non-wetland. A frequency of 67%-99% (Facultative Wetland), for example, means that 67%-99% of sample plots containing the species randomly selected across the range of the species would be wetland (U.S. Fish and Wildlife Service 1988).

Table 5. USFWS Indicator Categories for vascular plant species that occur in wetlands (U.S. Fish and Wildlife Service 1988).

Indicator categories		
Code	**Wetland Type**	**Comment**
OBL	Obligate Wetland	Occurs almost always (estimated probability 99%) under natural conditions in wetlands.
FACW	Facultative Wetland	Usually occurs in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.
FAC	Facultative	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
FACU	Facultative Upland	Usually occurs in non-wetlands (estimated probability 67%-99%), but occasionally found on wetlands (estimated probability 1%-33%).
UPL	Obligate Upland	Occurs in wetlands in another region, but occurs almost always (estimated probability 99%) under natural conditions in non-wetlands in the regions specified.

Results

Thirty one BLM parcels were surveyed during September 2003, July 2004, and August 2004. Nine were determined to be Proper Functioning Condition (Table 7), seven were Functioning At Risk (Table 8), and 15 were Nonfunctional (Table) (Figure 3). A Proper Functioning Condition form was completed for all parcels (Appendix A).

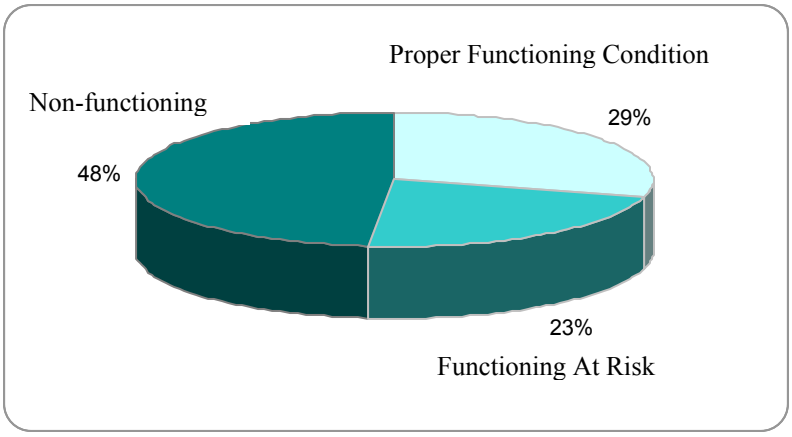

Figure 3. Summary of Proper Functioning Condition analysis.

The total wetland-riparian acres surveyed was 781.02. Sixty three percent (498.15 acres), were in Proper Functioning Condition, 16% (121.99 acres) were Functioning At Risk with downward trends, and 21% (160.88 acres) were Nonfunctioning (Figure 4).

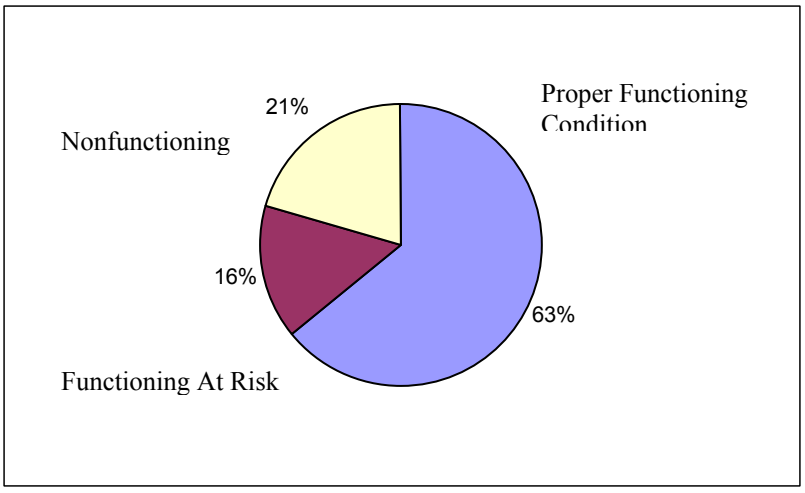

Figure 4. Summary of riparian acres surveyed.

Nine CNHP plant associations were identified on 12 parcels (Table 6). Global and State rank are explained in Methodology Section.

Table 6. CNHP Plant Communities within BLM Parcels.

CNHP Plant Community	**Global/ State Rank**	**BLM Parcel**	**PFC Rating**	**Element Occurrence Rank**
Glaux maritima	G3/S2	#110,112,113 Playa Lakes at Park Gulch #126 Playa Lakes	FAR PFC	B B
Dasiphora floribunda/ *Juncus balticus*	G3/S3	#97 Packer/Tarryall Road	FAR	C
Salix monticola/ mesic graminoids	G3/S3	#78 Sheep Creek #99 Tarryall Road East	PFC PFC	B C
Carex nebrascensis	G4/S3	#94 Finger Fens	PFC	B
Deschampsia cespitosa	G4/S4	#96 Link Ditch/Tarryall Fen	PFC	B
Salix brachycarpa/ mesic forb	G4/S4	#82,86,87 Mosquito Range ACEC	PFC	A
Salix planifolia/ *Carex aquatilis*	G4/S4	#82,86,87 Mosquito Range ACEC #88 American Flats	PFC PFC	A
Juncus balticus	G5/S5	#96 Link Ditch/Tarryall Fen #100 South Branch Creek #111 Park Gulch #139 James M. Jones SWA	PFC FAR FAR FAR	B D C D
Carex utriculata	G5/S5	#96 Link Ditch/Tarryall Fen	PFC	C

Discussion

The *Survey for Critical Wetlands in South Park 2003-2004* project identified 52% of the BLM parcels as being either Proper Functioning Condition or Functioning At Risk. Although this is only half of the total parcels surveyed, when viewed in context with past and current impacts, this percentage is notable. Taking another view, 63% of the 781.02 total wetland-riparian acres surveyed were documented as Proper Functioning Condition. This percentage demonstrates that a significant majority of BLM acres in South Park are functioning properly.

In contrast, 58% of the parcels were determined to be Nonfunctioning. A factor to be taken into account is that the majority of the Nonfunctioning parcels were previously misidentified as wetland-riparian habitats. The remaining Nonfunctioning parcels did, at one time, contain wetland-riparian habitat but have been so severely impacted by improper grazing management and/or hydrological alterations that the wetlands are Nonfunctioning.

The survey did not find additional occurrences of extreme rich fens. The survey did identify excellent to good occurrences of common plant associations that can serve as priorities for management decisions and ACEC designations. In particular, the playa lakes located on two BLM parcels are a very important component to the biodiversity of not only South Park, but also of the State of Colorado since the majority of Colorado's playas have either been converted to marsh wetlands or impacted by agricultural activities.

The Tarryall River supports good occurrences of common wetland-riparian plant communities and intact hydrology compared to the wetlands below the Tarryall Reservoir. There are very few highly functioning wetlands along the Tarryall River. These parcels deserve management attention, especially due to the threats from proposed Front Range water diversions.

The wetland parcels located within the Mosquito Range ACEC are unique because they support not only pristine alpine wetlands, but also globally rare and endemic upland plants. However, these parcels are not without significant threats. Privately held mine in-holdings have the potential to affect the wetlands directly through additional roads, and indirectly through changes to the water chemistry in mine tailing run-off. Off road travel by 4WDs is currently creating numerous two-tracks, resulting in increased erosion and inappropriate off-road travel (i.e., once a two-track has been created by one vehicle, subsequent vehicles are encouraged to follow).

Table 7. Proper Functioning Condition Parcels 2003-2004.										
Map ID	**Date Visited**	**PFC Done**	**Name**	**Habitat**	**Township**	**Range**	**Section**	**Riparian Acres**	**PFC Condition**	**Comments**
78	9/19/03	x	Sheep Creek	Riparian/Montane Grassland	11S	78W	2, 11	24.11	PFC	
82, 86, 87	7/21/04	x	Mosquito Range ACEC	Riparian/Wetland/T&E Plants	9S	79W	1, 2	83.8	PFC	high elevation, only threat mining claims
88	7/21/04	x	American Flats	Riparian/Wetland/ Aquatic/T&E Plants	9S	79W	12	28.36	PFC	alpine wetland
94	9/3/03	x	Park Gulch #1/Finger Fens	Fen/Mire/Riparian/ Mt.Plover/Montane Grassland/T&E Plants	8S	76W	34, 35	32.56	PFC	need grazing improvments
96	9/17/03	x	Link Ditch/Tarryall Fen	Fen/Mire/Riparian/ Mt.Plover/Montane Grassland/T&E Plants	8S	75W	31,6	89.71	PFC	wet meadow associated with Tarryall River
99	7/22/04	x	Tarryall Road East		9S	75W	2	4.89	PFC	water ownership questions
119	9/17/03	x	Indian Gulch	Riparian/Montane Grassland	9S	75W	27, 28	9.74	PFC	Lentic wetland
126	8/10/04	x	Playa Lakes Area	Riparian/Mt.Plover/ Montane Grassland	10S	76W	11, 14	147.58	PFC	need grazing improvments
149	7/23/04	x	Trout Creek Pond	Wetland/T&E Plants	10S 11S	77W 76W	33 4	77.4	PFC	upstream grazing adding sediment
Total Acres								498.15		

Table 8. Functioning At Risk Parcels 2003-2004.											
Map ID	**Date Visited**	**PFC Done**	**Name**	**Habitat**	**Township**	**Range**	**Section**	**Riparian Acres**	**PFC Condition**	**Trend**	**Comments**
48	8/10/2004	x	Agate Creek	Riparian/Mt.Plover/ Montane Grassland	13S	76W	24	32.29	FAR	Down	Dry gulch, improper grazing
66	7/26/04	x	Buffalo Gulch	Riparian/Mt.Plover/ Montane Grassland	14S	74W	19	2.97	FAR	Down	mesic not wetland, grazed heavily
97	7/20/04	x	Packer/Tarryall Road	Riparian/Montane Grassland	8S	75W	34, 35	1.47	FAR	Not apparent	Baltic rush with shrubby cinquefoil, wet soils, spring fed, next to county roads
100	7/22/04	x	S. Branch Creek	Riparian/Montane Grassland	9S	76W	5	3.99	FAR	Down	improper grazing
110, 112, 113	9/17/03	x	Playa Lakes at Park Gulch	Riparian/Aquatic/ Mt.Plover/Montane Grassland	9S	75W, 76W	18, 19 13,24, 25	53.89	FAR	Down	grazing problems
111	9/16/03	x	Park Gulch #2	Riparian/Mt.Plover/ Montane Grassland	9S	76W	3	25.42	FAR	Down	old placer tailings, grazing problems
139	9/18/03	x	James M. Jones SWA	Riparian/Mt.Plover/ Montane Grassland	10S	76W	24	1.96	FAR	Down	improper grazing
Total Acres								121.99			

Table 9. Nonfunctioning Condition Parcels 2003-2004.

Map ID	Date Visited	PFC Done	Name	Habitat	Township	Range	Section	Riparian Acres	PFC Condition	Comments
20	7/23/04	x	South Antero Reservoir	Wetland/ Mt.Plover/W.Snowy Plover/ Montane Grassland	13S	76W	4,5	33.37	NF	no water, no wetland plants, exchange w/ denver water in progress
36, 37, 39	7/26/04	x	Cross Creek, Threemile Creek	Riparian/ Mt.Plover/ Montane Grassland	13S	73W	8, 16	11.05	NF	no wetland, places where there are cracks, likely holds some water during summer thunderstorms
50	7/26/04	x	Dry Gulch/ Gilead Creek	Riparian/Mt.Plover/ Montane Grassland	13S	73W	25,26,27	8.33	NF	no water, wetland plants, or soils
81	9/19/03	x	Twelvemile Creek	Riparian/Wetland/ Montane Grassland	11S	78W	13, 14	4.29	NF	no water, wetland plants, or soils
90	7/20/04	x	Fremont Ditch	Riparian/Montane Grassland	9S	76W	22	5.51	NF	no wetland in parcel, present grazing and past gravel mining
91, 92	7/20/04	x	Randall Ditch at Packer Road	Mire/Mt.Plover/ Montane Grassland/ T&E Plants	8S	75W	19, 29	3	NF	no wetland in parcel, present grazing
95	7/22/04	X	O'Neil Ditch	Riparian/ Montane Grassland	8S	76W	33	21.89	NF	ditch is vegetated with shrubby cinquefoil, soils are moist not hydric. No water and no obligate wetland plants.
106	7/21/04	x	Red Mountain Pass	Riparian/Mt.Plover/ Montane Grassland/T&E Plants	9S	75W	7	13.69	NF	no wetlands, subalpine fir with aspen
116	7/21/04	x	Trout Creek/CR 7	Riparian/Mt.Plover/ Montane Grassland	9S	76W	18	0.11	NF	no wetland, short grass prairie
120	9/17/03	x	Indian Hills Spring	Riparian/Montane Grassland	9S	75W	22	9.56	NF	no wetland
148	7/28/04	x	Steel Gulch	Riparian/Mt.Plover/ Montane Grassland	11S	74W	4, 32	3.08	NF	no water, wetland plants, or soils
150, 156	7/28/04	x	Sevenmile Gulch	Riparian/Mt.Plover/ Montane Grassland	11S	75W	6, 18	25.62	NF	no water, wetland plants, or soils

Map ID	Date Visited	PFC Done	Name	Habitat	Township	Range	Section	Riparian Acres	PFC Condition	Comments
159	8/11/04	x	Black Mountain	Riparian/Mt.Plover/ Montane Grassland/ T&E Plants	11S	77W	15	20.33	NF	no water, wetland plants, or soils
173	8/11/04	x	Buffalo Spring	Riparian/Upland/ T&E Plants	12S	77W	2	0.61	NF	no water, wetland plants, or soils
175	7/26/04	x	Sulphur Mountain	Riparian/Mt.Plover/ Montane Grassland	12S	74W	4	0.44	NF	no water, wetland plants, or soils
Total Acres								160.88		

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Appendix A
Proper Functioning Condition Forms

South Antero Reservoir BLM #20 Nonfunctional

Standard Checklist

Park County
Quadrangle: Antero Reservoir Quadrangle Code: 3810588
T13S R76W Sections 4, 5
UTMs: not recorded
Elevation: 8,960 feet
Date: July 23, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shortgrass prairie with shallow swales.
Plants: *Juncus balticus*
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: upland grass, non-vegetated, riparian herb
Rosgen Classification: N/A

	OBL	FACW	FAC	FACU
Juncus balticus		X		

Summary Determination

Functional Rating:

Nonfunctional X

Cross Creek and Three-mile Creek BLM #36, #37, and #39 Nonfunctional

Standard Checklist

Park County
Quadrangle: Spinney Mountain Quadrangle Code: 3810585
T13S R73W Sections 8, 16, 17
UTMs: not recorded
Elevation: 8760 feet
Dates: July 23 and July 26, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shortgrass prairie
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: upland grass/riparian herb 1
Rosgen Classification: N/A

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Dry playas at Three Mile Creek

Dry Playa at Three Mile Creek

Dry gully at Cross Creek

Agate Creek BLM #48
Functioning at Risk

Standard Checklist

Park County
Quadrangle: Antero Reservoir NE Quadrangle Code: 3810587
T13S R76W Section24
UTMs: 13S 0427376 4306054
Elevation 9,107 feet
Date August 10, 2004

ID Team Observers: Culver, March, Eastin

Yes	No	N/A	HYDROLOGY
	X		1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
	X		4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: At time of survey, gulley was dry. Gully is 6 feet wide and 4 feet deep in places. Currently there are wetland plants that provide some bank stabilization, but the hydrology is completely altered due to improper grazing and water retention ponds.
Soils: clayey, no evidence of saturation Plants: dominated by *Critesion jubatum* *Artemisia frigida*, *Argentina anserine*, *Festuca arizonica*, *Breea arvensis*, and *Salsola australis*
pH/conductivity: no water

CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Classification: G Type

	OBL	FACW	FAC	FACU
Argentina anserina	X			
Breea arvensis				X
Salsola australis				X
Critesion jubatum			X	

Summary Determination

Functional Rating:

Proper Functioning Condition_____

Functional-At Risk * X

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____Downward _____X_____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes___X_____No _____

If yes, what are those factors?

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Improper grazing, agriculture activities, hydrological alteration

Capability

The parcel is located adjacent to private land that appears to have ditched Agate Creek above BLM property. Currently, this parcel is at risk, due to the hydrology (or lack of).

Potential

The goal for this parcel is to restore the hydrology, remove the noxious weeds and allow native wetland plants to recolonize.

Agate Creek dry gully

Dry Gulch/Gilead Creek BLM #50 Nonfunctional

Standard Checklist

Park County
Quadrangle: Spinney Mountain Quadrangle Code: 3810585
T13S R73W Sections 25, 26, 27
UTMs: not recorded
Elevation 8,800 feet
Date July 26, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Dry gulch, no water, entrenched gully with eroded banks
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Stream Classification: N/A

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Gilead Creek

Dry Creek

Buffalo Gulch BLM #66
Functioning At Risk

Standard Checklist

Park County
Quadrangle Dicks Peak Quadrangle Code: 3810576
T14S R74W Section 19
UTMs 13S 0437993 4297065
Elevation 9,580 feet
Date July 26, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
	X		1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
	X		4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
	X		12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shallow gully, 10-12 feet wide, 6 feet deep along some stretches. Evidence of heavy grazing.
Soils: loamy, no hydric soils.
Plants: Dominated by *Juncus balticus* with *Achillea millefolium*, *Critesion jubatum*, and *Deschampsia cespitosa.*

CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Achillea millefolium				X
Deschampsia cespitosa		X		
Juncus balticus		X		
Critesion jubatum			X	

Summary Determination

Functional Rating:

Proper Functioning Condition_____

Functional-At Risk * _____X_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

_____

Upward _____Downward _____X_____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes___X_____No _____

If yes, what are those factors?

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Improper grazing, agriculture activities, hydrological alteration

Capability

The riparian area has been degraded via hydrologic alterations and grazing. With current management, this parcel will continue to decline.

Potential

The goal for this parcel is to restore the hydrology, remove the noxious weeds and allow native wetland plants to recolonize.

Buffalo Gulch

Sheep Creek BLM #78
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Jones Hill Quadrangle Code: 3910611
Quadrangle: Fairplay West Quadrangle Code: 3910621
T11S R78W Section 11 and 2
UTMs: 13S 4331325 406614
Elevation: 10,053 ft.
Date: September 19, 2003

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
X			2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows

X			12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Meandering stream with several streamlets. Evidence of beaver, deer, and elk. No obvious signs of cattle or sheep grazing. BLM section of wetland approx 0.5 mile of Sheep Creek. Private property up and downstream. This parcel was one of the best examples of an intact, albeit small, riparian area in South Park.
Soils: sandy loam with evidence of flooding
Plants: *Salix monticola* 15%, *Salix planifolia* 10%, *Salix brachycarpa* 10%, *Salix drummondiana* 5% with *Ribes inerme* 5%, *Dasiphora floribunda* 10%, *Fragaria* sp.1%, *Carex utriculata* 20%, *Calamagrostis canadensis* 15%, *Juncus balticus* 15%, *Carex microptera* 5%, *Eleocharis palustris* 5%.
pH = 8.1 conductivity = 500 micromhos/second
CNHP Wetland Plant Association Classification: *Salix monticola*/mesic graminoid (G3/S3) B Rank
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Salix monticola				X
Ribes inerme	X			
Carex utriculata	X			
Carex microptera	X			
Eleocharis palustris		X		
Salix planifolia	X			
Salix brachycarpa		X		

Summary Determination

Functional Rating:

Proper Functioning Condition ____X_____

Functional-At Risk * _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No ___X_____

If yes, what are those factors? ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

Wetland is properly functioning within the above constraints and land ownership.

Potential

Wetland's viability could be affected by future activities upstream on private property, e.g., improper grazing or other forms of altered hydrology.

Sheep Creek Willow Carr

Twelve Mile Creek BLM #81
Nonfunctional

Standard Checklist

Park County
Quadrangle: Jones Hill Quadrangle Code: 3910611
T11S R78W Section 14 and 13
UTMs: 13S 4327224 407327
Elevation: 9735 feet
Date: September 19, 2003

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
	X		1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

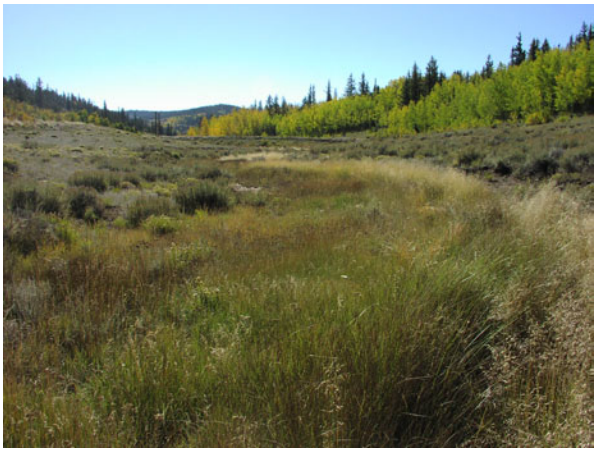
Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Wetland is spring-fed. The BLM parcel is a narrow strip (approx. 9 feet long). At the spring, there is an abandoned pipe that was once used to direct or pump water.
Soils: mucky peat in area just below spring, rest are loamy sands.
Plants: dominated by hay grasses e.g., *Poa pratensis*, *Phleum pratense*, *Thinopyrum intermedium*, *Critesion brachyanherum* with *Festuca arizonica*, and *Deschampsia cespitosa*

	OBL	FACW	FAC	FACU
Poa pratensis				X
Phleum pratense				X
Deschampsia cespitosa		X		
Hordeum jubatum			X	

pH = 8 conductivity = 810 micromhos/second measured in small pool below spring.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: open water 1
Rosgen Stream Classification: E Type



Summary Determination

Functional Rating:

Nonfunctional X

Mosquito Range ACEC BLM #82, #86, #87
Proper Function Condition

Standard Checklist

Park County
Quadrangle: Climax Quadrangle Code: 3910632
T9S R79W Sections 1, 2
UTMs 13S 0399840 4350119
Elevation: 12,186 feet
Date: July 21, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
	X		4) Upland watershed is not contributing to riparian-wetland degradation
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
X			7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events, snowmelt)
X			12) Riparian-wetland plants exhibit high vigor

X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
X			15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

Alpine parcel, hydrology: snowmelt, summer rains, and likely springs in flatter areas.
Threats: mine tailings, OHV traffic that do not stay on designated trails. Observed mule deer, marmots, pika, Lincoln and White-crowned sparrow.
Soils: Entisols, shallow, rocky. Soils along shallow ponds do have peat (1 cm – 10 cm), sapric, areas that are quaking, hummocky.
Plants: *Salix brachycarpa, Deschampsia cespitosa, Kobresia myosuroides* on drier slopes, *Salix planifolia, Carex aquatilis, Caltha leptosepala* in wetter areas along rivulets.
pH = 7

CNHP Wetland Plant Association Classification: *Salix brachycarpa*/mesic forbs (G4/S4) – A Rank on drier slopes,
Salix planifolia/*Carex aquatilis* (G4/S4)—A Rank, in wetter areas along rivulets
CDOW Riparian Mapping Classification: open water, riparian herb 1
Rosgen Stream Classification: B Type

	OBL	FACW	FAC	FACU
Carex utriculata	X			
Carex aquatilis	X			
Deschampsia cespitosa		X		
Caltha leptosepala	X			
Kobresia myosuroides				X
Salix planifolia	X			
Salix brachycarpa		X		

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk * _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____
Downward _____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No _____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership
Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

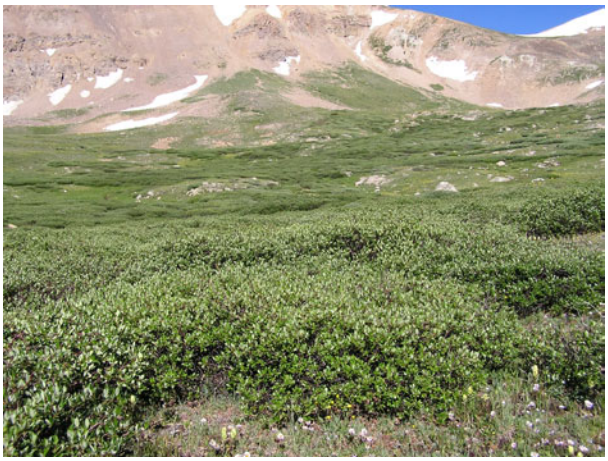
Wetland is threatened by mining claims that override federal ownership. Mining could increase sediment load, increase toxicity of waters, and affect water levels.

Potential

Currently, the wetland has achieved ecological status.

Scree slope above Oliver Twist Lake

Overview of Oliver Twist Lake



Salix brachycarpa/mesic forb plant association

Dry alpine meadow adjacent to Oliver Twist Lake

American Flats BLM #88
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Climax Quadrangle Code: 3910632
T9S R79W Section 12
UTMs 13S 0399514 4348483
Elevation: 12,254 feet
Date: August 11, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
	X		4) Upland watershed is not contributing to riparian-wetland degradation
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
X			7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events, snowmelt)
X			12) Riparian-wetland plants exhibit high vigor

X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
X			15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

General Description: Typical alpine wet meadow with shallow, tarn lakes fed by snowmelt and summer precipitation. Main threats: off road travel with 4x4 vehicles, leaching mine tailings/water quality, additional roads for radio tower maintenance.
Soils: organic matter in first 1 cm, gravelly soils, glacial till.
Plants: At shallow lake—*Ranunculus hyperboreas*, *Carex aquatilis, Salix planifolia*, *Salix brachycarpa*, *Bistorta bistortoides*, *Caltha leptosepala*, *Pedicularis groendlandica*, *Primula parryi*.
Above lakeshore: *Salix planifolia*, *Salix reticulata*, *Salix nivalis*, *Carex aquatilis*.
Uplands: dry tundra; *Kobresia myosuroides*, *Festuca ovina*, *Carex illota*, *Carex chalciolepsis*, *Erigeron peregrinus*, *Acomastylis rossii.*

CNHP Wetland Plant Association Classification: *Salix planifolia*/*Carex aquatilis* (G4/S4).
CDOW Riparian Mapping Classification: upland grass, riparian herb 2, unvegetated
Rosgen Stream Classification: B Type

	OBL	FACW	FAC	FACU
Ranunculus hyperboreas	X			
Carex utriculata	X			
Carex aquatilis	X			
Deschampsia cespitosa		X		
Caltha leptosepala	X			
Kobresia myosuroides				X
Salix planifolia	X			
Salix brachycarpa		X		

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk * _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____
Downward _____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No X **If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

Parcel is within the Mosquito Pass ACEC, an area unique to the BLM, where special management attention is required to protect and prevent irreparable damage to public land and/or related waters containing resources, values, systems, processes, or hazards identified, designated, and protected through the land-use planning process.

Potential

Parcel can attain its ecological status due to the ACEC designation.

American flats with Gemini Peak

Tarn lake located at base of Mt. Evans

American Flats from Mosquito Pass "road"

Main Threat—4 WDs off designated road.

Result from off road travel in alpine area

Local residents at American Flats

Fremont Ditch BLM #90 Non-functioning

Standard Checklist

Park County
Quadrangle: Como Quadrangle Code: 3910538
T9S R76W Section 22
UTMs: 13S 0424107 4355223
Elevation 9,845 feet
Date July 20, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Fremont Ditch dried up. Area grazed, borrow pits present. Plants: *Dasiphora floribunda* shrubland with *Artemisia frigida*, *Muhlenbergia filiculmis*, and *Koeleria macrantha*.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 2
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Dasiphora floribunda		X		

Summary Determination

Functional Rating:

Nonfunctional X

Fremont Ditch

Randall Ditch at Packer Road BLM #91, #92 Non-functioning

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T8S R75W Sections 19, 29
UTMs: not recorded
Elevation 9,600 feet
Date July 20, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Parcel contains no wetland, ditch dry, shortgrass prairie located to the north and south of Packer Road Soils:
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 2
Rosgen Stream Classification: G Type

Summary Determination

Functional Rating:

Nonfunctional X

Randall Ditch

Finger Fens/Park Gulch #1 BLM #94
Proper Functioning Condition
(originally described from Johnson and Gerhardt 2002)

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T8S R76W Section 34 and 35
UTMs: 13S 4350032 425412
Elevation 9,608 feet
Date September 16 and 17, 2003
ID Team Observers: Culver, Gilbert, Backstrand

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Parcel supports 3-4 groundwater discharge wetlands. The springs support small, discreet wet meadows in an otherwise shortgrass prairie. Hummocks atop peaty soils are present. No grazing effects were observed.
Soils: Peat in upper 2 cm, mucky peat between 2-10 cm, gravel at 10cm. 3/1
Plants: *Carex nebrascensis*, *Deschampsia cespitosa*, *Eleocharis palustris*
pH=8; conductivity=not taken
CNHP Wetland Plant Association Classification: *Carex nebrascensis* plant association (G4/S3)—B Rank
CDOW Riparian Mapping Classification: riparian herb 1, riparian herb 2
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Carex nebrascensis	X			
Deschampsia cespitosa		X		
Eleocharis palustris				

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____

Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No _____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability (ecological status that can be attained within political, social, or economical constraints or realistic goals for the assessment area)

Wetland is functioning proper within the current restraints.

Potential (ecological status that can be attained without above limiting factors or without limiting factors what is the ultimate goal for assessment area)

Presently the wetland is functioning, however managers could consider ACEC status for the Parcel due to its uniqueness in the Resource District.

South Finger Fen dominated by *Carex nebrascensis*

North Finger Fen with *Carex nebrascensis* plant association

O'Neil Ditch BLM #95
Non-functioning

Standard Checklist

Park County
Quadrangle: Como Quadrangle Code: 3910538
T8S R76W Section 33
UTMs: 13S 0423198 4350756
Elevation: 9,714 feet
Date: July 22, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

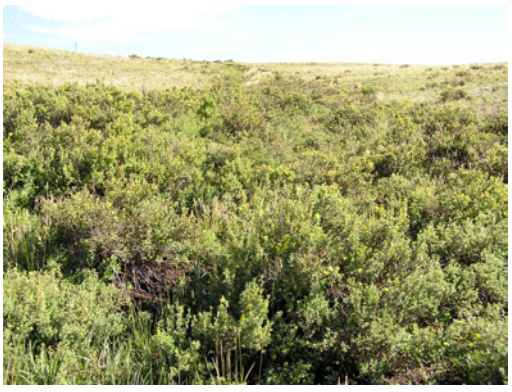
General description: Parcel does not support a wetland, gully has been dry for a long time, however if there was a flooding event, due to the plant cover within the ditch, it would slow down water. The ditch supports *Dasiphora floribunda* and *Juncus balticus*. The upland shortgrass prairie is in very good condition, little to no grazing evident. The CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 1 and 2, upland grass
Rosgen Classification: G Type

	OBL	FACW	FAC	FACU
Juncus balticus		X		
Dasiphora floribunda		X		

Summary Determination

Functional Rating:

Nonfunctional _____ X _____



O'Neil Ditch with *Dasiphora floribunda*

Link Ditch/Tarryall Fen BLM #96
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T8S R75W Sections 31 and 6
UTM: 13S 4351282 429222
Elevation: 9,461 feet
Date: September 17, 2003

ID Team Observer: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
X			12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Parcel supports a good example of a wet meadow along the Tarryall River. Hummocks present with peaty soils. Little evidence of grazing, wetland at base of hill approx. 20 acres. Open water observed at UTMs: 4351447 429190 with small fish (minnows?).
Soils: mucky peat with 2-3 cm organic matter in O Horizon, oxidized root channels and Mn deposits present. pH 7.7 conductivity = 200 micromhos/cm
% Plant Cover: *Deschampsia cespitosa* 40%, *Juncus balticus* 40%, *Carex utriculata* 15%, *Beckmannia syzigachne* 5%, *Potentilla plattensis* 1%, *Halerpestes cymbalaria* 1%, *Dasiphora floribunda* 1%.

CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 1
CNHP Wetland Plant Association Classification: *Juncus balticus* plant association (G5/S5)—B Rank; *Carex utriculata* plant association (G5/S5)—C Rank, *Deschampsia cespitosa* (G4/S4)—B Rank.
CDOW Riparian Mapping Classification: riparian herb 2, upland grass
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Beckmannia syzigachne	X			X
Potentilla plattensis	X			
Carex utriculata	X			
Halerpestes cymbalaria	X			
Deschampsia cespitosa		X		
Dasiphora floribunda		X		

Summary Determination

Functional Rating:

Proper Functioning Condition ___X___

Functional-At Risk *_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____
Downward _____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No ___X_____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

The wetland appears to have reached its ecological status, however improper grazing could potentially lead to altering the hydrology. A management plan could assure that the wetland continues to function properly.

Potential

The ultimate goal for this parcel is protect stream banks and wet meadows from intense grazing.

Carex utriculata wetland next to Tarryall River

Link Ditch Fen/Tarryall Mire—Northeast BLM #96
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle Milligan Lakes Quadrangle Code: 3910537
Location: T9S R75W Section 6
UTMs: 13S 4350765 429926
Elevation: 9,735 feet
Date: September 17, 2003

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
X			12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Wet meadow with standing water from overbank flooding from Tarryall River. Little to no evidence of grazing, cattle observed in drier areas.
Hydrology results from the Link Ditch and headgates
Soils: mucky peat with evidence of flooding events
Plants: Dominated by *Carex utriculata* plant association in wet portions and *Deschampsia cespitosa* plant association in the drier areas.
pH = 7.9 Conductivity = 200 micromhos/cm
CNHP Wetland Plant Association Classification: *Carex utriculata* (G5/S5)—C Rank
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Carex utriculata	X			
Deschampsia cespitosa		X		

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk * _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____
Downward _____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?
Yes_____No ___X_____
If yes, what are those factors? ____Dewatering ____Mining activities____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership
Other (specify e.g., grazing, irrigation, agriculture activities)

Capability (ecological status that can be attained within political, social, or economical constraints or realistic goals for the assessment area)
Wetland is properly functioning. Management actions will need to be taken if Link Ditch is expanded or eliminated.
Potential (ecological status that can be attained without above limiting factors or without limiting factors what is the ultimate goal for assessment area)
The ultimate goal for this parcel is to monitor effects of grazing.

Deschampsia cespitosa wetland

Carex utriculata wetland

Packer/Tarryall Road BLM #97
Functioning At Risk

Standard Checklist

Park County
Quadrangle Milligan Lakes Quadrangle Code: 3910537
T8S R75W Sections 34 and 35
UTMs: 13S 0435162 4350816
Elevation: 9200 feet
Date: July 20, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
	X		2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
X			12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Natural depression adjacent to county road. Mesic soils indicate high groundwater table. Above parcel is a windmill with a stock tank evidence of a spring or well. Threats include: road improvements and sedimentation from snow removal activities. Exotic plants include: *Cardus nutans* and *Cardaria* spp. Soils: mucky peat, evidence of redox. Plants: *Dasiphora floribunda, Juncus balticus, with Salix ligulifolia*. pH = no open water
CNHP Wetland Plant Association Classification: *Dasiphora floribunda/Juncus balticus* plant association (G3/S3)—C Rank
CDOW Riparian Mapping Classification: riparian herb 2
Rosgen Classification: N/A

	OBL	FACW	FAC	FACU
Dasiphora floribunda				X
Juncus balticus		X		
Salix ligulifolia	X			

Summary Determination

Functional Rating:

Proper Functioning Condition _____

Functional-At Risk *_____X_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**
Upward _____
Downward _____

Not Apparent _X_____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes___X_____No _____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment __X__Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Residential development and subsequent impacts on hydrology

Capability

It is unknown what the development plans are in this area. To determine ecological status management needs to know about residential and road development plans.

Potential

Presently the wetland is functioning properly, however the unknown question regarding hydrology puts it at Functioning at Risk. The wetland plants are thriving in its current condition.

Dasiphora floribunda/*Juncus balticus* plant association

Tarryall Road East BLM #99
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle Observatory Rock Quadrangle Code: 3910536
T9S R75W Section 2
UTMs 13S 0436606 4349961
Elevation: 9160 feet
Date: July 22, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
X			2) Where beaver dams are present they are active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
		Unknown	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
X			12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Parcel is located along the Tarryall River. Beaver present, recruitment of willows, relative wide floodplain, although it is contained by the Tarryall Road. No grazing activities observed, densely vegetated.
Soils: alluvial, rocky Plants: *Salix monticola*, *Salix geyeriana*, *Picea pungens*, *Dasiphora floribunda*, *Juncus balticus*, *Carex utriculata*. . pH = 7
CNHP Wetland Plant Association Classification: *Salix monticola*/mesic graminoids (G3/S3)—C Rank
CDOW Riparian Mapping Classification: riparian herb 1 and 2
Rosgen Classification: C Type

	OBL	FACW	FAC	FACU
Dasiphora floribunda				X
Juncus balticus		X		
Carex utriculata	X			
Salix monticola	X			
Salix geyeriana	X			
Picea pungens			X	

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk *

Nonfunctional

Unknown Not known regarding upstream activities on the Tarryall e.g., ditching, mining.

***Trend for Functional At Risk:**

Upward _____

Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes___x (likely)_____No _____**If yes, what are those factors?**

_x___Dewatering _x___Mining activities

____Watershed condition __x__Dredging activities _x___Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

All the water in the Tarryall River is owned by some entity. A realistic goal for this parcel is fully dependent on the decisions concerning water rights.

Potential

If the Tarryall River has minimal stream flow and allowed to flood on a seasonal basis, the goal for this parcel could be to leave as is, for currently it appears to functioning properly.

Tarryall River East

South Branch Creek BLM #100
Functioning At Risk

Standard Checklist

Park County
Quadrangle: Como Quadrangle Code: 3910538
T9S R76W Section 5
UTMs: 13S 0422096 4349621
Elevation: 9,686 feet
Date: July 22, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
	X		1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
		unknown	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shallow, low gradient stream, that is channelized by intensive grazing. Several areas where water does not flow, stagnant pools. Banks are vegetated by graminoids.
Soils: mucky, difficult to classify due to agriculture activities. Plants include: *Iris missouriensis*, *Juncus balticus*, *Achillea millefolium*, *Argentina anserina*, *Poa pratensis*,
CNHP Wetland Plant Association Classification: *Juncus balticus* plant association (G5/S5)
CDOW Riparian Mapping Classification: riparian herb 1
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Juncus balticus		X		
Argentina anserina	X			
Iris missouriensis	X			
Achillea millefolium				X
Poa pratensis				X

Summary Determination

Functional Rating:

Proper Functioning Condition _____

Functional-At Risk *_____X_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____

Downward __X_____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes__X____No _____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment __X__Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Grazing effects on vegetation and hydrology.

Capability

This parcel is functioning, but grazing and subsequent hydrological alterations put its ecological status in jeopardy. Management actions could reverse the downward trend.

Potential

Presently the wetland is functioning properly. The wetland plants are present will be restored with reduced impacts from grazing.

Red Mountain Pass BLM #106
Nonfunctional

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T9S R75W Section 7
UTMs: not taken
Elevation: 9,400 feet
Date: September 17, 2003

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Swales within shortgrass prairie.
Plants: *Juncus balticus* and upland grasses
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 2
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Juncus balticus		X		

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Swale with *Juncus balticus*

Park Gulch #2 BLM #111
Functioning At Risk
(originally described by Johnson and Gerhardt 2002)

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T9S R76W Section 3
UTMs: 13S 4350032 25412
Elevation 9,583feet
Date September 16, 2003

ID Team Observers: Culver, Gilbert, Backstrand

Yes	No	N/A	HYDROLOGY
	X		1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Parcel supports an incised stream/gully that is located in an active grazing allotment. The stream supports graminoids that prevent some erosion, but grazing activities have channelized the stream as well as provided drainage from cattle trailing .
Soils: clayey with oxidized root channels, 10YR 4/1
Plants: *Juncus balticus*, *Poa pratensis*, *Beckmannia syzigachne*, *Carex microglochin*, *Koeleria macrantha*, *Hordeum jubatum*, *Deschampsia cespitosa*, *Carex nebrascensis*, *Argentina anserina*, *Eleocharis palustris*
pH/conductivity: no water
CNHP Wetland Plant Association Classification: *Juncus balticus* plant association (G5/S5)—C Rank
CDOW Riparian Mapping Classification: riparian herb 1, riparian herb 2
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Beckmannia syzigachne	X			
Juncus balticus		X		
Argentina anserina	X			
Carex nebrascensis	X			
Deschampsia cespitosa		X		
Eleocharis palustris				
Carex microglochin				X
Poa pratensis				X
Hordeum jubatum			X	

Summary Determination

Functional Rating:

Proper Functioning Condition _____

Functional-At Risk_____**X**_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____
Downward ___X_____
Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No ___X____**If yes, what are those factors?** ____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Grazing intensity and numbers need to be evaluated to achieve PFC

Capability

Revision of grazing regime would assist in restoration of stream banks.

Potential

Presently the wetland is functioning at risk with a downward trend with the current grazing regime. The wetland vegetation present would facilitate the restoration of riparian health if grazing issue is addressed.

Overview of Park Gulch #2

Playa Lakes at Park Gulch BLM #110, 112, 113
Functioning At Risk

Standard Checklist

Park County
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
Quadrangle: Elkhorn Quadrangle Code:: 3910527
T9S R76W Sections 13, 24, 25
T9S R75W Sections 18, 19
UTMs: 13S 4346224 427741
Elevation 9,70 feet
Date September 17, 2003

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
	X		4) Upland watershed is not contributing to riparian-wetland degradation
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
X			7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events,

			snowmelt)
X			12) Riparian-wetland plants exhibit high vigor
X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
X			15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

General Description: Series of depressional, lentic wetland with "rings" of vegetation according to alkalinity. Moderate to heavy impact from cattle grazing in wetland and uplands, cows present on date of visit.
Soils: Near shore—sandy with small gravel, clayey at 15cm.
Plants: Outer "ring"--*Glaux maritima* 10%, *Festuca idahoensis* 10%, *Astragalus kentrophyta* 1%, *Astragalus bodinii* 1%, bare ground 80%. Inner "ring" *Salicornia rubra* 10%, *Suaeda calceoliformis* 10%, *Puccinellia airoides* 1% Bare ground 80%
pH = 7.4 Conductivity = 4000 micromhos/second
CNHP Wetland Plant Association Classification: *Glaux* maritima plant association (G3/S2)—B Rank
CDOW Riparian Mapping Classification: riparian herb 2, upland grass, non-vegetated
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Glaux maritima	X			X
Suaeda calceoliformis		X		
Puccinellia airoides	X			
Salicornia rubra	X			

Summary Determination

Functional Rating:

Proper Functioning Condition_____

Functional-At Risk * _____X_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____ Downward ___Yes_____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____ No ___X____ **If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

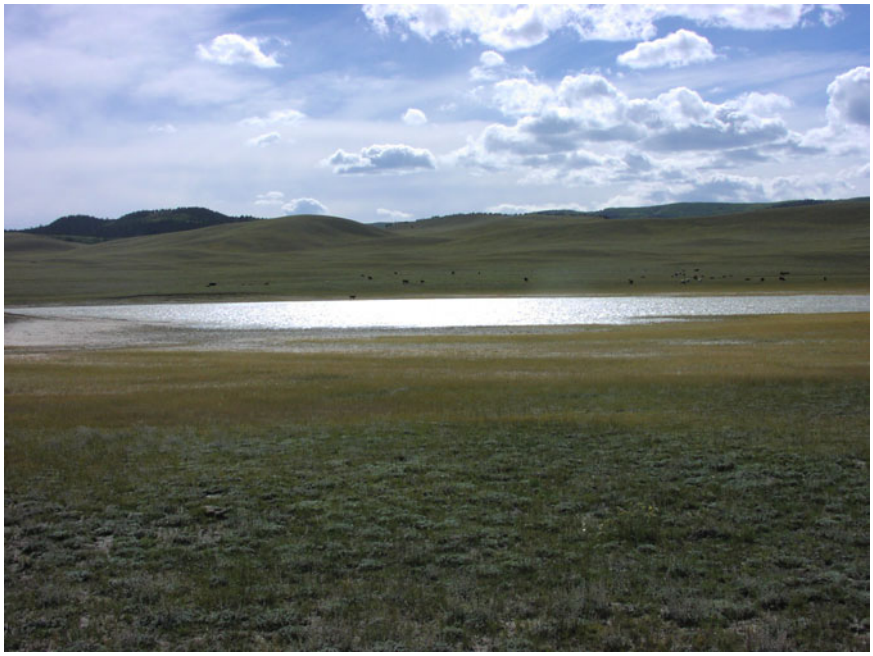
Other (specify e.g., grazing, irrigation, agriculture activities)

Grazing impacts are evident

Capability Wetland is functioning at risk due to current management practices.

Potential (ecological status that can be attained without above limiting factors or without limiting factors what is the ultimate goal for assessment area)

Currently the wetland is functioning at risk due to grazing impacts to hydrology.



Playa Lakes at Park Gulch Overview

Trout Creek at CR 7 BLM #116
Nonfunctional

Standard Checklist

Park County
Quadrangle: Como Quadrangle Code: 3910538
T9S R76W Section 18
UTMs: 13S 0419986 4347138
Elevation 9,665feet
Date July 21, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shortgrass prairie with *Dasiphora floribunda* and *Juncus balticus*
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 2, upland grass
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Dasiphora floribunda				X
Juncus balticus		X		

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Shortgrass prairie on Trout Creek/ CR 7 Parcel

Indian Gulch Pond BLM #119
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Elkhorn Quadrangle Code: 3910527
T9S R75W Sections 27 and 28
UTMs: 13S 4343859 433786
Elevation 9,540 feet
Date September 17, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
X			4) Upland watershed is not contributing to riparian-wetland degradation
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
	X		7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events, snowmelt)
X			12) Riparian-wetland plants exhibit high vigor

X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
X			15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

General Description: Lentic wetland as a result of a natural drainage that has been diked for use as a stock pond. No weeds, but horse grazing evident.
Plants: open water surrounded by *Eleocharis palustris* and *Carex utriculata*
pH = 7.5 Conductivity = 200.4 micromhos/second
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: none
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Eleocharis palustris	X			
Carex utriculata	X			

Summary Determination

Functional Rating:

Proper Functioning Condition ____X_____

Functional-At Risk * _____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No _____**If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

Wetland and pond are functioning within political constraints.

Potential

The pond is located in a natural depression but is enhanced by the human made berm. Ecological status is dependent on the structure.

Indian Gulch Pond with *Eleocharis palustris* and *Carex utriculata* encircling pond

Indian Hills Spring BLM #120
Nonfunctional

Standard Checklist

Park County
Quadrangle: Elkhorn Quadrangle Code: 3910527
Quadrangle: Milligan Lakes Quadrangle Code: 3910537
T9S R75W Section 22
UTMs: 13S 4344615 434576
Elevation 9,492 feet
Date September 17, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Small spring located in Indian Hills subdivision. The spring is located on private property, but was dry on date of survey. Parcel does support small depressions that could hold precipitation and/or snowmelt
Soils: no hydric soils, loamy
Plants: *Dasiphora floribunda* with *Juncus balticus*, *Deschampsia cespitosa*, and *Carex* sp.
CNHP Wetland Plant Association: N/A
CDOW Riparian Mapping Classification: upland grass
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Dasiphora floribunda				X
Juncus balticus		X		
Deschampsia cespitosa		X		

Summary Determination

Functional Rating:

Nonfunctional X

Dasiphora floribunda plant association

Playa Lakes BLM #126
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Elkhorn Quadrangle Code: 3910527
T10S R76W Sections 14 and 11
Elevation 9,223 feet
Date August 10, 2004

ID Team Observers: Culver, March, Eastin, Gilbert, and Backstrand

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
	X		4) Upland watershed not contributing to riparian-wetland plants
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
X			7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events, snowmelt)
X			12) Riparian-wetland plants exhibit high vigor

X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
		X	15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

General Description: Lentic wetland, series of depressions with varying depths of water levels from 1 foot o dry. Alkaline deposits along shores. Hoof divets throughout. Presence of head cuts above the larger playas, likely natural from intense thunderstorm
Soils: clayey, gleyed with mottling and redox features 10 YR 4/1 at 20 cm deep, pit dug 6 m from shoreline
Plants: *Suaeda calceoliformis*, *Puccinellia airoides*, *Festuca arizonica*, *Halerpestes cymbalaria*, *Distichlis spicata*, *Critesion jubatum*, *Polygonum arenastrum*, *Monolepis nuttalliana*, *Eleocharis palustris, Triglochin maritima, Argentina anserina, Glaux maritime, Breea arvensis*
CNHP Wetland Plant Association Classification: *Glaux maritima* plant association (G3/S2)—B Rank
CDOW Riparian Mapping Classification: open water, riparian herb 2
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Glaux maritima	X			X
Suaeda calceoliformis		X		
Puccinellia airoides	X			
Halerpestes cymbalaria	X			
Eleocharis palustris	X			
Triglochin maritime	X			
Argentina anserine	X			
Salicornia rubra	X			
Distichlis spicata			X	
Breea arvensis			X	

Summary Determination

Functional Rating:

Proper Functioning Condition X

Functional-At Risk *_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____ Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____ No _____ **If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities)

Capability

Playa lakes are currently private, BLM is in contract stages to secure the Lakes.

Potential (ecological status that can be attained without above limiting factors or without limiting factors what is the ultimate goal for assessment area)

Monitoring of grazing is essential to prevent degradation of shores and hydrology. Elk, deer and pronghorn use area, likely a main water source for wildlife.

Middle Playa

North Playa and North Playa with headcut on eastern side

South Playa

James Mark Jones SWA BLM #139
Functioning at Risk

Standard Checklist

Park County
Quadrangle: Elkhorn Quadrangle Code: 3810527
T10S R76W Section 24
UTMs: 13S 4334931 427013
Elevation 9,209 feet
Date September 18, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
	X		4) Riparian-wetland area is widening or has achieved potential extent
	X		5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
	X		9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
	X		14) Point bars are revegetating with riparian-wetland vegetation
	X		15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable
	X		17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General Description: Intermittent stream with puddles of water. Moderate grazing, cows present. No culvert under access road preventing water flow. Stream banks eroding, appears that at one time a berm or dike was present
Soils: muck with no evidence of flooding
Plants:*Juncus balticus* with *Rumex crispus* and *Lolium perenne*.
CNHP Wetland Plant Association Classification: *Juncus balticus* plant association (G5/S5)—D Rank
CDOW Riparian Mapping Classification: non-vegetated, upland grass, riparian herb 2
Rosgen Stream Classification: E Type

	OBL	FACW	FAC	FACU
Rumex crispus		X		
Juncus balticus		X		
Lolium perenne				X

Summary Determination

Functional Rating:

Proper Functioning Condition_____

Functional-At Risk * X

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____ Downward X

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____ No X **If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership
Other (specify e.g., grazing, irrigation, agriculture activities)
Grazing impacts are evident

Capability
Wetland is functioning at risk due to current grazing management regime.
Potential
Currently the wetland is functioning at risk due to grazing impacts to hydrology.

James M. Jones SWA
Intermittent stream with *Juncus balticus* wetland

Steel Gulch BLM #148
Nonfunctional

Standard Checklist

Park County
Quadrangle: Eagle Rock Quadrangle Code: 3910526
T11S R74W Sections 4, 32
UTMs: 13S 0441212 4331337
Elevation 9,218 feet
Date July 28, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Natural depression with dry gulch, narrow, 5-6 feet across, 2-3 feet deep. Upland plants include: *Muhlenbergia filiculmis*, *Poa pratensis*, *Artemisia frigid.* Evidence of grazing from cattle and horses.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: none
Rosgen Stream Classification: G Type

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Natural depressions at Steel Gulch

Trout Creek Wildlife Management Area BLM #149
Proper Functioning Condition

Standard Checklist

Park County
Quadrangle: Fairplay East Quadrangle Code: 3910528
T10S R77W Section 33
T11S R77W Section 4
UTMs: 13S 422405 4330867
Elevation 9, 363 feet
Date July 23, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
X			1) Riparian-wetland area is saturated at or near the surface or inundated in "relatively frequent" events (1-3 yearrs)
X			2) Fluctuation of water levels is not excessive
X			3) Riparian-wetland area is enlarging or has achieved potential extent
	X		4) Upland watershed is not contributing to riparian-wetland degradation
X			5) Water quality is sufficient to support riparian-wetland plants
	X		6) Natural surface or subsurface flow patterns are not altered by disturbance i.e., hoof action, dams, dikes, trails, roads, rills, gullies, drilling activities)
	X		7) Structure accommodates safe passage of flows (e.g., no headcut affecting dam or spillway)

Yes	No	N/A	VEGETATION
X			8) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			9) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
X			10) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			11) Vegetation is comprised of those plants or plant communities that have root masses capable of withstanding wind events, wave flow events, or overland flows (e.g., storm events, snowmelt)

X			12) Riparian-wetland plants exhibit high vigor
X			13) Adequate vegetative cover is present to protect shorelines/soil surface and dissipate energy during high wind and wave events or overland flows
X			14) Frost or abnormal hydrologic heaving is not present
X			15) Favorable microsite condition (i.e., woody debris, water temperature, etc.) is maintained by adjacent site characteristics)

Yes	No	N/A	EROSION/DEPOSITION
X			16) Accumulation of chemicals affecting plant productivity/composition is not apparent
X			17) Saturation of soils (i.e., ponding, flooding frequency and duration) is sufficient to compose and maintain hydric soils
X			18) Underlying geologic structure/soil material/permafrost is capable of restricting water percolation
X			19) Riparian-wetland is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)
X			20) Islands and shoreline characteristics (i.e., rocks, course and/or large woody debris) are adequate to dissipate wind and wave event energies

Remarks

General Description: Lentic wetland created in 1987, bermed, restricted outlet, no headgate. Inlet has been ditched.
Soils: Clay 10YR 4/1 at 15 cm, oxidized root channels present, no gleying
Plants: shoreline-*Phleum pretense*, *Carex aquatilis*, *Carex utriculata*: mudflats-*Neolepia campestris, Carex douglasii*, *Suaeda calceoliformis*, *Chenopodium* sp., *Puccinellia airoides*. Aquatic-*Eleocharis palustris*, *Carex aquatilis*, *Carex utriculata*. Uplands-*Artemisia frigida,Juncus balticus, Argentina anserine.*
ph = 7 .
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: upland grass, riparian herb 2
Rosgen Stream Classification: N/A

	OBL	FACW	FAC	FACU
Phleum pratense				X
Juncus balticus		X		
Argentina anserina	X			
Carex utriculata	X			
Carex aquatilis	X			
Carex douglasii				X
Suaeda calceoliformis	X			
Puccinellia airoides	X			
Eleocharis palustris	X			

Summary Determination

Functional Rating:

Proper Functioning Condition ___X___

Functional-At Risk *_____

Nonfunctional _____

Unknown _____

***Trend for Functional At Risk:**

Upward _____Downward _____

Not Apparent _____

Are factors contributing to unacceptable conditions outside BLM's control or management?

Yes_____No ___X_ **If yes, what are those factors?**

____Dewatering ____Mining activities ____Watershed condition ____Dredging activities ____Road encroachment ____Land ownership

Other (specify e.g., grazing, irrigation, agriculture activities

_____

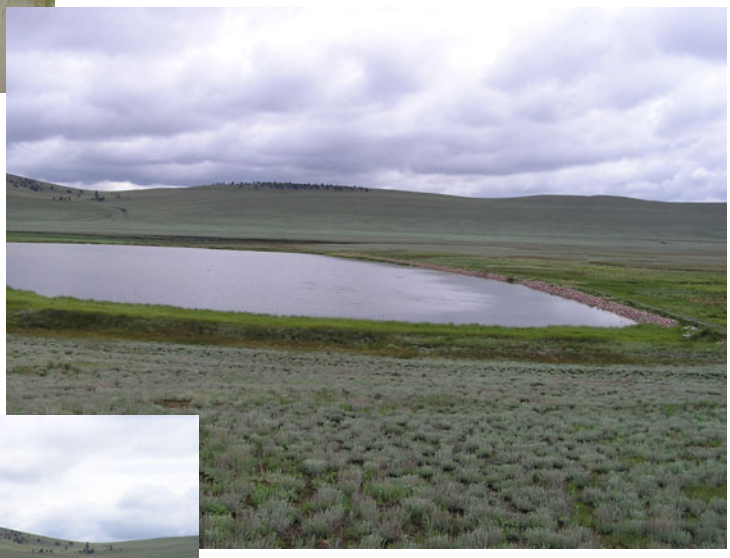
Capability

Wetland is managed for waterfowl by CDOW and BLM. It is unknown if other political constraints and funding could effect its viability.

Potential

Since there is no water control within the wetland by staff, it appears it maintains a stable water level. However, upstream impacts or hydrological alterations on Trout Creek could have deleterious effects on the pond and its shores.

Trout Creek Inlet



Overview of Pond

Berm on south side of Trout Creek Pond

Sevenmile Gulch BLM #150, 156 Nonfunctional

Standard Checklist

Park County
Quadrangle: Hartsel Quadrangle Code: 3910517
Quadrangle: Elkhorn Quadrangle Code: 3910527
Quadrangle: Eagle Rock Quadrangle Code: 391052
T11S R75W Sections 18, 6
UTMs: 13S 0429598 437654
Elevation 9,045 feet
Date July 27, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows

		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Shallow gully, 2-3 feet deep, 10-15 feet wide, no water, shortgrass prairie. There are a series of excavations along Sevenmile Gulch likely to collect water, evidence of cows within the catchments, no water observed.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: upland grass, upland shrub
Rosgen Stream Classification: Type G

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Sevenmile Gulch

Excavations along Sevenmile Gulch

Black Mountain BLM #159
Nonfunctional

Standard Checklist

Park County
Quadrangle: Garo Quadrangle Code: 3910518
T11S R77W Section 15
UTMs: 13S 0414026 4327070
Elevation 9,459 feet
Date August 11, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Dry gulch, non-wetland
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: riparian herb 2
Rosgen Stream Classification: N/A

Summary Determination

Functional Rating:

Nonfunctional _____X_____

Gully at Black Mountain Parcel

Buffalo Spring BLM #173
Nonfunctional

Standard Checklist

Park County
Quadrangle: Garo Quadrangle Code: 3910518
T12S R77W Section 2
UTMs: 13S 0415660 4321236
Elevation 9,218 feet
Date August 11, 2004

ID Team Observers: Culver

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows
		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: dry ditch dominated with upland grasses.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: non-vegetated, upland grass
Rosgen Stream Classification: N/A

Summary Determination

Functional Rating:

Nonfunctional X

Sulphur Mountain BLM #175
Nonfunctional

Standard Checklist

Park County
Quadrangle: Sulphur Mountain Quadrangle Code: 3910516
T12S R74W Section 4
UTMs: not taken
Elevation 8,924feet
Date July 26, 2004

ID Team Observers: Culver
Not field surveyed due to private access. Evaluation determined from 7.5' topographical maps and infrared aerial photos.

Yes	No	N/A	HYDROLOGY
		X	1) Floodplain above blankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present they are active and stable
		X	3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
		X	4) Riparian-wetland area is widening or has achieved potential extent
		X	5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
		X	6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
		X	7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)
		X	8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
		X	9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events
		X	10) Riparian-wetland plants exhibit high vigor
		X	11) Adequate vegetative cover is present to protect banks and dissipate energy during high flows

		X	12) Plant communities are an adequate source of coarse and/or large woody material for maintenance/recovery)

Yes	No	N/A	EROSION/DEPOSITION
		X	13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) are adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
		X	15) Lateral stream movement is associated with natural sinuosity
		X	16) System is vertically stable
		X	17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

General description: Parcel is located on top of hill, there are no significant drainages.
Muley Gulch that is located to the west of parcel is dry.
CNHP Wetland Plant Association Classification: N/A
CDOW Riparian Mapping Classification: upland grass, riparian herb 2
Rosgen Stream Classification: N/A

Summary Determination

Functional Rating:

Nonfunctional X

Appendix B

Colorado Natural Heritage Program

Colorado Natural Heritage Program

To place this document in context, it is useful to understand the history and functions of the Colorado Natural Heritage Program (CNHP).

CNHP is the state's primary comprehensive biological diversity data center, gathering information and field observations to help develop statewide conservation priorities. After operating in the Colorado Division of Parks and Outdoor Recreation for 14 years, the Program was relocated to the University of Colorado Museum in 1992, and then to the College of Natural Resources at Colorado State University in 1994, where it has operated since.

The multi-disciplinary team of scientists, planners, and information managers at CNHP gathers comprehensive information on the rare, threatened, and endangered species and significant plant associations of Colorado. Life history, status, and locational data are incorporated into a continually updated data system. Sources include published and unpublished literature, museum and herbaria labels, and field surveys conducted by knowledgeable naturalists, experts, agency personnel, and our own staff of botanists, ecologists, and zoologists.

CNHP uses the Biodiversity Tracking and Conservation System (BioTiCS) developed by NatureServe by all Natural Heritage Programs to house data about imperiled species. This database includes taxonomic group, global and state rarity rank, federal and state legal status, observation source, observation date, county, township, range, watershed, and other relevant facts and observations. for digitizing and mapping occurrences of rare plants, animals, and plant associations. These rare species and plant associations are referred to as “elements of natural diversity” or simply “elements.”

Concentrating on site-specific data for each element enables CNHP to evaluate the significance of each location for the conservation of biological diversity in Colorado and in the nation. By using species imperilment ranks and quality ratings for each location, priorities can be established to guide conservation action. A continually updated locational database and priority-setting system such as that maintained by CNHP provides an affective, proactive land-use planning tool.

To assist in biological diversity conservation efforts, CNHP scientists strive to answer questions such as the following:

What species and ecological associations exist in the area of interest?

Which are at greatest risk of extinction or are otherwise significant from a conservation perspective?

What are their biological and ecological characteristics, and where are these priority species or associations found?

What is the species’ condition at these locations, and what processes or activities are sustaining or threatening them?

Where are the most important sites to protect?

Who owns or manages those places deemed most important to protect, and what is threatening those places?

What actions are needed for the protection of those sites and the significant elements of biological diversity they contain?

How can we measure our progress toward conservation goals?

CNHP has effective working relationships with several state and federal agencies, including the Colorado Department of Natural Resources, the Colorado Division of Wildlife, Colorado State Parks, Colorado Department of Transportation, the Bureau of Land Management, and the U.S. Forest Service. Numerous local governments and private entities, such as consulting firms, educators, landowners, county commissioners, and non-profit organizations, also work closely with CNHP. Use of the data by many different individuals and organizations encourages a cooperative and proactive approach to conservation, thereby reducing the potential for conflict.

Error Summary For South Park Wetland Inventory Report

- The DOW riparian layer was used as a base to determine where inventory was needed. Some non-riparian drainages show on the riparian layer as riparian herbaceous. Some of these were inventoried and classified as non-functional when they were actually non-riparian. These polygons were included in the BLM parcel and acreage statistics (per-cent), artificially increasing non-functional riparian acres values.

- Riparian acres were determined using the DOW riparian layer and some minor errors were made in the initial calculations.

- Riparian areas were quantified using acres values, miles of riparian (stream) was not calculated.

- Two parcels that were inventoried were disposed of and are no longer BLM; parcel 119, page 96 and parcel 120, page 99.

- Some multiple riparian/wetland areas are included on one form but are entered separately in the BLM riparian/wetland database.

- In the "Habitat" column of the tables summarizing the inventory, the term "T&E Plants" is used broadly and includes sensitive status plants also.

- Tarryall Road East, parcel 99, page 78 should be Michigan Creek

Corrections for Acre Values for the South Park Riparian/Wetland Inventory

Page 18:

Map ID	Riparian Acres
82,86,87	145.6
94	38.1
96,should incl.102	242.7
do you agree?	
126	204.2
149	99.1

Page 19:

111	33.6

Pages 20 and 21 are all non-riparian…..do you agree??