

Level 4 Potential Conservation Area (PCA) Report

Name Newt Jack Spring Reservoir

Site Code S.USCOHP*9316

IDENTIFIERS

Site ID 34 Site Class PCA
 Site Alias None

Network of Conservation Areas (NCA)

<u>NCA Site ID</u>	<u>NCA Site Code</u>	<u>NCA Site Name</u>
-		No Data

LOCATORS

Nation United States Latitude 371742N
 State Colorado Longitude 1070842W

Quad Code Quad Name
 37107-C2 Chris Mountain

County
 Archuleta (CO)

Watershed Code Watershed Name
 14080102 Piedra

SITE DESCRIPTION

Minimum Elevation	7,920.00 Feet	2,414.00 Meters
Maximum Elevation	7,970.00 Feet	2,429.00 Meters

Site Description

The Newt Jack Spring Reservoir site occurs in central Archuleta County two miles southwest of Hatcher Reservoir, where several small ponds and wetland depressions occur in a broad opening within a montane quaking aspen (*Populus tremuloides*) and ponderosa pine (*Pinus ponderosa*) forest. The uppermost, deepest pond has evident berming containing standing water. Only about 50 square meters of the pond is actually open water; the remainder is filled with aquatic vegetation, including bur-reed (*Sparganium* sp.), pondweed (*Potamogeton* sp.), rushes (*Juncus* spp.), spikerush (*Eleocharis* sp.), smallwing sedge (*Carex microptera*), and pale false mannagrass (*Torreyochloa pallida* var. *pauciflora*). The remaining depressions are dominated by beaked sedge (*Carex utriculata*), and vary in moisture and depth; some are moist, some dry, some have standing water, and they are not always connected by mesic or hydrophytic vegetation. These spring fed wetlands appear to have seasonal and intermittent flow that drains to the southeast, although no channel is apparent. Water evidently draws down periodically, as evidenced by matted plant debris within the sedge stands and on the soil surface. Northwest Territory sedge occurs in mosaic with Colorado false hellebore (*Veratrum tenuipetalum*)-dominated stands across the local area, and there is a dense covering of graminoids and forbs between the depressions, including smallwing sedge, redtop (*Agrostis gigantea*), northern bedstraw (*Galium boreale*), beautiful cinquefoil (*Potentilla pulcherrima*), and tufted hairgrass (*Deschampsia caespitosa*). Areas upslope from the spring are dominated by ponderosa pine and Gambel oak (*Quercus gambelii*). A road runs directly to the east of the wet meadow, and an older, closed ATV road runs from a nearby Forest Service road to the west edge of the site. Because of these roads, the area sees a great deal of recreational use, which has resulted in the introduction of non-native plant species including Kentucky bluegrass (*Poa pratensis*), timothy (*Phleum pratense*) and common dandelion (*Taraxacum officinale*). The forest around the site is managed by the USFS for thinning and restoration to a multi-aged forest, and there is residential development occurring on private parcels in the local area, but not within one direct mile of the site.

Key Environmental Factors

Soils were tested in a depressional wetland dominated by Northwest Territory sedge just downstream from the bermed pond. The depression was dry at the time of the visit. The top horizon was filled with roots and was a mineral soil (light brown) at 0-9 cm. The A-horizon at 9-22 cm had fewer roots, and was a dark silty clay loam, color 10YR 2/1. A silty clay B-horizon, at 22-42 cm, was lighter with possible gleying, and matrix color 10YR 3/2.

Climate Description

No Data

Land Use History

No Data

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Cultural Features

No Data

SITE DESIGN

Site Map P - Partial

Mapped Date 05/23/1997

Designer Kettler, S.M.

Boundary Justification

The boundary encompasses the occurrence and includes a buffer of approximately 1,000 feet. Eliminating disturbance within this 1,000 foot buffer would assist in maintaining the integrity of the occurrence, and the integrity of the avian, macroinvertebrate and periphyton communities (Noel et al. 1986, Spackman and Hughes 1995) associated with the riparian forest. Maintenance of this 1,000 foot buffer would also aid in reducing impacts from sedimentation (Karr and Schlosser 1978) resulting from increased erosion, which occurs in areas where streamside vegetation is removed or degraded.

Primary Area

92.12 Acres

37.28 Hectares

SITE SIGNIFICANCE

Biodiversity Significance Rank B5: General Biodiversity Interest

Biodiversity Significance Comments

The Newt Jack Spring Reservoir site includes a fair (C-ranked) occurrence of the globally secure (G5/S4) beaked sedge (*Carex utriculata*) montane wetland. This wetland association is found at montane and subalpine elevations throughout much of the western U.S. Stands occur in montane and subalpine areas around the edges of lakes and beaver ponds, along the margins of slow-moving reaches of streams and rivers, and in marshy swales and overflow channels on broad floodplains. Sites are flat to undulating, often with a hummocky microtopography. The water table is usually near the surface for most of the growing season. Stands often appear to be nearly pure *Carex utriculata*, but a variety of other graminoid species may be present as well.

Other Values Rank No Data

Other Values Comments

No Data

LAND MANAGEMENT ISSUES

Land Use Comments

Amazingly, this wet meadow area has not yet seen impacts from OHV use, but this easily accessed site will inevitably be discovered and impacted by OHV users. Currently, wildlife use the site more than humans, though hunting in the area is likely. No trails currently exist through the meadow.

Natural Hazard Comments

No Data

Exotics Comments

No Data

Offsite

Hydrological processes originating outside of the planning boundary, including water quality, quantity, timing and flow must be managed to maintain site viability.

Information Needs

No Data

ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element</u>			<u>Global</u>	<u>State</u>	<u>Driving</u>
<u>State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Rank</u>	<u>Rank</u>	<u>Site Rank</u>
18795	<i>Carex utriculata</i> Herbaceous Vegetation	Beaked Sedge Montane Wet Meadows	G5	S4	Yes

REFERENCES

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Reference ID

Full Citation

172808	J. R. Karr and I. J. Schlosser. 1978. Water resources and the land-water interface. Science 201: 229-234.
165959	Noel, D.S., C.W. Martin and C.A. Federer. 1986. Effects of Forest Clearcutting in New England on Stream Macroinvertebrates and Periphyton. Environmental Management 10: 661-670.
170844	Randolph, D., Smith, Kettler, Redders, Roy, and Aitken. 1994. San Juan National Forest Riparian Site Survey.
159511	Spackman, S. C. and J. W. Hughes. 1995. Assessment of Minimum Stream Corridor Width for Biological Conservation: Species Richness and Distribution Along Mid-Order Streams in Vermont, USA. Biological Conservation 71:325-332.

ADDITIONAL TOPICS

Additional Topics

No Data

VERSION

Version Date 12/14/2005

Version Author Freeman, K.M.

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