

# Level 4 Potential Conservation Area (PCA) Report

Name Ignacio Creek

Site Code S.USCOHP\*25713

## IDENTIFIERS

Site ID 2251 Site Class PCA  
Site Alias Upper Ignacio Creek

### 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 370839N  
State Colorado Longitude 1072454W

### Quad Code Quad Name

37107-A4 Allison  
37107-B4 Pargin Mountain

### County

Archuleta (CO)

### Watershed Code Watershed Name

14080102 Piedra

## SITE DESCRIPTION

Minimum Elevation	6,100.00 Feet	1,859.28 Meters
Maximum Elevation	7,400.00 Feet	2,255.52 Meters

### Site Description

Ignacio Creek is located in the southwest portion of Archuleta County, west and south of Pargin Mountain and north of Navajo Reservoir. It is a lower montane intermittent stream that flows southward first through a moderately narrow valley that then opens into a moderately broad valley upstream of its confluence with the Piedra River. Ignacio Creek flows in a moderately sinuous stream channel, punctuated by boulders, pools, cascades, scoured banks, and point bar deposition. There are abandoned channels and signs of flooding events (debris and scouring). Riparian vegetation occurs along the narrow channel and the immediate floodplain. The upstream extent of the creek is dominated by a mature and healthy boxelder - narrowleaf cottonwood / red-osier dogwood (*Acer negundo* var. *interius* - *Populus angustifolia* / *Cornus sericea*) community, with Douglas-fir (*Pseudotsuga menziesii*) in the overstory, and a diverse shrub component displaying a sparse to dense canopy cover. The riparian shrubs such as red-osier dogwood, sandbar willow (*Salix exigua*), and park willow (*Salix monticola*) are most abundant where the riparian zone expands to incorporate low terraces and benches. The herbaceous understory is sparse to moderately dense and is a mixture of mostly native forbs with few non-native species. The adjacent uplands along this higher stretch of Ignacio Creek contain spruce - fir forests (*Picea pungens*, *Pseudotsuga menziesii* - *Abies* sp.) on north-facing slopes and ponderosa pine (*Pinus ponderosa*) forests with Gambel oak (*Quercus gambelii*) shrublands on south-facing slopes. In its lower reach, the riparian area is dominated by a narrowleaf cottonwood - Rocky Mountain juniper (*Juniperus scopulorum*) community, providing a more open canopy cover than upstream. Cottonwoods are generally mature or decadent, but are regenerating on cobble bars within the creek floodplain. The shrub layer is less diverse and also more sporadic, dominated by sandbar willow, Woods' rose (*Rosa woodsii*), and western white clematis (*Clematis ligusticifolia*). The terraces above the floodplain are dominated by native and non-native herbaceous species and an abundance of cheatgrass (*Bromus tectorum*), especially in pastures adjacent to the riparian area. A hydrophytic herbaceous layer containing clustered field sedge (*Carex praegracilis*) and field horsetail (*Equisetum arvense*) occurs in fringes along the stream channel and banks, but is not contiguous. Adjacent uplands are dominated by ponderosa pine forests with sagebrush - rabbitbrush (*Artemisia* spp.- *Chrysothamnus* spp.) flats and Gambel oak shrublands. There is wildlife sign throughout the site, such as wildlife trails, deer and elk scat, coyote scat, and bear scat and tracks. Songbirds and birds of prey also use the riparian habitat for forage, cover, and roosting. A dirt road parallels the creek halfway up the site to where it ends at an oil or gas wellhead. Above the well pad, an ill-defined trail follows the creek, but is seldom used.

### Key Environmental Factors

No Data

### Climate Description

No Data

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## Land Use History

Ignacio Creek was proposed as a USFS Research Natural Area at one time.

## Cultural Features

No Data

## SITE DESIGN

Site Map Y - Yes

Mapped Date 12/12/2005

Designer Freeman, K.M.

## Boundary Justification

The boundary was drawn to include the known extent of the two riparian plant associations, plus additional area large enough to buffer the riparian zone and its direct watershed. The boundary also provides a small buffer from the road where surface runoff may contribute excess nutrients and sediment, and may act as a vector for weed distribution and subsequent invasion. It should be noted that all the hydrologic processes necessary to the elements and the watersheds that contribute to the reach of stream within the site are not fully contained by the boundary.

Primary Area 983.14 Acres

397.86 Hectares

## SITE SIGNIFICANCE

Biodiversity Significance Rank B3: High Biodiversity Significance

## Biodiversity Significance Comments

This site supports a fair (C-ranked) example of the globally imperiled (G2/S2) boxelder - narrowleaf cottonwood / red-osier dogwood (*Acer negundo* - *Populus angustifolia* / *Cornus sericea*) riparian forest plant community. This community type is a late-seral association that appears to be restricted to western Colorado and is not known from outside the state (NatureServe 2005). Typically, mature to decadent cottonwoods occur in the overstory above stands of box elder, with a dense and diverse shrub layer. This riparian plant community can slowly convert to an upland association over time (Carsey et al. 2003). Many areas that may have supported occurrences of this community type in the past have been altered by agriculture and development. The site also supports a fair (C-ranked) example of the globally vulnerable (G2G3/S2S3) narrowleaf cottonwood - Rocky Mountain juniper (*Populus angustifolia* - *Juniperus scopulorum*) montane riparian forest, a plant community typified by an open cottonwood and juniper canopy and a sparse shrub layer and herbaceous understory, occurring along lower foothill elevation streams. This community type is rarely found without grazing or other agricultural impacts.

Other Values Rank No Data

## Other Values Comments

No Data

## LAND MANAGEMENT ISSUES

## Land Use Comments

An oil/gas wellhead currently exists at the Forest Service boundary, approximately at the midpoint of the site. It is currently not in use, but is likely to be developed in the near future. The Forest Service maintains a locked gate at this boundary, and the road ends at the oil/gas wellhead. A faint trail occurs upstream of the wellhead, but it is not heavily traveled. It can be expected that hunters use the area during the fall. The lower half of the site may be used for grazing, though no signs of current grazing were noted in 2005.

## Natural Hazard Comments

Western poison ivy (*Toxicodendron rydbergii*) occurs along Ignacio Creek, and bear sign is common.

## Exotics Comments

Cheatgrass (*Bromus tectorum*), yellow sweetclover (*Melilotus officinalis*), field bindweed (*Convolvulus arvensis*) and other common weeds are prevalent in the lower reaches of Ignacio Creek, but above where the existing dirt road ends at an oil/gas wellhead, cheatgrass and other weeds rapidly diminish along the riparian zone. The most frequent weeds in the upper portion of the site include Kentucky bluegrass (*Poa pratensis*), and common dandelion (*Taraxacum officinale*).

## Offsite

No Data

## Information Needs

No Data

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## ASSOCIATED ELEMENTS OF BIODIVERSITY

<u>Element State ID</u>	<u>State Scientific Name</u>	<u>State Common Name</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>Driving Site Rank</u>
24479	<i>Acer negundo</i> - <i>Populus angustifolia</i> / <i>Cornus sericea</i> Forest	Narrowleaf Cottonwood Riparian Forests	G2	S2	Yes
24963	<i>Populus angustifolia</i> - <i>Juniperus scopulorum</i> Woodland	Montane Riparian Forest	G2G3	S2S3	Yes

## REFERENCES

<u>Reference ID</u>	<u>Full Citation</u>
160903	Carsey, K., D. Cooper, K. Decker, D. Culver, and G. Kittel. 2003. Statewide wetlands classification and characterization: Wetland plant associations of Colorado. Prepared for Colorado Department of Natural Resources, Denver, CO by Colorado Natural Heritage Program, Fort Collins, CO.
193580	Cullicott, Catherine, C. Dunmire, C. Calwell. 2002. The HD Mountains of Southwest Colorado: Impacts of Proposed Coal-Bed Methane Development and Promising Alternatives. Ecos Consulting, Durango CO.
193633	Freeman, K.M., March, M.A. and D.R. Culver. 2006. Final Report: Survey of Critical Wetlands and Riparian Areas in Archuleta County. Colorado Natural Heritage Program, Fort Collins, CO.
193577	Save the HD Mountains. 2005. [web page] Overview of DEIS Concerns. Specific Resource Concerns: Ignacio Creek. < <a href="http://www.savehdmountains.org/summary.htm">http://www.savehdmountains.org/summary.htm</a> Accessed 12 December 2005.
193472	Sovell, J., P. Lyon, and L. Grunau. 2003. Final Report: Upper San Juan Biological Assessment. Colorado Natural Heritage Program, Fort Collins, CO.
193576	USDA, Forest Service. 2005. [web page] San Juan National Forest: Northern San Juan Basin Coal Bed Methane Project. <a href="http://www.fs.fed.us/r2/sanjuan/projects/ea/nsjb/nsjb.shtml">http://www.fs.fed.us/r2/sanjuan/projects/ea/nsjb/nsjb.shtml</a> . Accessed 12 December 2005.
193554	USDA, NRCS. 2002. Orthophoto Mosaic for Archuleta County, CO. USDA-NRCS, National Cartography and Geospatial Center, Geospatial Data Branch, Fort Worth, TX.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 12/12/2005  
Version Author Freeman, K.M.

## Disclaimer

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