

# Level 4 Potential Conservation Area (PCA) Report

Name Sterling Place

Site Code S.USCOHP\*810

## IDENTIFIERS

Site ID 767 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 404756N  
State Colorado Longitude 1085418W

<u>Quad Code</u>	<u>Quad Name</u>
40108-G8	Lodore School
40108-G7	Big Joe Basin

## County

Moffat (CO)

<u>Watershed Code</u>	<u>Watershed Name</u>
14040109	Vermilion
14040106	Upper Green-Flaming Gorge Reservoir

## SITE DESCRIPTION

<b>Minimum Elevation</b>	5,400.00	<b>Feet</b>	1,646.00	<b>Meters</b>
<b>Maximum Elevation</b>	6,200.00	<b>Feet</b>	1,889.76	<b>Meters</b>

## Site Description

This site consists primarily of flat bottomlands, with a prominent bluff running north-south through its center. The southern flank of Cold Spring Mountain also enters the north side of this site. The low elevation bottomlands in the southern portion support large areas of greasewood and sagebrush shrublands. Drainages with ephemeral creeks cut down through the surrounding uplands, exposing dramatic cliffs. Water from these drainages feeds the greasewood shrublands in the lowlands. Outcrops of whitish gray shale support a shale barrens plant community, in which a good quality occurrence of *Penstemon gibbensii* is found. The upland areas in the northern portion support pinon / juniper woodlands. Pinons and junipers are also found to a limited extent growing on the white shale substrate with *Penstemon gibbensii*, but they are a minor component of the community. Elevation ranges from 5,400 to 6,200 feet. Size is roughly 2,000 acres. The largest suboccurrence of *Penstemon gibbensii* is found on the prominent white shale bluffs. Plants are only found on the steep, barren west-facing slopes, growing in very fine textured powdery soil. The flat top of the bluff is capped with a layer of denser, reddish sandstone. No plants were found growing in this strata anywhere in Brown's Park. However, cobbles and gravel from this layer have washed into the lower white strata in which *Penstemon gibbensii* is found. Soils on the slopes of this bluff are highly susceptible to erosion because of their friability and the paucity of vegetation. Cryptogamic crusts were found in many places which probably lend some stability to the surface. This suboccurrence continues into rolling hills of shale-derived soils which are surrounded by greasewood flats, sagebrush, and scattered pinons and junipers. Two other small suboccurrences of *Penstemon gibbensii* are found in this site. One is known only from an herbarium specimen label and has not been visited since 1978. Species associated with *Penstemon gibbensii* in the shale barrens habitat at Sterling Place include mule's ears (*Wyethia scabra*), locoweed (*Oxytropis lambertii*), milk vetch (*Astragalus* sp.), chainpod (*Hedysarum boreale*), phlox (*Phlox* sp.), rabbitbrush (*Chrysothamnus viscidiflorus*), milkweed (*Asclepias cryptoceras*), prince's plume (*Stanleya pinnata*), prickly gilia (*Leptodactylon* sp.), snakeweed (*Gutierrezia sarothrae*), wild buckwheat (*Eriogonum* spp.), Indian ricegrass (*Oryzopsis hymenoides*), spurge (*Euphorbia* sp.), bedstraw (*Galium* sp.), twinpod (*Physaria* sp.), mountain mahogany (*Cercocarpus montanus*), horsebrush (*Tetradymia canescens*), Utah juniper (*Juniperus osteosperma*), and pinon pine (*Pinus edulis*). The full extent of this occurrence as drawn on maps by Neely (1986) and Dorn (1990) was apparently not occupied by *Penstemon gibbensii* in 1999. This observation may be due to failure to find plants when they are not in flower, normal shifts in plant distribution from year to year, or localized extirpation of plants.

## Key Environmental Factors

No Data

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## Climate Description

No Data

## Land Use History

No Data

## Cultural Features

No Data

### SITE DESIGN

Site Map Y - Yes

Mapped Date 05/16/2000

Designer Spackman, S.C. and D.G. Anderson

## Boundary Justification

The boundary is drawn to include the extent of the occurrences of *Penstemon gibbensii*. Potential habitat for *Penstemon gibbensii* that was identified during this and previous surveys is also included within the boundary. Potential habitat areas include the shale barrens southwest of State Route 318, the southern flank of Cold Spring Mountain, and shale barrens south of the known occurrences and east of State Route 318 (in section 29). Management decisions in the adjacent greasewood, sagebrush, and pinon / juniper communities can easily have effects on the small shale barren areas among them. Trampling, increased erosion, and grazing by cattle pose potential threats to *Penstemon gibbensii*. Thus, adjacent areas are included in which management decisions must be made to insure the security of this occurrence.

Primary Area 5,584.46 Acres

2,259.96 Hectares

### SITE SIGNIFICANCE

Biodiversity Significance Rank B2: Very High Biodiversity Significance

## Biodiversity Significance Comments

This site contains a good (B-ranked) occurrence of a plant species which is critically imperiled on a global scale (G1/S1), Gibben's beardtongue (*Penstemon gibbensii*). Historical occurrences of state rare mammals and amphibians have been documented in the past.

Other Values Rank No Data

## Other Values Comments

No Data

### LAND MANAGEMENT ISSUES

## Land Use Comments

No Data

## Natural Hazard Comments

No Data

## Exotics Comments

Weed species found that pose a threat to *Penstemon gibbensii* are cheat grass (*Anisantha tectorum*), wienerleaf (*Halogeton glomeratus*), and Russian thistle (*Salsola australis*). An integrated pest management plan designed to deal with these species would benefit *Penstemon gibbensii*.

## Offsite

No Data

## Information Needs

No Data

### ASSOCIATED ELEMENTS OF BIODIVERSITY

Element			Global	State	Driving
State ID	State Scientific Name	State Common Name	Rank	Rank	Site Rank
20176	<i>Penstemon gibbensii</i>	Gibben's beardtongue	G1G2	S1	Yes

### REFERENCES

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## Reference ID

## Full Citation

164144

Dorn, R.D. 1990. Report on the status of *Penstemon gibbensii*, a candidate threatened species. Unpublished.

173217

Spackman, S. and D. Anderson. 1999. Field Survey and Protection Recommendations for the Globally Imperiled Gibben's Beardtongue, *Penstemon gibbensii* Dorn in Colorado. Unpublished report for the Colorado Natural Areas Program. 36pp.

## ADDITIONAL TOPICS

### Additional Topics

No Data

## VERSION

Version Date 05/16/2000

Version Author Spackman, S.C. and D.G. Anderson

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