

1. **Species:** *Arabis crandallii* (Crandall’s rockcress)
2. **Status:** Table 1 summarizes the current status of this species or subspecies by various ranking entity and defines the meaning of the status.

Entity	Status	Status Definition
NatureServe	G2	Globally imperiled possibly fewer than 50 total extant occurrences in Colorado and Wyoming
CNHP	S2	Imperiled in Colorado due to few occurrences (possibly fewer than 30) and isolated populations
Colorado State List Status	None	
USDA Forest Service	None	
USDI FWS ^b	None	
^a Colorado Natural Heritage Program.		
^b US Department of Interior Fish and Wildlife Service.		

The 2012 U.S. Forest Service Planning Rule defines Species of Conservation Concern (SCC) as “a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species’ capability to persist over the long-term in the plan area” (36 CFR 219.9). This overview was developed to summarize information relating to this species’ consideration to be listed as a SCC on the Rio Grande National Forest, and to aid in the development of plan components and monitoring objectives.

3. Taxonomy

Arabis crandallii is used by the NRCS Plants National Database and NatureServe. However, the Flora of North America treatment places this species into *Boechnera* based on genetic work, ITIS, The Colorado Natural Heritage Program, Weber and Wittmann (2012), as well as Ackerfield (2015) all recognize *Boechnera crandallii* over *Arabis crandallii*. This overview will use *Arabis crandallii* in accordance with NRCS Plants National Database, while recognizing that most authorities do not accept this taxa.

4. Distribution, abundance, and population trend on the planning unit [12.53.2,3,4]:

Crandall’s rockcress is a regional endemic known from central Colorado and southern Wyoming. The species is not known from the Rio Grande NF but is known from less than 2 air miles from the Rio Grande boundary near Mear’s Junction as well as O’Haver Lake on the San Isabel NF. The habitat of Crandall’s rockcress is open and rocky areas within shrublands, woodlands, and forests, and this habitat certainly occurs on the Rio Grande. Thus it is likely that it is present on the Rio Grande There are a reported 30 extant occurrences in Colorado, but the likely number of occurrences may be less owing to misidentification of a common species as Crandall’s rockcress, at least 18 of the 30 occurrences are on NFS lands, but again that number may be fewer. Crandall’s rockcress can be locally common, numbering in the thousands of individuals over

hundreds of acres when it does occur. Other occurrences number in the single digits over fractions of acres.

Table 2. Known Occurrence Frequency within the Planning Area (NRIS database)

Known Occurrences in the past 20 years	0
Year Last Observed	0

5. Brief description of natural history and key ecological functions [basis for other 12.53 components]:

Crandall's rockcress occurs in rocky and open areas within sagebrush shrublands, P-J or mountain mahogany woodlands, and ponderosa pine, aspen, or lodgepole pine forests from 8,100 to 11,000 feet in elevation. This species has been observed on rocky areas of different parent material from granitic to sandstone or limestone.

6. Overview of ecological conditions for recovery, conservation, and viability [12.53 7, 9?, 10, 11, 12] including Threats and Risk Factors:

Habitat loss from road construction has been noted as a threat to Crandall's rockcress. Some populations are immediately next to highways and other roads and exotic species may also be a threat. Some trails have been moved to avoid impacts to Crandall's rockcress.

7. Key literature:

Ackerfield, J. 2015. Flora of Colorado. Botanical Research Institute of Texas Press. Fort Worth, TX.

Ladyman, J.A.R. (2005, May 25). *Boechea crandallii* (B.L. Robinson) W.A. Weber (Crandall's rockcress): a technical conservation assessment. [Online]. USDA Forest Service, Rocky Mountain Region. Available:
<http://www.fs.fed.us/r2/projects/scp/assessments/boecheacrandallii.pdf>

Colorado Natural Heritage Program (CNHP). 2015. Element Occurrence Records for *Boechea crandallii*. Unpublished data stored on U.S. Forest Service Geographic Information Systems Servers. Compiled onto USFS Servers from CNHP database February 2015.

Flora of North America Editorial Committee (eds.). 1993+. Flora of North America North of Mexico. 19+ vols. New York and Oxford. *Boechea crandallii* treatment accessed September 25, 2015 at http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250094781

Integrated Taxonomic Information System (ITIS). 2015. Online database. <http://www.itis.gov/> Accessed September 25, 2015.

NatureServe, 2015. NatureServe Explorer. Online database. <http://explorer.natureserve.org/index.htm> Accessed September 25, 2015.

USDA NRCS Plants National Database. 2015. Online database. <http://plants.usda.gov/> Accessed September 25, 2015.

Weber, W.A. and Wittmann, R.C. 2012. Colorado Flora 4th ed. University of Colorado Press. Boulder, CO.

8. Map of Known Occurrences and Modeled Suitable Habitat

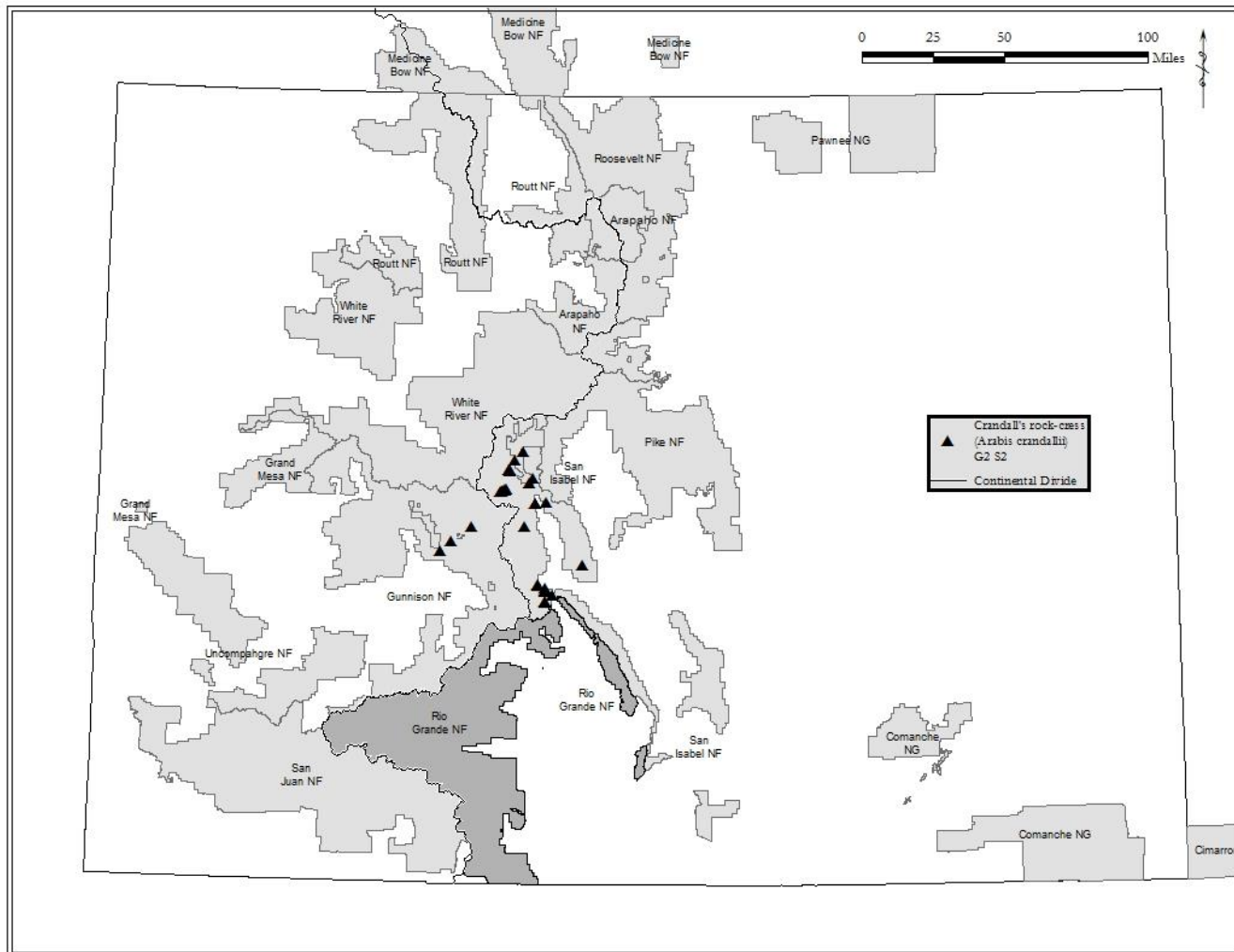


Figure 1. Reported Occurrences.