

Review of Northeastern Colorado Globally Imperiled & Vulnerable Species

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Conservation Status Definitions

Global (G) and State (S) Ranks

G/S1 —Critically Imperiled

G/S2 —Imperiled

G/S3 —Vulnerable

G/S4 —Apparently Secure

G/S5 —Secure



G#T# Trinomial (T) rank for subspecies or varieties



Ranking Criteria

- Number of occurrences
- Range
- Occupied habitat
- Quality of habitat
- Abundance
- Threats
- Trend
- Number of protected occurrences





Primary References

Ackerfield, Jennifer. Flora of Colorado. Fort Worth, BRIT Press, 2015.

Colorado Natural Heritage Program (CNHP). 2022. Biodiversity Tracking and Conservation System (BIOTICS). Colorado Natural Heritage Program, Colorado State University, Fort Collins, CO.

NatureServe. 2022. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. <https://explorer.natureserve.org/>.

SEINet Portal Network. 2022. <http://swbiodiversity.org/seinet/index.php>.

USDA, NRCS. 2022. The PLANTS Database (<http://plants.usda.gov>). National Plant Data Team, Greensboro, NC. USA.

Personal communications



Aletes humilis

Larimer aletes

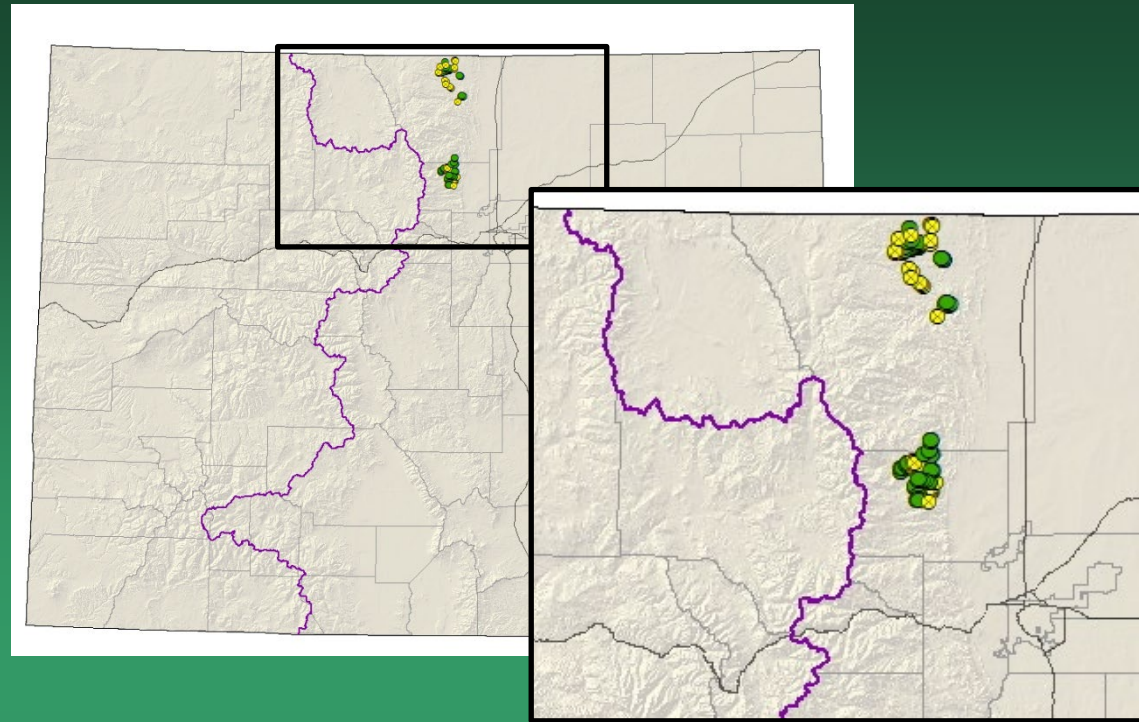
Rank: G2G3/S2S3

Status: SWAP Tier 2

Elevation: 6,155-8,825 ft.

CO occurrences: 27

Historical: 13



- Global distribution: Larimer & Boulder counties, possibly into southern Wyoming
- Last observed in Colorado: 2021, Seglias & Wilson
- Primary threats: Recreational uses
- Land ownership/management: CPW, local government, NGO/land trust, private, USFS





Aletes humilis



Aquilegia saximontana

Rocky Mountain columbine

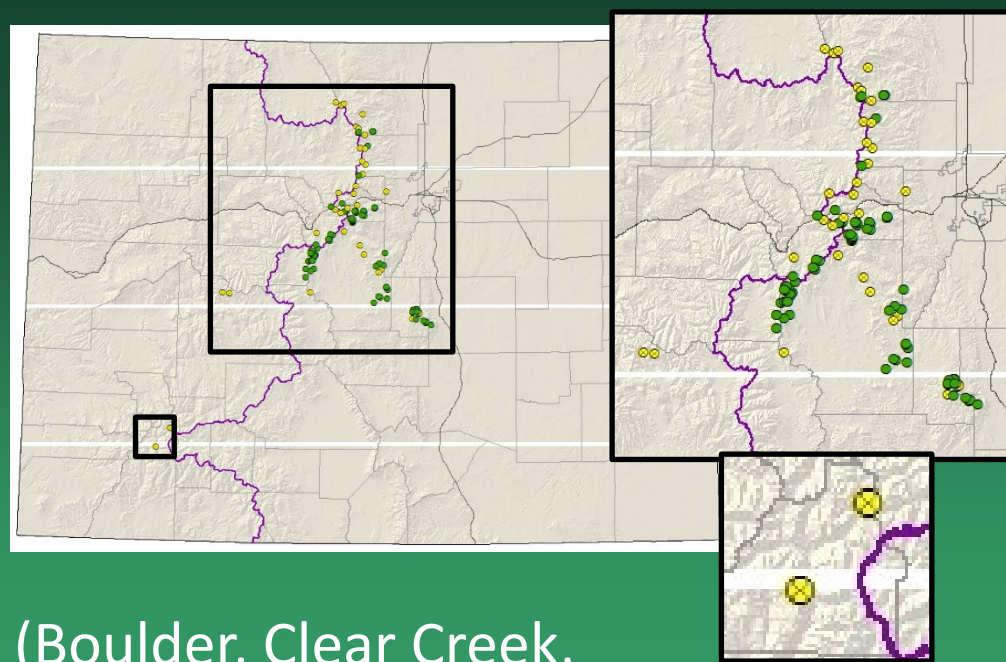
Rank: G3/S3

Status: None

Elev.: 7,620-14,260 ft.

CO occurrences: 74

Historical: 33



- Global distribution: Colorado (Boulder, Clear Creek, El Paso, Gilpin, Gunnison, Jackson, Jefferson, Lake, Larimer, Park, San Juan, Summit, & Teller counties)
- Last observed in Colorado: 2022 (Nimz, Alinfield, Mallory - iNaturalist; 2020 – Pam Smith in Jeffco)
- Primary threats: Roadside disturbance, recreation, grazing
- Land ownership/management: Local government, NGO/land trust, NPS, state, private, USFS



Aquilegia saximontana



Astragalus sparsiflorus

Front Range milkvetch

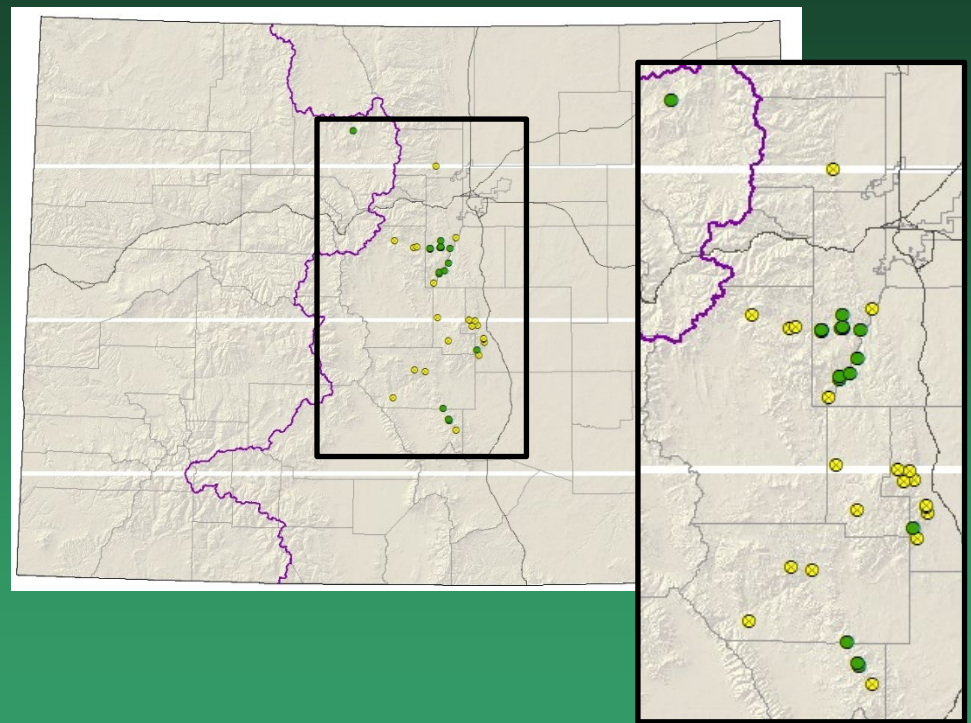
Rank: G2G3/S2S3

Status: SWAP Tier 2

Elev.: 5,510-9,220 ft.

CO occurrences: 29

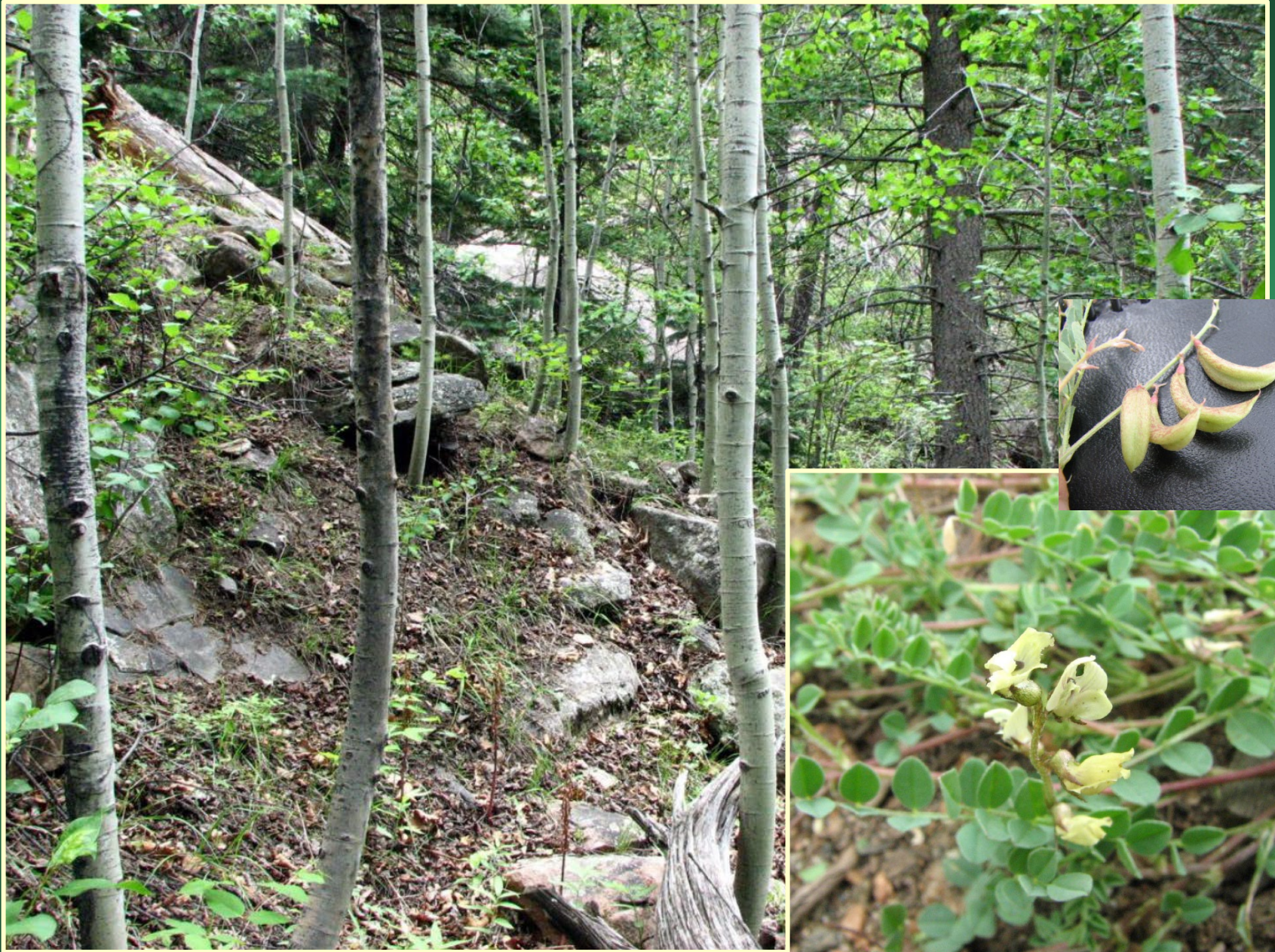
Historical: 18



- Global distribution: Colorado endemic (Boulder, Custer, Douglas, El Paso, Fremont, Grand, Jefferson, Park, & Teller)
- Last observed in Colorado: 2021, Pam Smith, Jefferson County
- Primary threats: Recreation
- Land ownership/management: Local government, federal, NGO, state, private, USFS



Astragalus sparsiflorus



Carex oreocharis

Grassy slope sedge

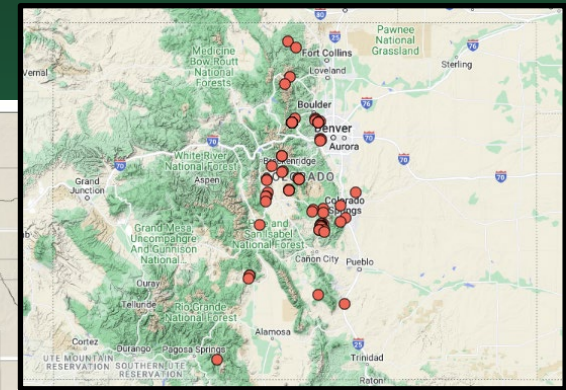
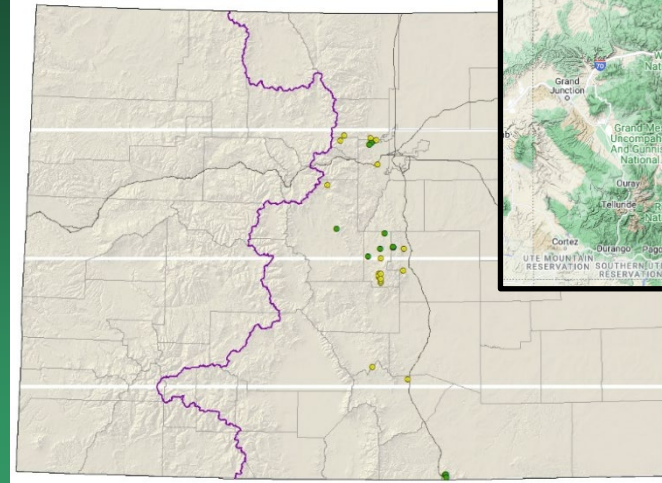
Rank: G3/S3

Status: None

Elev.: 5,980-10,540 ft.

CO occurrences: 23

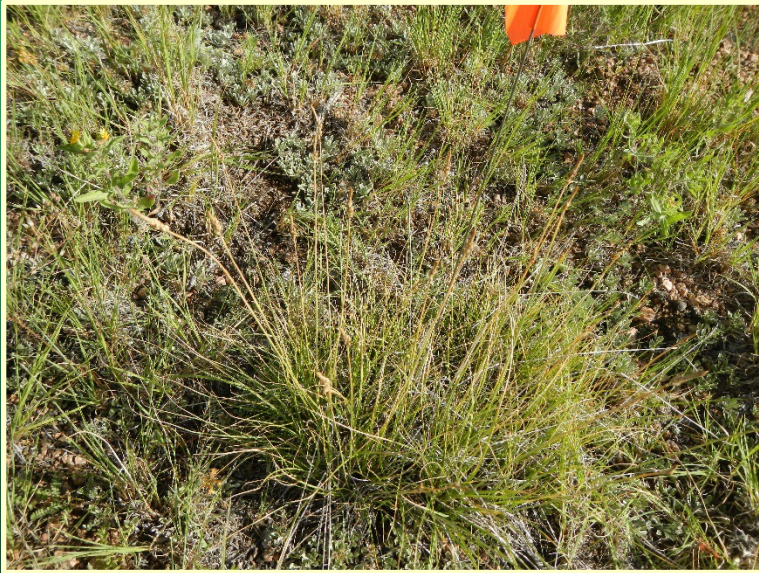
Historical (Failed to Find): 14 (1)



- Global distribution: Arizona, New Mexico, Wyoming, Colorado (Boulder, Conejos, Custer, Douglas, El Paso, Fremont, Gilpin, Larimer, Las Animas, Jefferson, Park, & Teller) and Mexico
- Last observed in Colorado: 2022, CNHP
- Primary threats: Development, fire suppression, grassland deterioration, invasive species, mining, and roads
- Land ownership/management: BLM, local government, federal, NPS, private, USFS



Carex oreocharis



Draba globosa
Rockcress draba

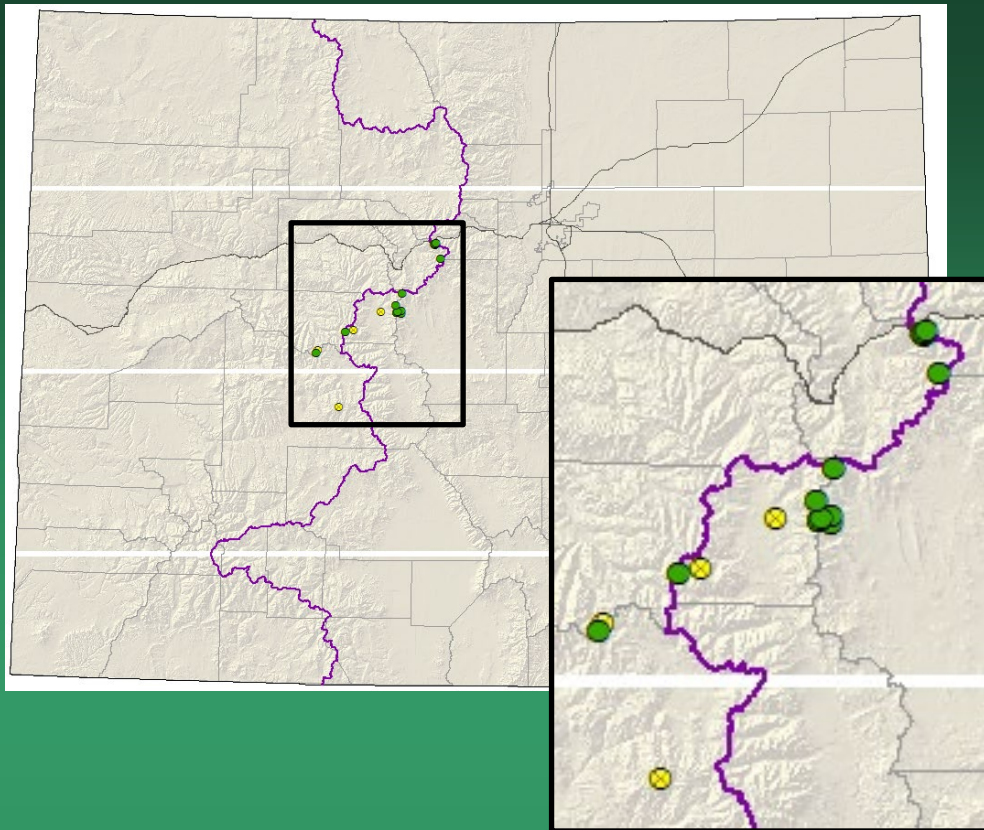
Rank: G3/S1

Status: None

Elev.: 10,560-13,370 ft.

CO occurrences: 12

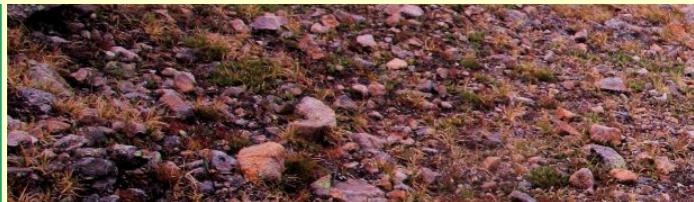
Historical: 4



- Global distribution: Idaho, Montana, Utah, Wyoming, Colorado (Clear Creek, Gunnison, Lake, Park, Pitkin, & Summit counties)
- Last observed in Colorado: 2016, MRHI
- Primary threats: Recreation, mining
- Land ownership/management: Private, USFS



Draba globosa



Eriogonum exilifolium

Dropleaf wild buckwheat

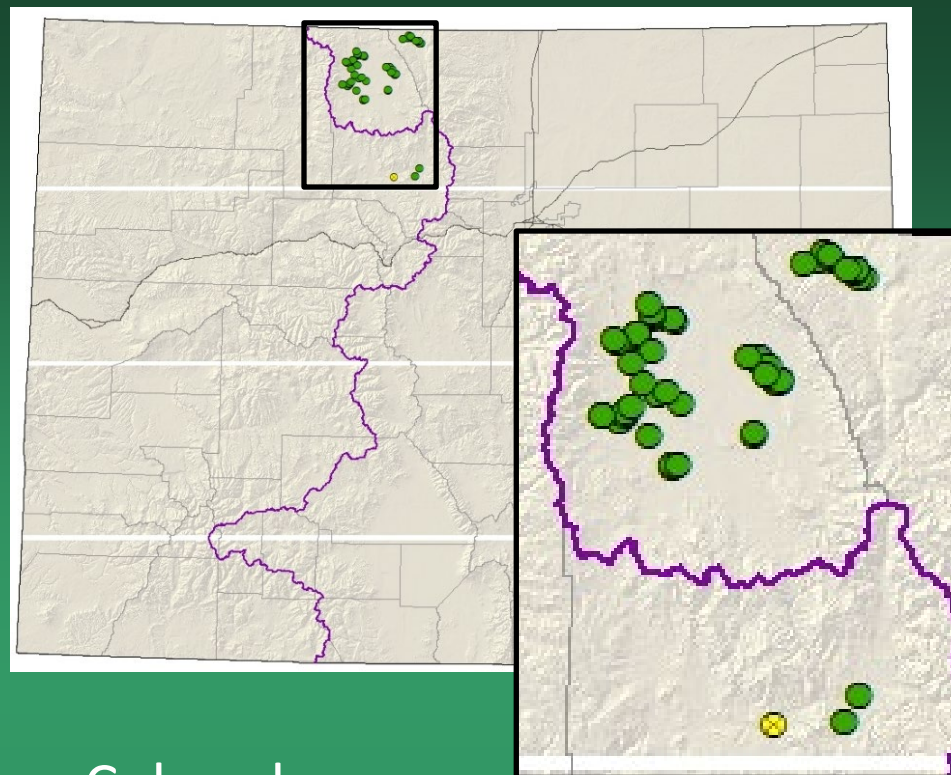
Rank: G3/S3

Status: USFS sensitive

Elev.: 7,820-8,770 ft.

CO occurrences: 27

Historical: 1



- Global distribution: Wyoming, Colorado (Grand, Jackson, & Larimer counties)
- Last observed in Colorado: 2022, updates to known EOs with iNaturalist
- Primary threats: Oil and gas development, OHV, invasive species
- Land ownership/management: BLM, state, private, USFS



Eriogonum exilifolium



Lomatium nuttallii
Nuttall's desert-parsley

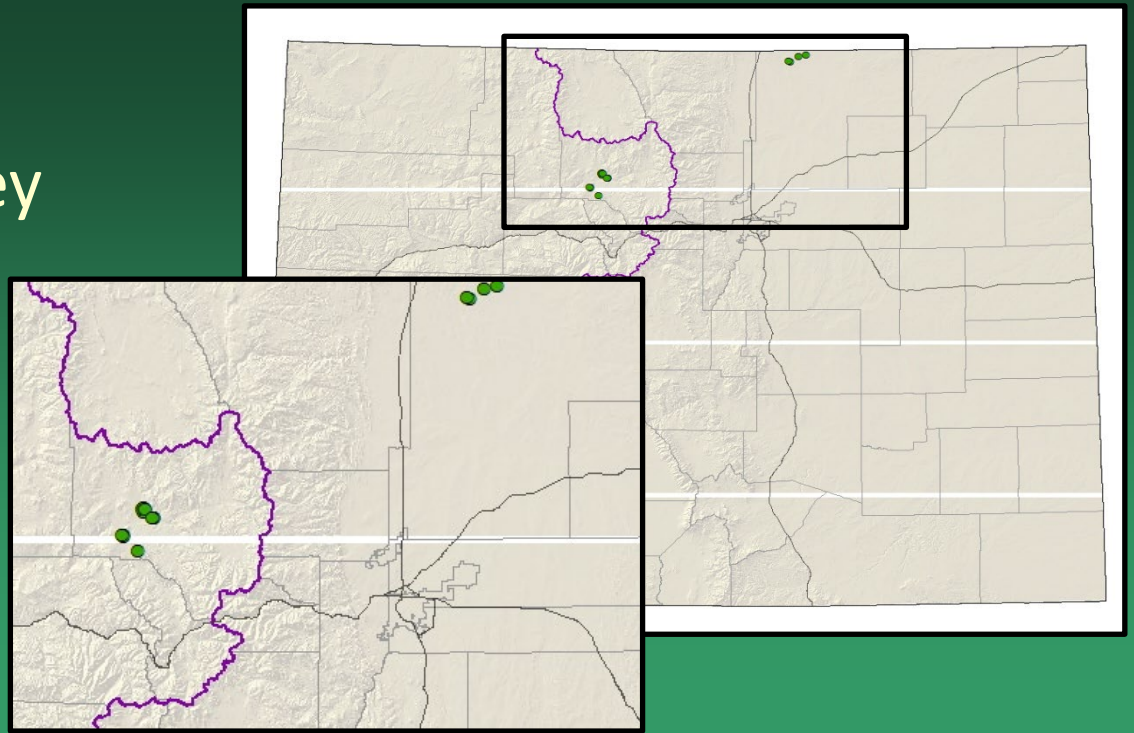
Rank: G3/S2

Status: None

Elev.: 5,590-7,800 ft.

CO occurrences: 7

Historical: 0



- Global distribution: Idaho, Montana, Wyoming, Nebraska, South Dakota (historical), Colorado (Grand & Weld counties)
- Last observed in Colorado: 2010, D. Clark, D. Hazlett
- Primary threats: OHV, weeds, cattle trampling
- Land ownership/management: BLM, state, private



Lomatium nuttallii



Mentzelia speciosa
Jeweled blazingstar

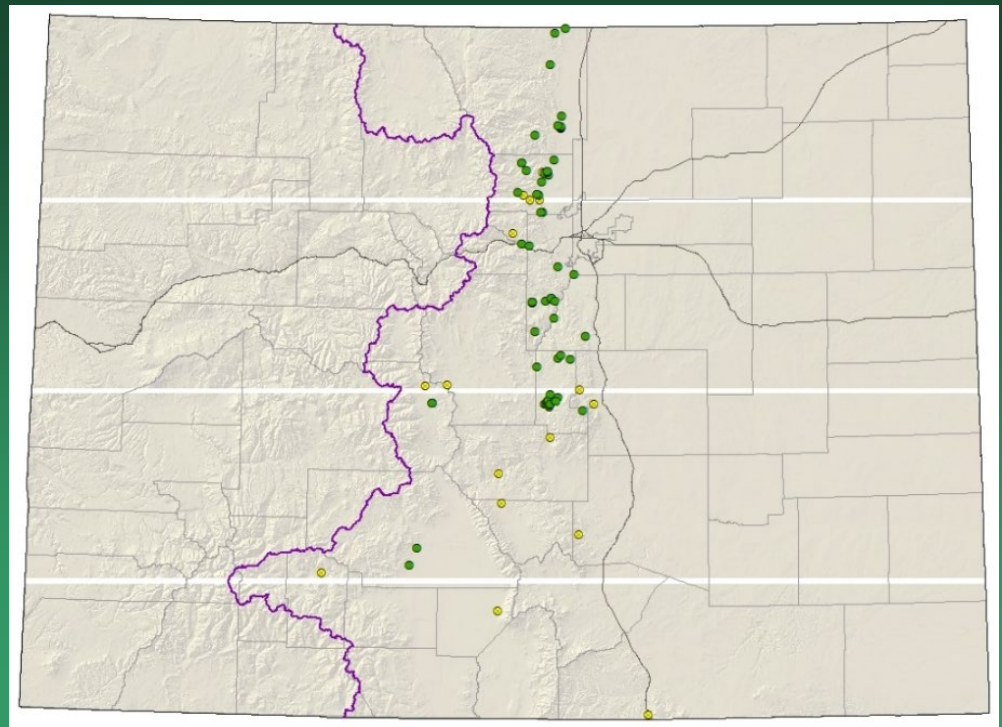
Rank: G3/S3

Status: None

Elev.: 5,390-10,850 ft.

CO occurrences: 54

Historical: 16



- Global distribution: Wyoming, New Mexico (SEINet), Colorado (Alamosa, Arapahoe, Boulder, Chaffee, Clear Creek, Custer, Denver, Douglas, El Paso, Fremont, Gilpin, Jefferson, Larimer, Las Animas, Mineral, Park, Pueblo, Saguache & Teller)
- Last observed in Colorado: 2021, Pam Smith
- Primary threats: Residential development, road maintenance, recreation



Mentzelia speciosa



Mimulus gemmiparus

Rocky Mtn. Monkeyflower

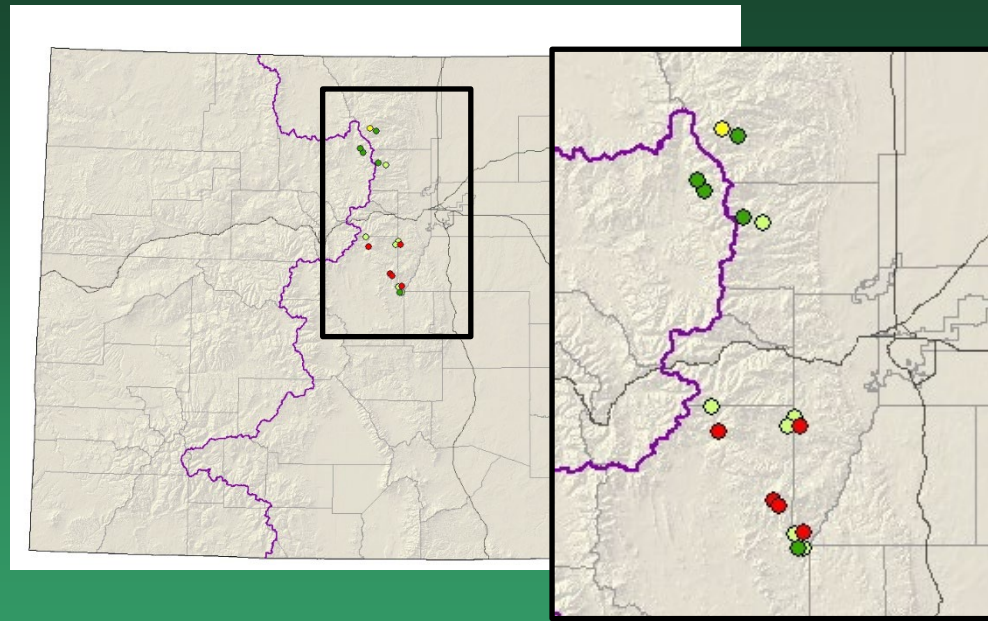
Rank: G1/S1

Status: SWAP Tier 1,
USFS sensitive

Elev.: 8,360-11,200 ft.

CO occurrences: 18

Historical: 1; Natural: 6; Introduced: 6; Mixed: 5



- Global distribution: Colorado endemic (Boulder, Clear Creek, Grand, Jefferson, Larimer, & Park counties)
- Last Observed in Colorado: 2019, Beardsley
- Primary threats: Recreation, fire & fire mitigation, hydrologic alterations, ecological disturbances
- Land ownership/management: NPS, state, USFS





Mimulus gemmiparus

Oenothera coloradensis

Gaura neomexicana ssp. *coloradensis*

Colorado butterfly plant

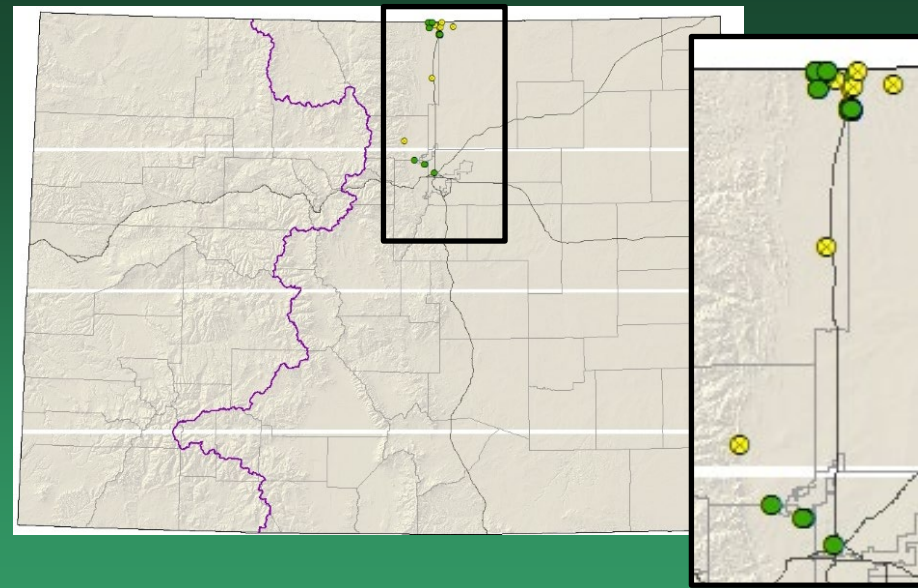
Rank: G3T2/S1S2

Status: SWAP Tier 1

Elev.: 4,800-6,300 ft.

CO occurrences: 14

Historical: 4; # Ranked Failed to Find: 3; # Ranked Poor: 4



- Global distribution: Wyoming, Nebraska, and Colorado (Adams, Boulder, Jefferson, Larimer & Weld counties)
- Last observed in Colorado: 2017, Islam, Strouse
- Primary threats: Hydrologic alteration, incompatible livestock grazing, invasive species
- Land ownership: City of Fort Collins, private, state



Oenothera coloradensis



Oenopsis wardii

Ward's golden-weed

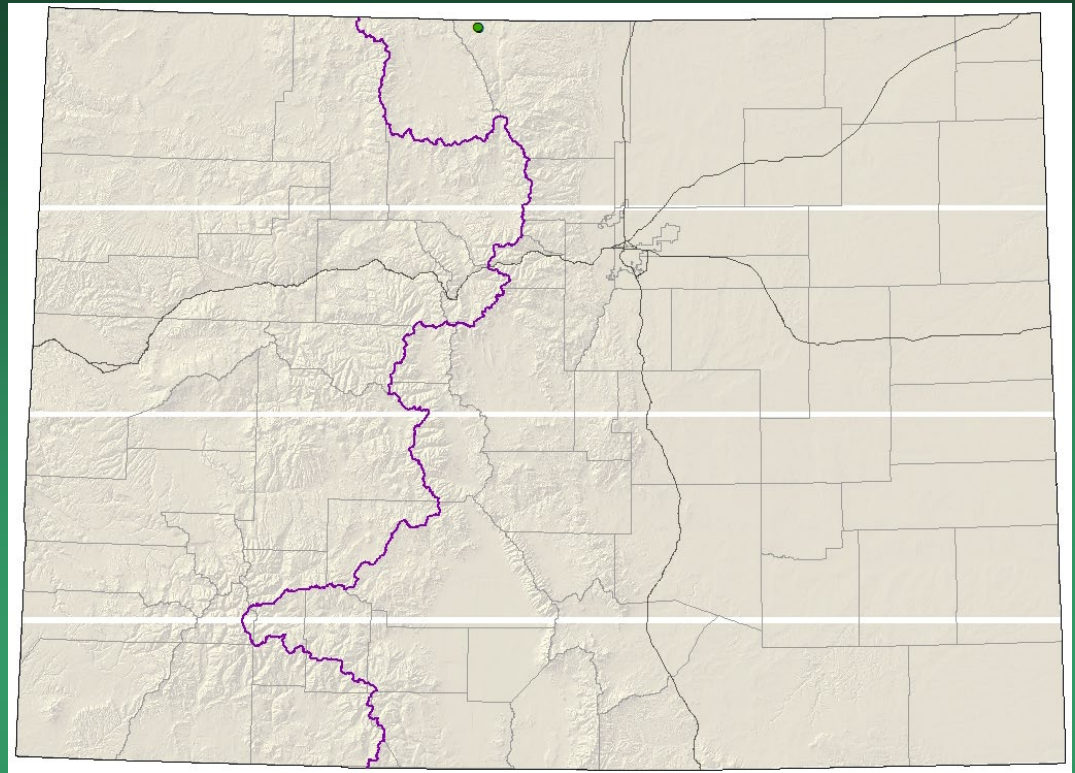
Rank: G3/S1

Status: None

Elev.: 7,830-7,850 ft.

CO occurrences: 1

Historical: 0



- Global distribution: Wyoming and Colorado (Larimer County).
- Last observed in Colorado: 2021, Lagier on iNaturalist
- Primary threats: Incompatible grazing
- Land ownership/management: BLM, private



Oönopsis wardii



Parthenium alpinum
Alpine fever-few

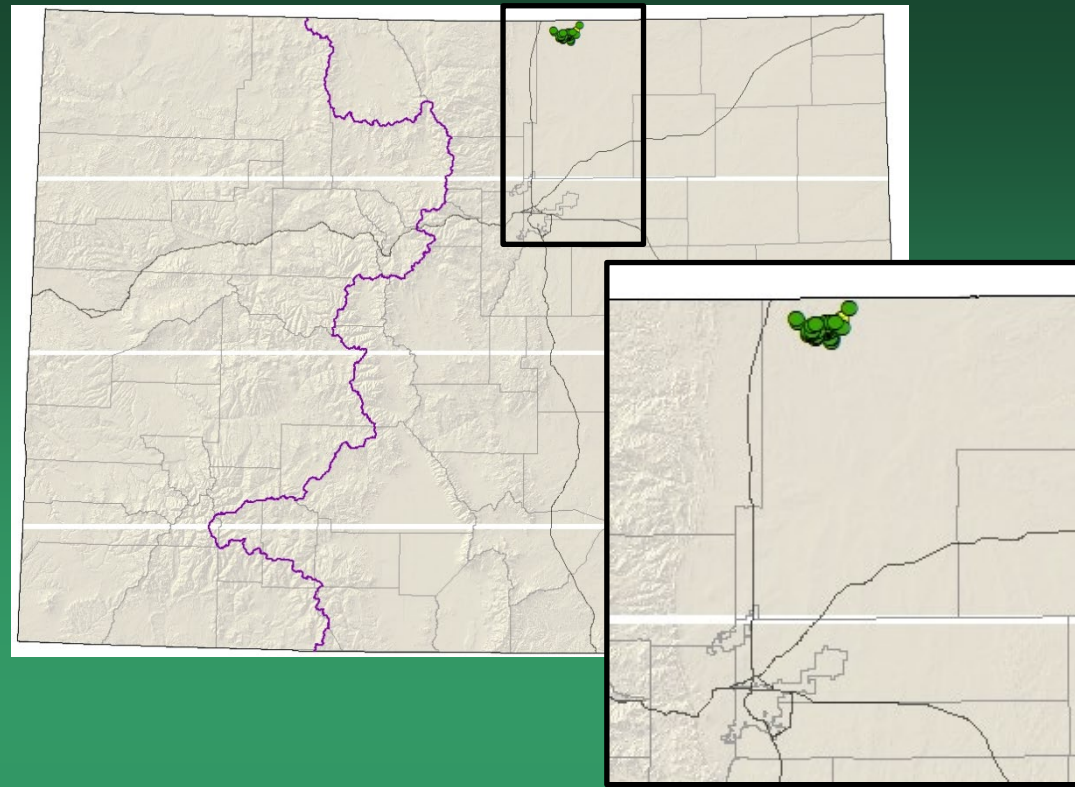
Rank: G3/S2

Status: None

Elev.: 5,500-5,820 ft.

CO occurrences: 7

Historical: 1



- Global distribution: Wyoming, New Mexico, and Colorado (Weld County)
- Last observed in Colorado: 2021, Ernie Marx
- Primary threats: Road maintenance, quarries, pipelines, oil and gas development, off-road vehicle use
- Land ownership/management: Private, USFS



Bolophyta alpina



Phacelia denticulata

Rocky Mountain phacelia

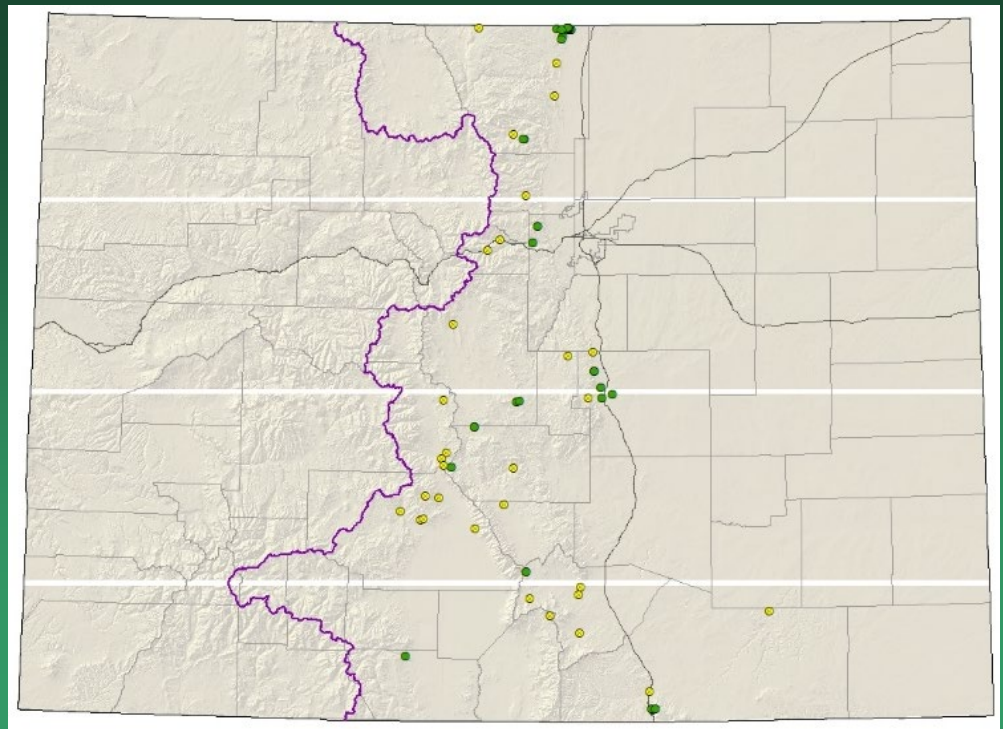
Rank: G3/S3

Status: None

Elev.: 7,470-8,720 ft.

CO occurrences: 49

Historical: 29



- Global distribution: Wyoming, New Mexico, Colorado (Boulder, Chaffee, Clear Creek, Conejos, Costilla, Custer, Douglas, El Paso, Fremont, Huerfano, Jefferson, Larimer, Las Animas, Park, Saguache & Teller)
- Last observed in Colorado: 2021, Tsingine and Lee – specimen
- Primary threats: Low overall threat impact - recreation
- Land ownership/management: BLM, local government, federal, NPS, private, USFS



Phacelia denticulata



Phacelia formosula

North Park phacelia

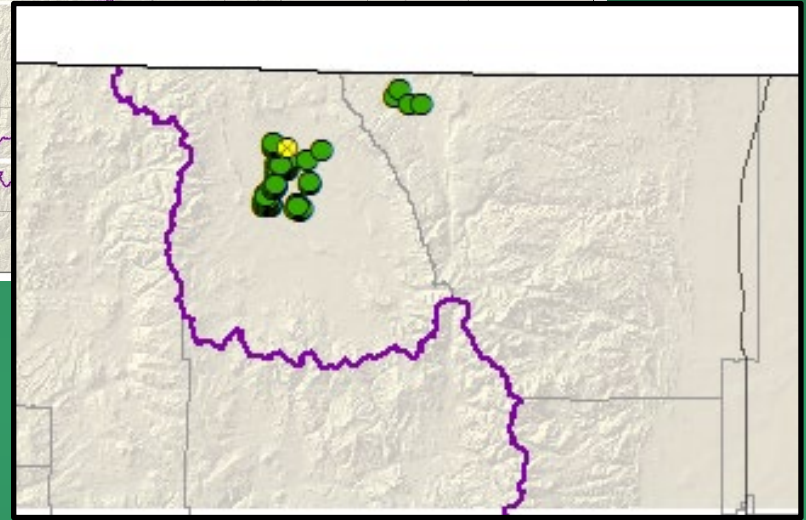
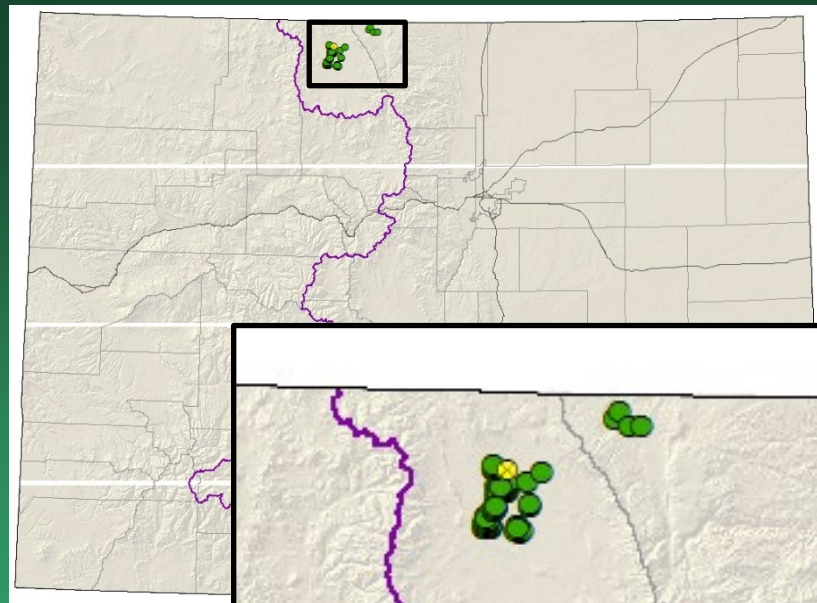
Rank: G2/S2

Status: SWAP Tier 1
LE

Elev.: 7,900-8,300 ft.

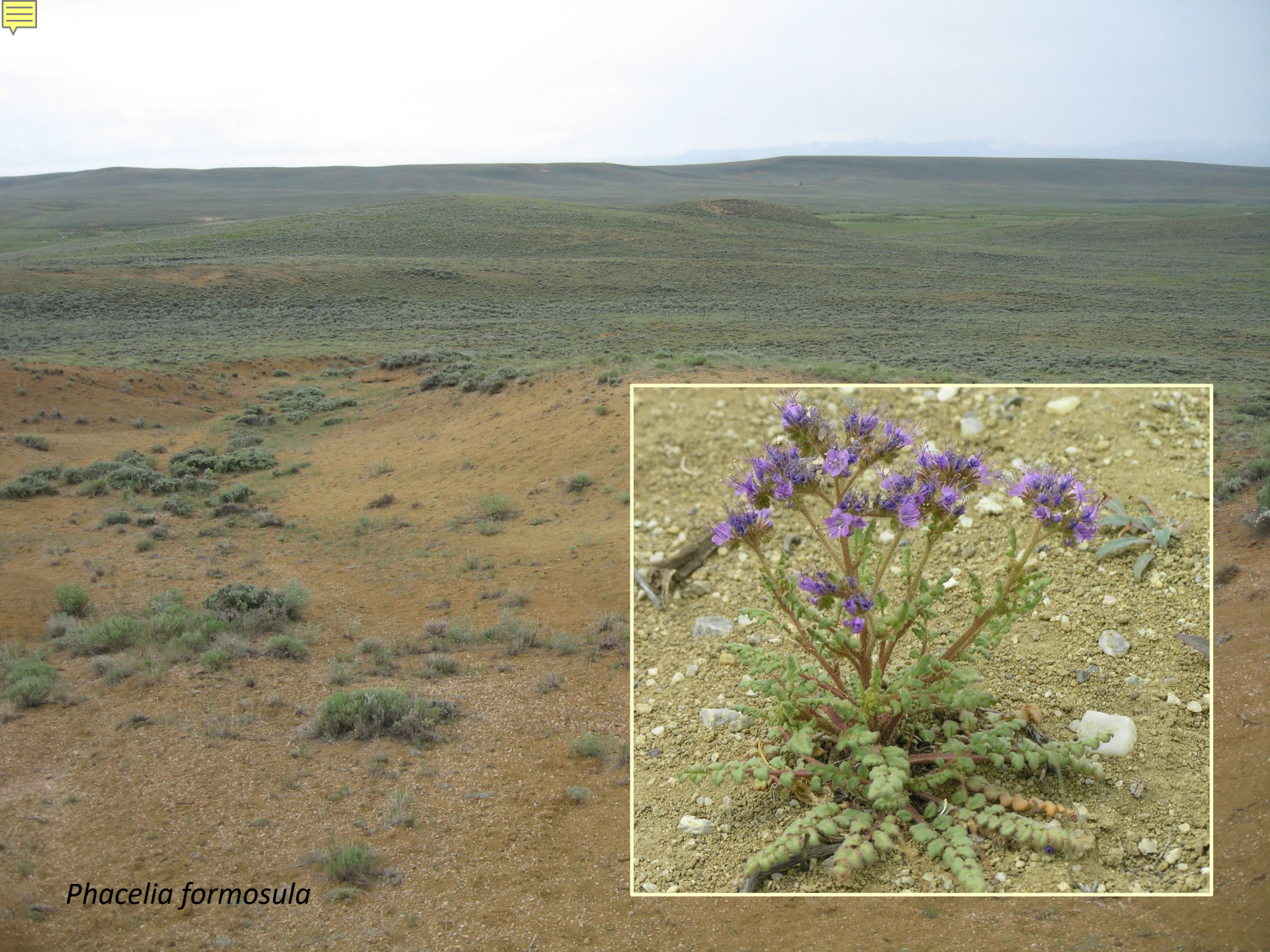
CO occurrences: 13

Historical: 2




- Global distribution: Colorado endemic (Jackson & Larimer)
- Last observed: 2022, BLM and partner organizations
- Primary threats: OHV use, incompatible livestock grazing, oil and gas development
- Land ownership/management: BLM, federal, state, private





Phacelia formosula

 *Potentilla ambigens*
Southern Rocky
Mountain cinquefoil

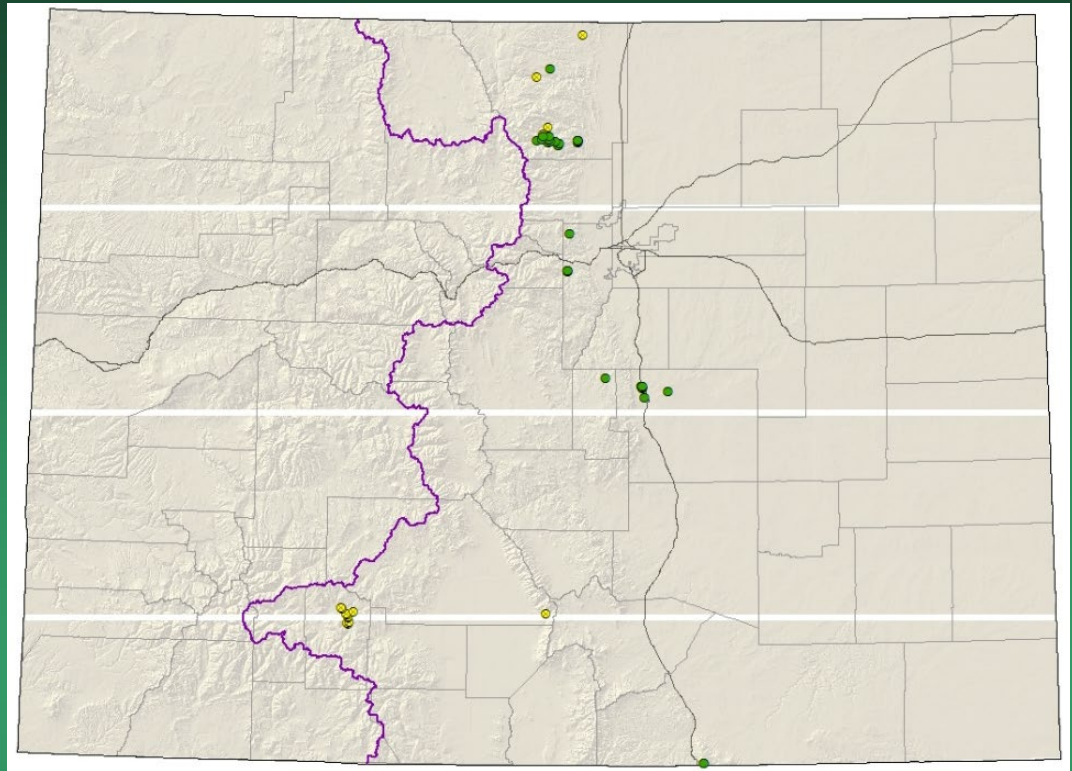
Rank: G3/S2

Status: None

Elev.: 6,610-9,060 ft.

CO occurrences: 20

Historical: 9



- Global distribution: New Mexico, Wyoming (historical), and Colorado (El Paso, Jefferson, Larimer, Las Animas, Mineral, Saguache, Teller)
- Last observed in Colorado: 2020, Anderson, Clark et al. Fishers Peak; 2020, Pam Smith, Jefferson County
- Primary threats: OHV, other recreation, residential & commercial development, secondary impacts of grazing, altered fire regime



Potentilla ambigens



Potentilla rupincola

Potentilla effusa var. *rupincola*

Rocky Mountain cinquefoil

Rank: G5?T2/S2

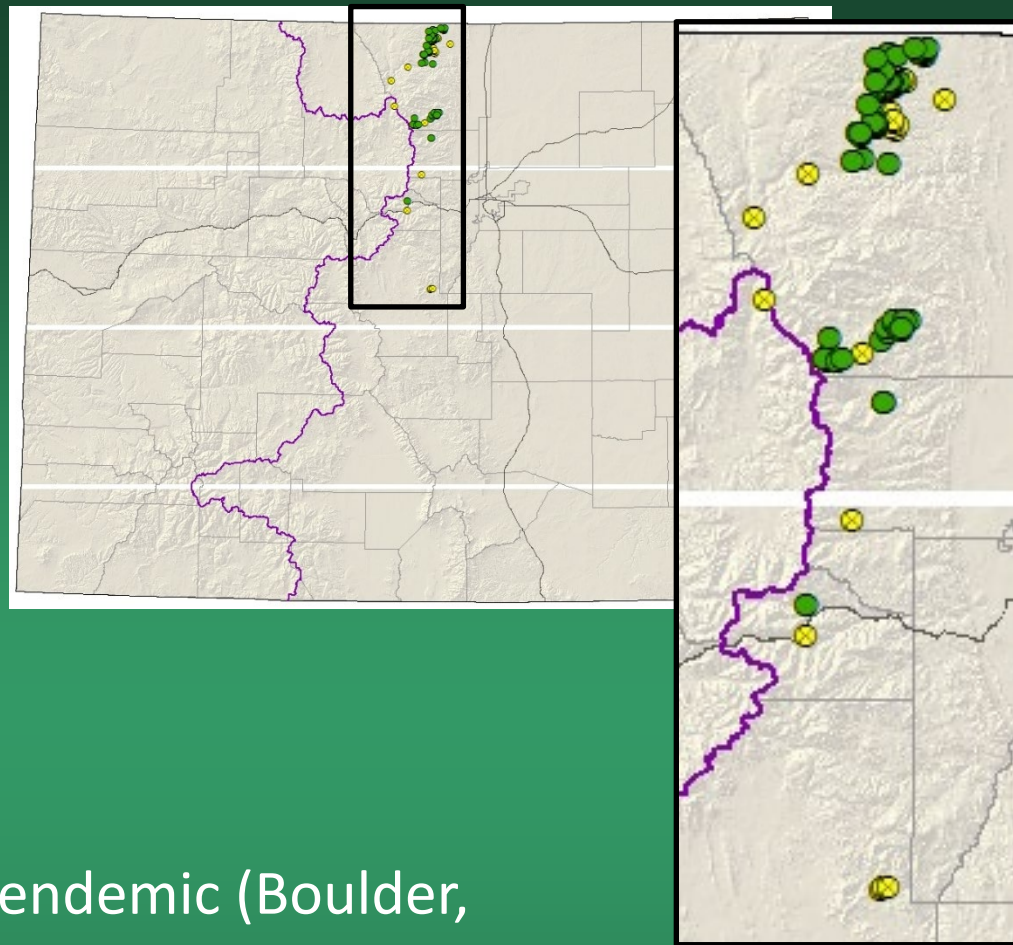
Status: SWAP Tier 2

USFS Sensitive

Elev.: 6,240-10,930 ft.

CO occurrences: 34

Historical: 10



- Global distribution: Colorado endemic (Boulder, Clear Creek, Larimer & Park counties)
- Last observed in Colorado: 2021, Ackerfield, iNaturalist
- Primary threats: Invasive species, residential and commercial development, right-of-way management, OHV, other recreation.



Potentilla rupincola



Sisyrinchium pallidum
Pale blue-eyed grass

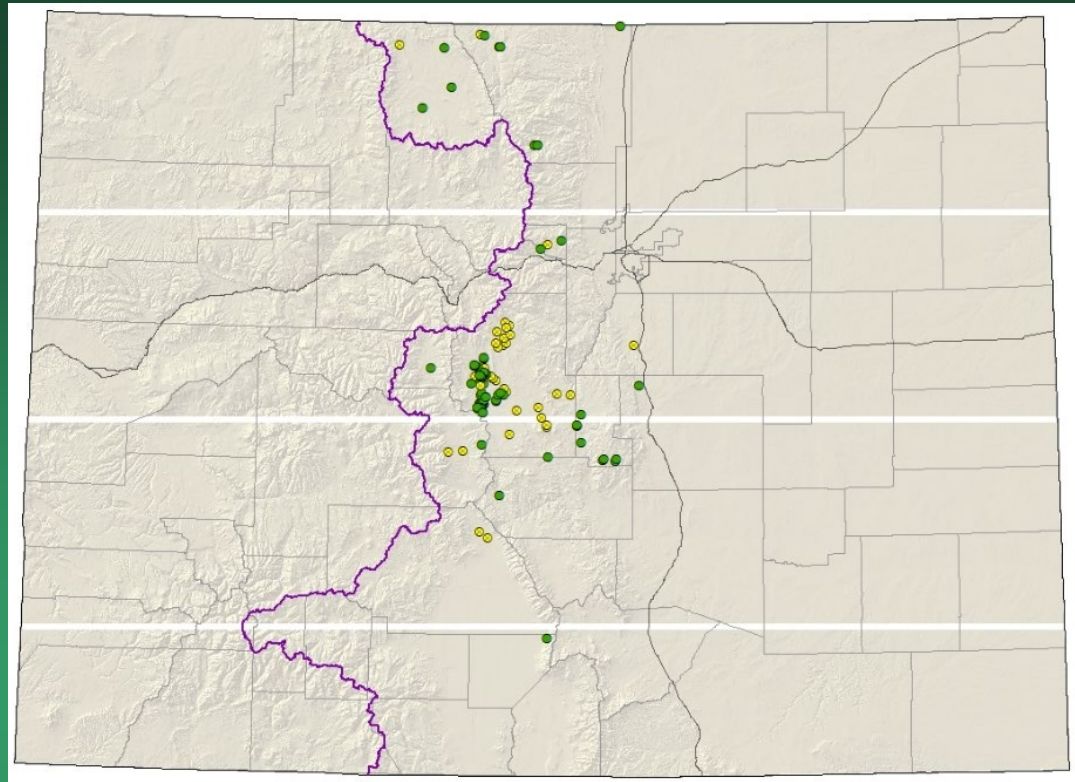
Rank: G3/S3

Status: BLM Sensitive

Elev.: 6,320-9,710 ft.

CO occurrences: 62

Historical: 28



- Global distribution: Wyoming and Colorado (Alamosa, Chaffee, Douglas, El Paso, Fremont, Gilpin, Jackson, Lake, Larimer, Park, Saguache, and Teller counties)
- Last observed in Colorado: 2021, Langemeier, iNaturalist
- Primary threats: Alteration of wetland habitat
- Land ownership/management: BLM, local government, NGO/land trust, NPS, state, private, USFS





Sisyrinchium pallidum

Spiranthes diluvialis

Ute ladies'-tresses

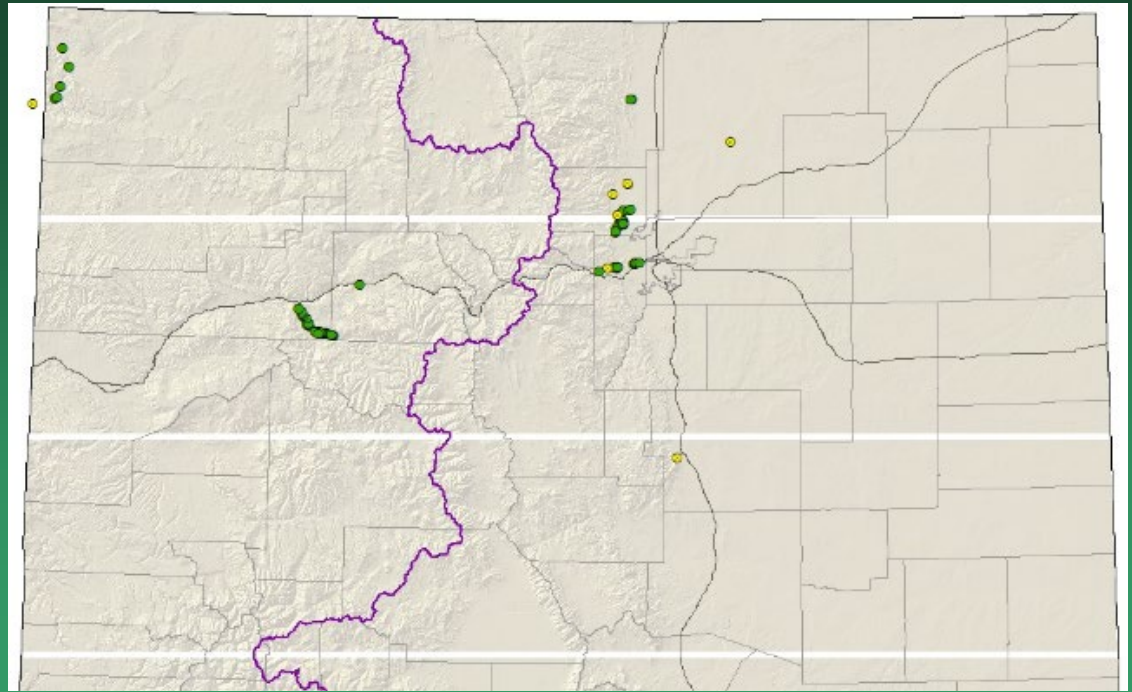
Rank: G2G3/S2

Status: SWAP Tier 1
LT

Elev.: 4,500-7,800 ft.

CO occurrences: 39

Historical: 11



- Global distribution: Washington, Idaho, Montana, Wyoming, Nevada, Utah, Nebraska, and Colorado (Boulder, Eagle, El Paso, Garfield, Jefferson, Larimer, Moffat, & Weld counties)
- Last observed in Colorado: 2021, Marshall and Erickson, Roaring Fork
- Primary threats: Hydrologic alteration, urbanization
- Land ownership/management: NPS, City of Fort Collins, City of Boulder, City of Wheat Ridge, Jefferson County, USFWS, Private, BLM, City of Carbondale



Spiranthes diluvialis



How can you help conserve rare plants?

- Update EORs
- Find new EOs
- Adopt a rare plant
- Learn to recognize rare plant species
- Work with herbaria to document your findings
- Observe pollinators

