

New and Noteworthy Collections of Rare Aquatics in Colorado

Mari Majack

MS Candidate (marika.majack@ucdenver.edu)

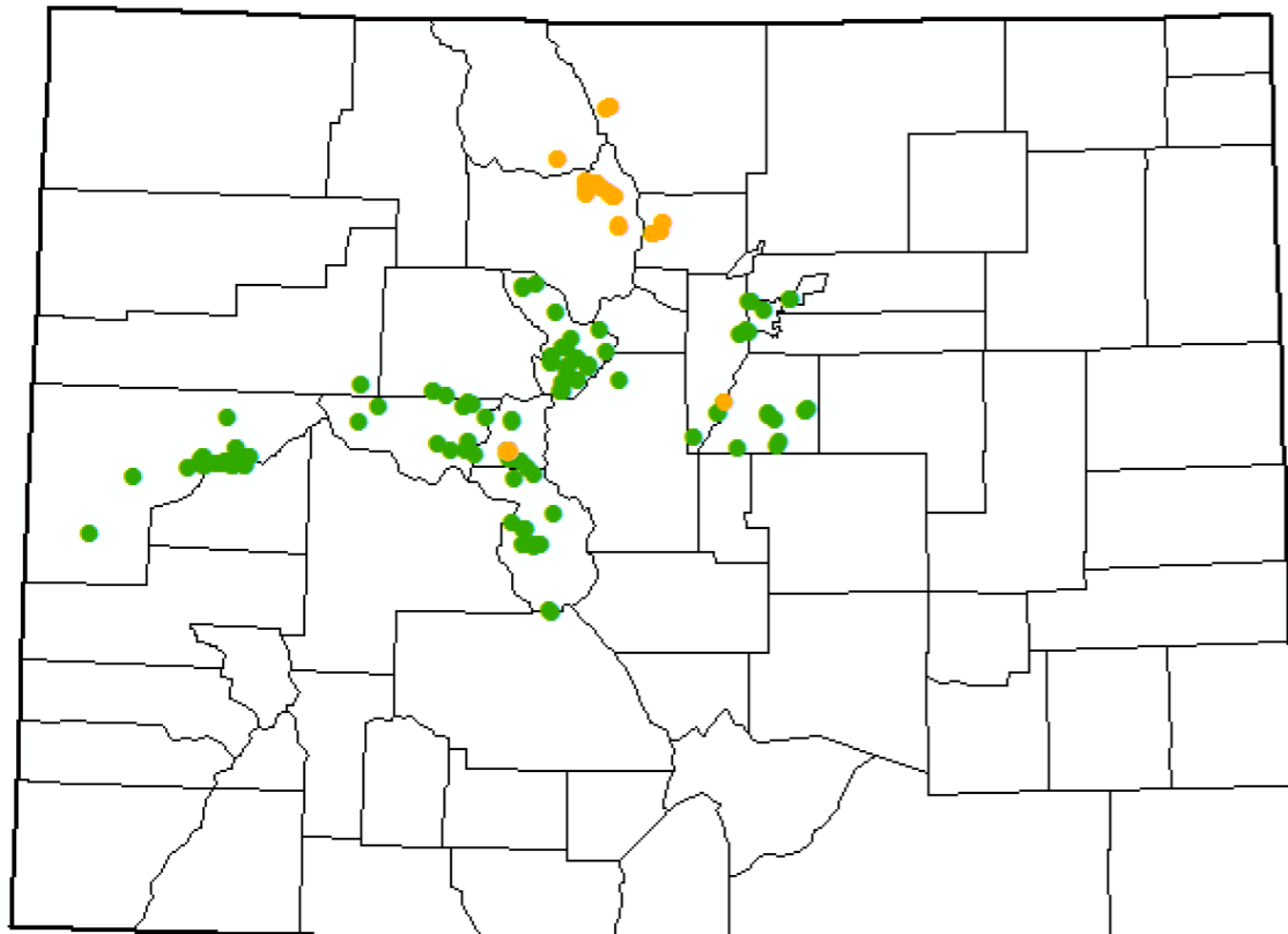
Applied Systematics Lab, Department of Integrative Biology
University of Colorado Denver

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Aquatic plant survey sites

- 2013: Fieldwork for MS thesis
122 sites: pondweeds only
- 2014: USFS rare plant survey
30 sites: all aquatic taxa



Nuphar lutea subsp. *polysepala*

Fieldwork funded by:

USDA Forest Service

Colorado Native Plant Society

CU Denver

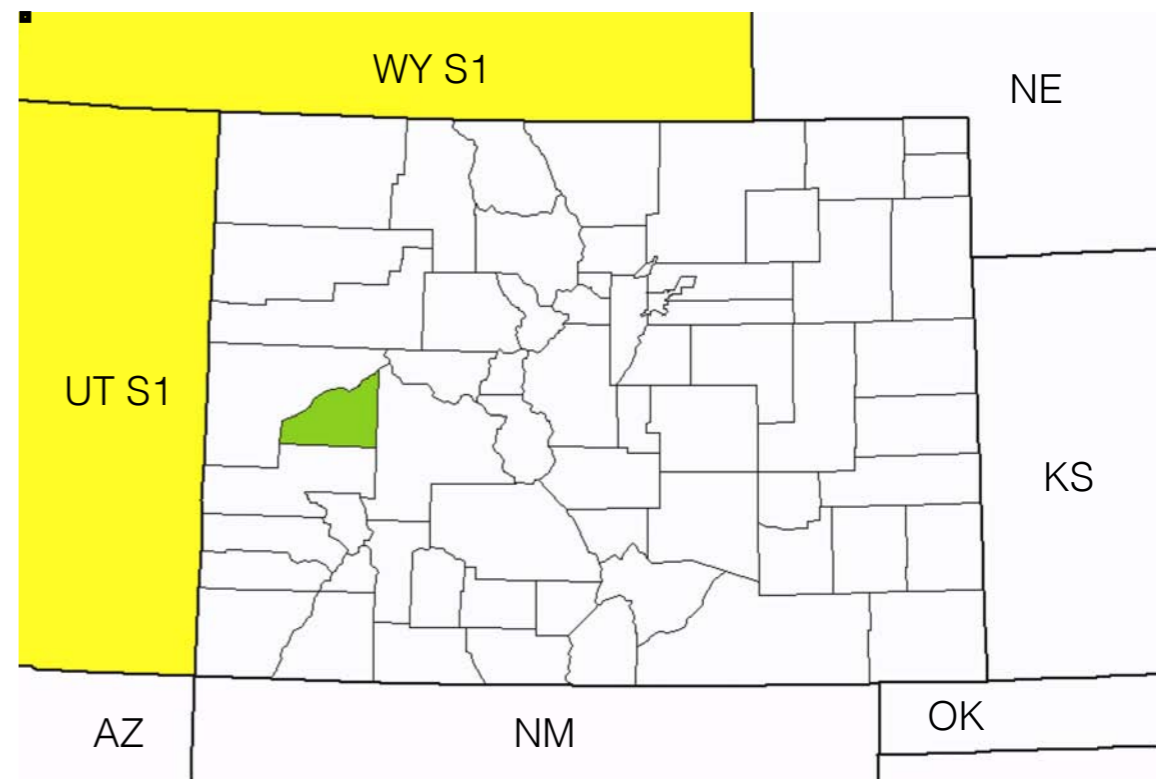


Potamogeton robbinsii Oakes

G5 CO SNR



First time documented in CO
2 new populations: Delta County



Potamogeton amplifolius Tuck.

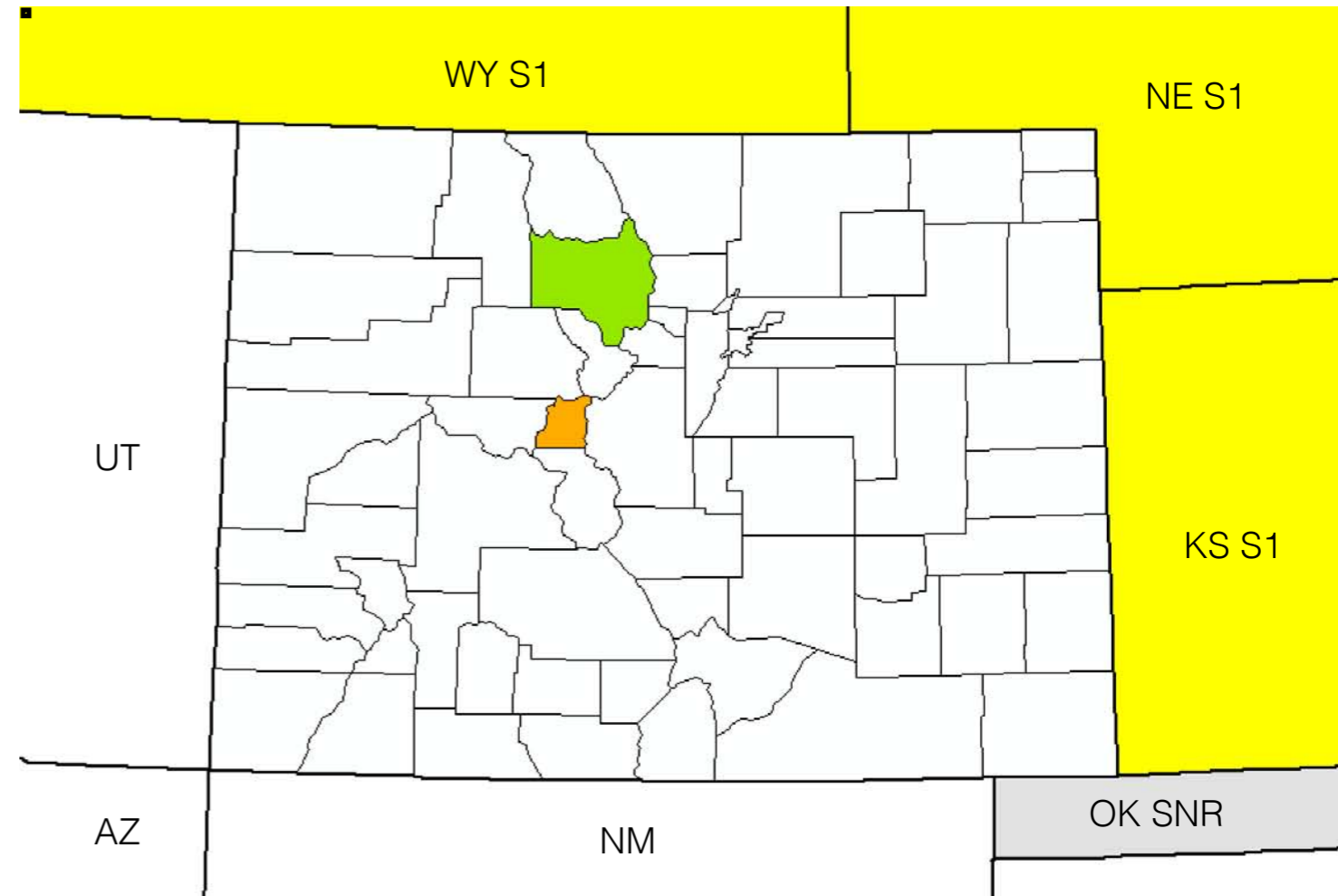
G5 CO SNR



1 new population: Grand County 2014
= only known extant population in CO



1 historic accession: Lake County 1952
= likely extirpated (not found 2013)

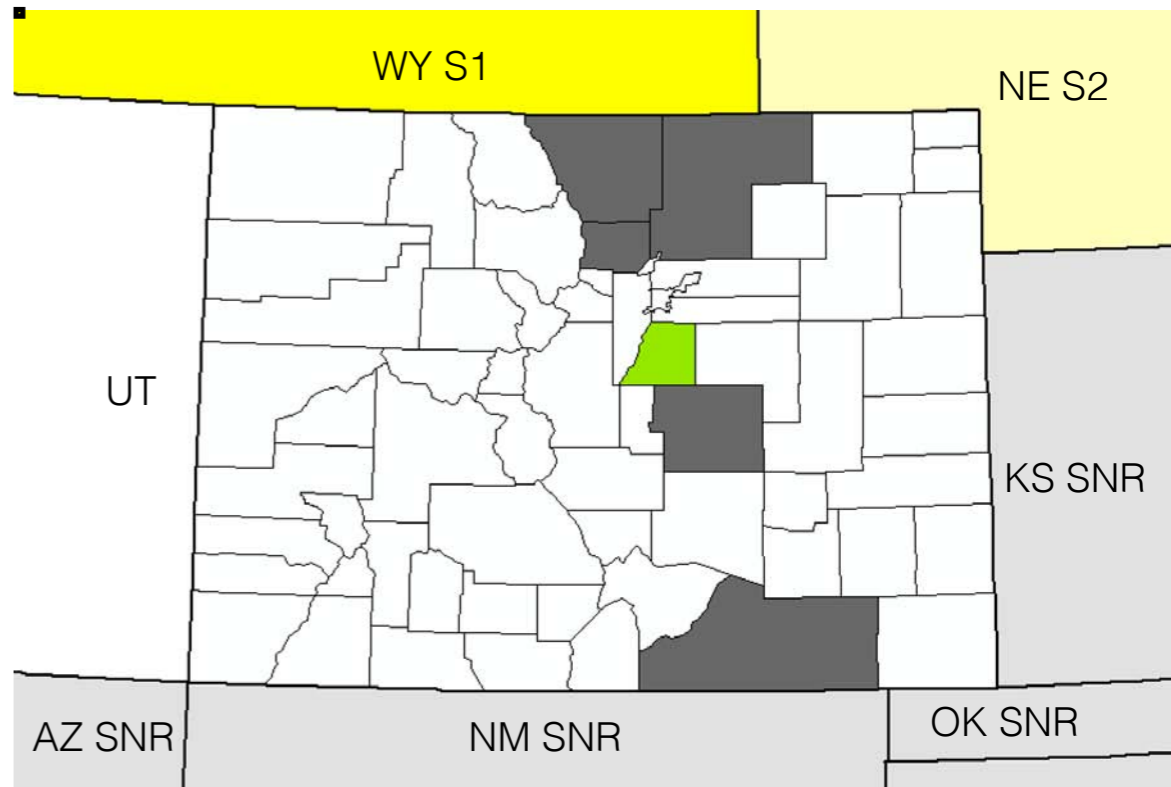


Potamogeton diversifolius Raf.

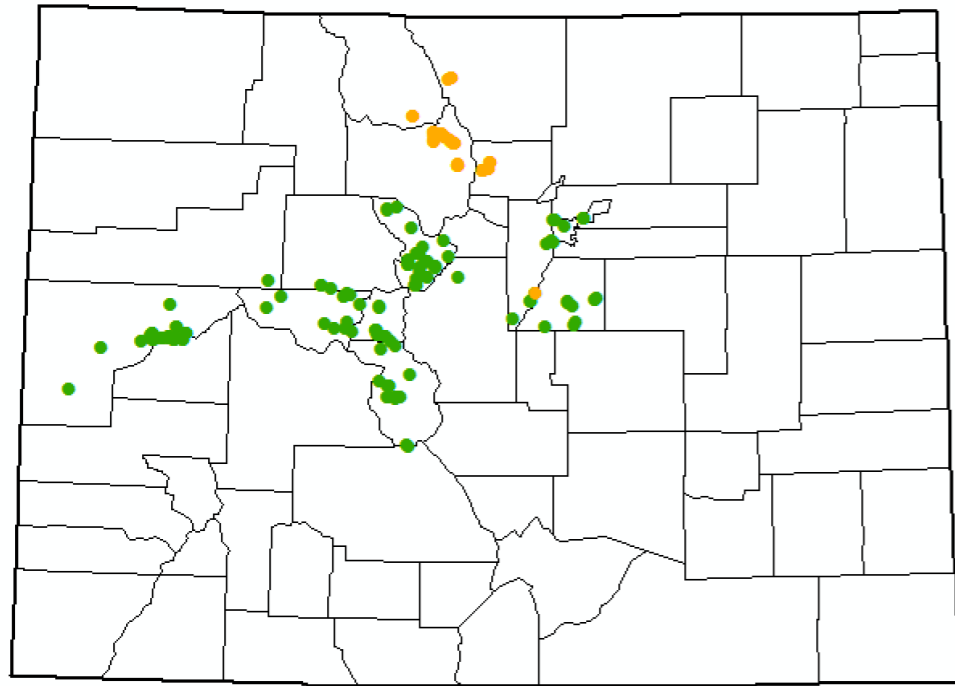
G5 CO S1



1 new population and county record:
Douglas County

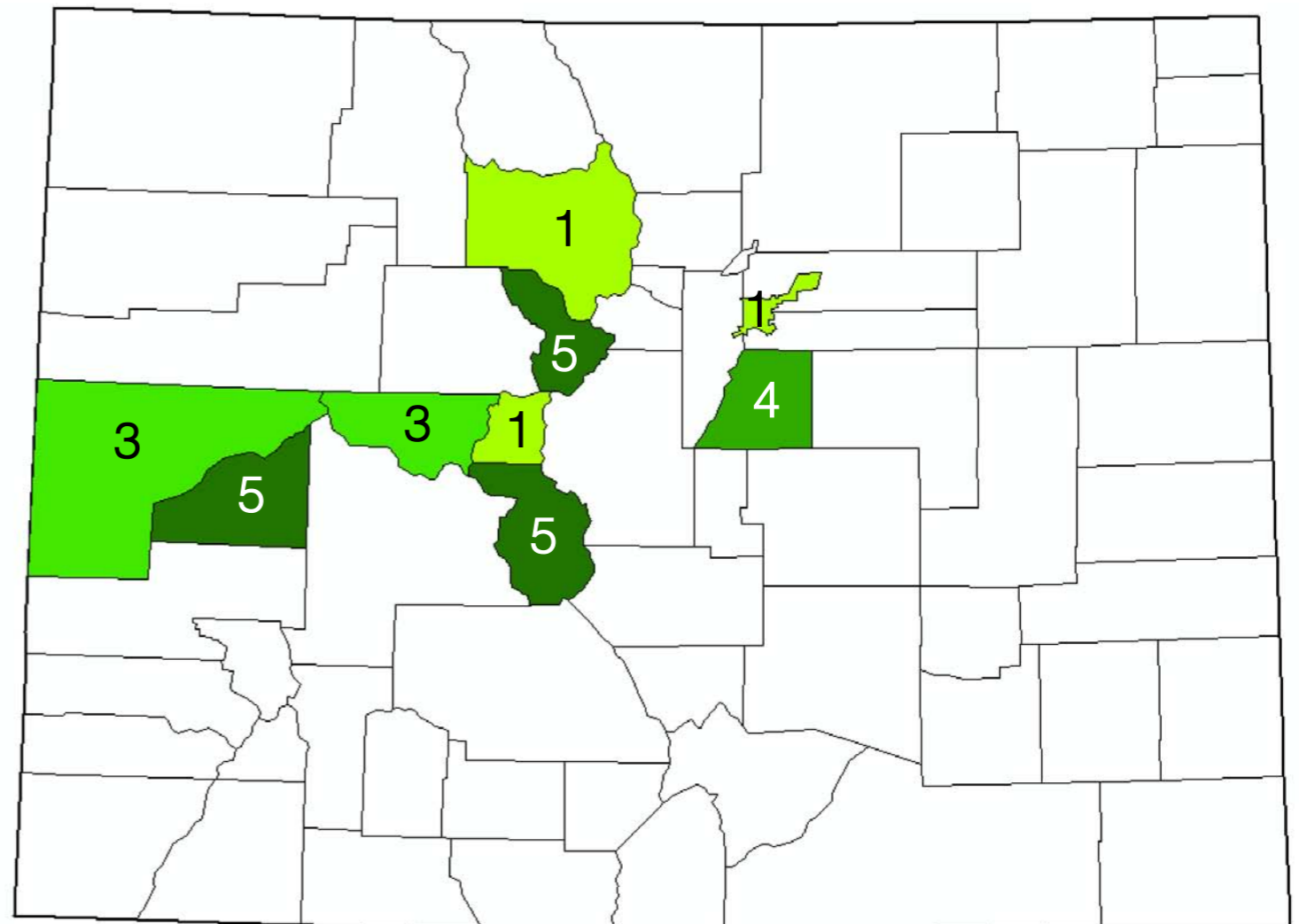


New records of native *Potamogeton* and *Stuckenia* spp.



Collecting effort 2013-2014

- 2013-2014 fieldwork documented:
 - 52+ new populations
 - 13 of 16 native pondweed species
 - 28 new county records



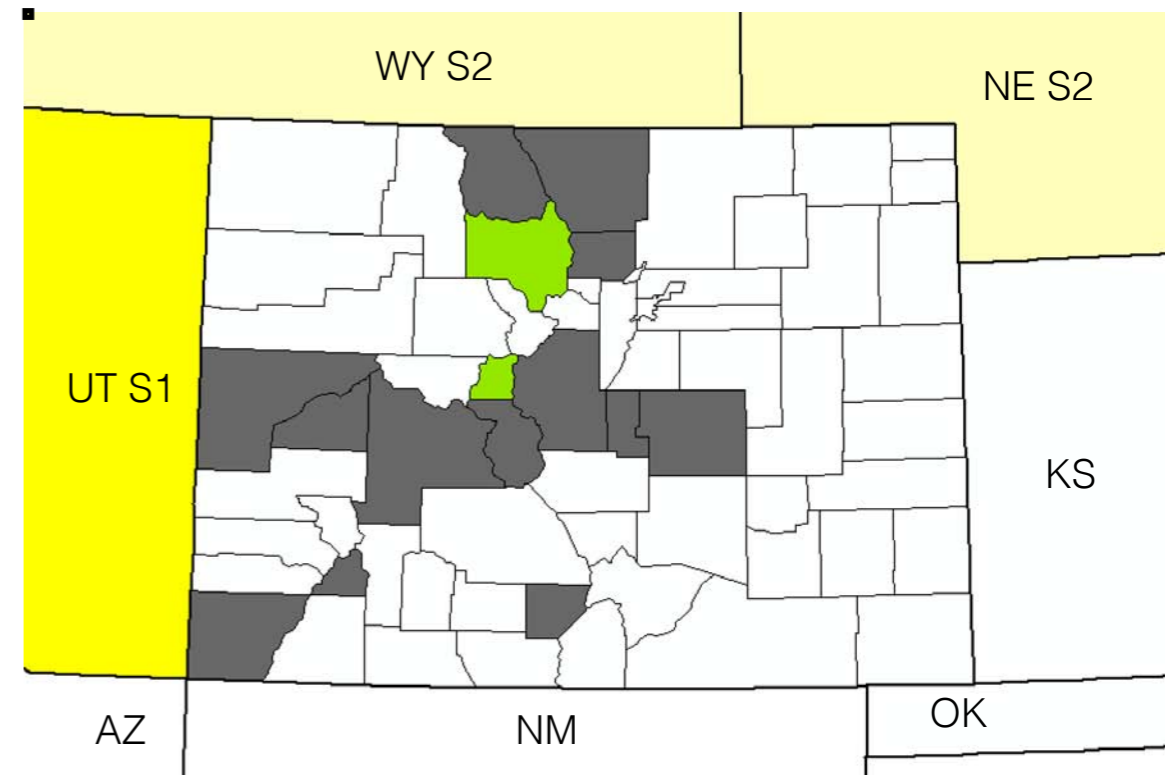
Potamogeton praelongus inflorescence

Utricularia minor L.

G5 CO S2 USFS Sensitive

2 new populations and county records:

 Grand County and  Lake County



Utricularia minor L.

G5 CO S2 USFS Sensitive



Terrestrial form

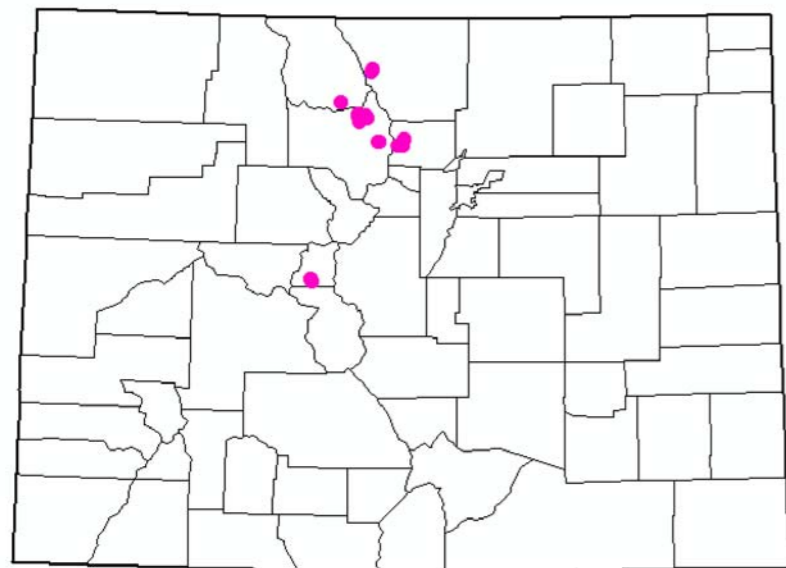


Gland

Summary of rare aquatics (other than pondweeds) collected 2014

| Species | Conservation rank | New pop. | New county records |
|--|--|----------|---|
| <i>Callitriche heterophylla</i> Pursh | G5 CO S1 CNHP tracked | 1 | Lake* (det. Z. Kaplan, flow cytometry) |
| <i>Elodea nuttallii</i> (Planch.) H.St.John | G5 CO SNR (KS S1 WY S1) | 1 | Lake* |
| <i>Isoetes tenella</i> Lemn | G5? CO S2 CNHP tracked | 2 | Grand |
| <i>Utricularia minor</i> L. | G5 CO S2 CNHP tracked, USFS Sensitive | 2 | Grand and Lake |
| <i>Utricularia intermedia</i> Hayne (provisional determination) | G5 CO S1 CNHP tracked | 1 | Lake |

*Many additional *Elodea* and *Callitriche* records were observed in 2013



Collecting effort 2014



Isoetes tenella



Elodea nuttallii
staminate flower

USFS Sensitive and CNHP tracked species documented 2013-2014

- ★ All species shown in this presentation were collected on Forest Service lands (with the exception of *Potamogeton diversifolius*)

USFS R2 Sensitive Species documented:

Utricularia minor

Potamogeton diversifolius

Potamogeton praelongus

Potamogeton robbinsii

Insufficient information available to make a recommendation (evaluated 2002-2003)



Utricularia macrorhiza



Callitriche heterophylla terrestrial form

CNHP tracked elements documented:

Callitriche heterophylla

Isoetes tenella

Potamogeton diversifolius (species and community)

Potamogeton foliosus (community)

Potamogeton natans (community)

Stuckenia filiformis (community)

Utricularia minor

Utricularia intermedia (provisional identification)

Utricularia macrorhiza (community, provisional)