



#### Supporting Document 4-2 CitSci BRAT Survey Findings for North Fork Colorado River and Supply Creek in the UCRWG ETF Project Area

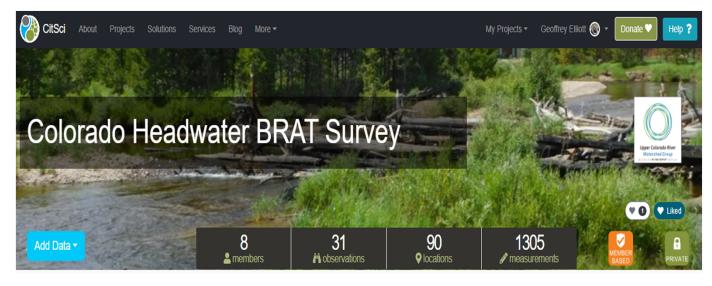
Brief prepared for the Upper Colorado River Watershed Group
Under CDPHE Grant #2022-3746
And Fire on the Mountain, Inc. Grant 2022

December 2022

## 1) BRAT Survey Summary



- Volunteer-friendly "citizen science" survey created by UCRWG team to document conditions in the UCRWG ETF project area including attributes conducive to beaver reestablishment
- Special thanks to CitSci.Org manager Dr. Greg Newman and the Natural Reserouce Ecology Lab (NREL) at Colorado State University



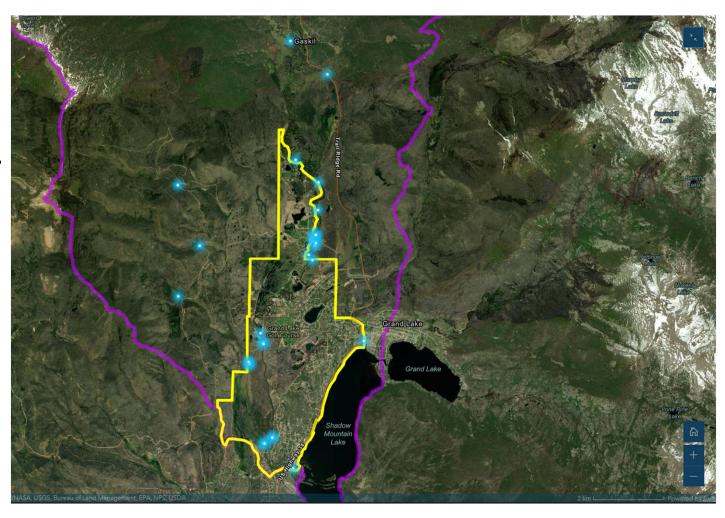




## 2) BRAT Survey Summary

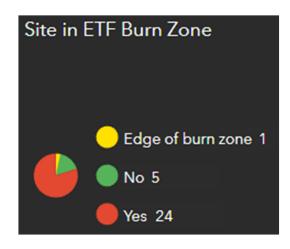


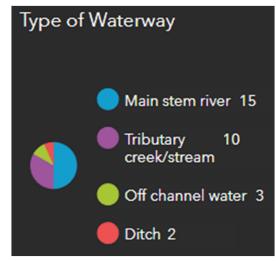
- 30 survey sites in the UCRWG ETF study area
- Observations made during high, medium, and low flows between April and November 2022
- For more detail see Story Map report at www.ucrwg.org



#### 3) BRAT Sites

- 24 of 30 survey sites (83%) within or on edge of ETF burn zone
- Sites include main stem of the North Fork Colorado River as well as tributaries, off channel waters, and ditches
- 60% are small waterways ≤10 yards wide



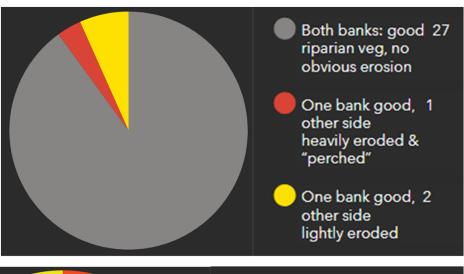


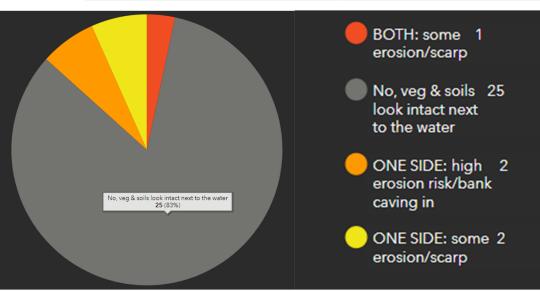


#### 4) Bank/Riparian Conditions

- Only 3 of 30

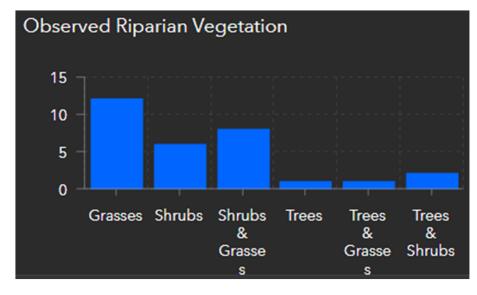
   (10%) sites
   showed
   significant bank
   instability
- 25 of 30 (83%) of sites show intact soils and vegetation next to the water





#### 5) Bank/Riparian Conditions

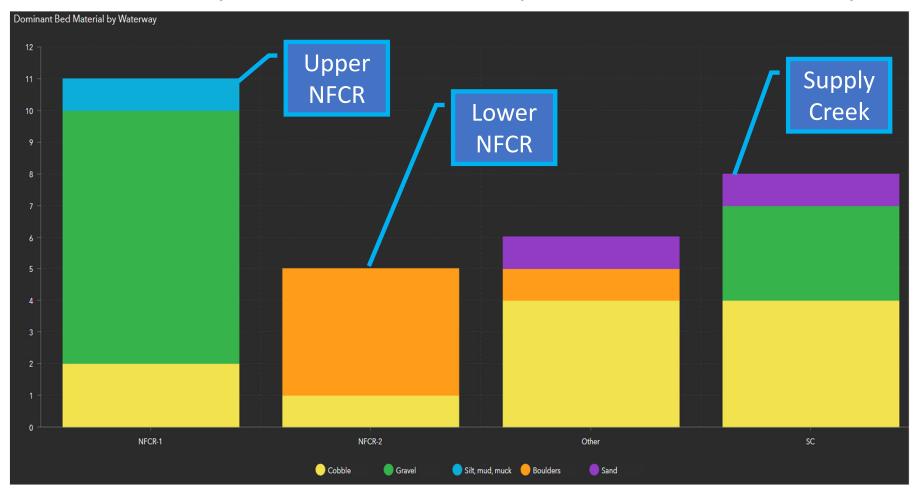
- 17 of 30 (57%) of sites included a significant shrub component including willow
- 13 of 24 sites (54%) showed some potential for beaver habitat
- Only 1 site (8%) had active beaver sign (fresh dam construction during our studies)





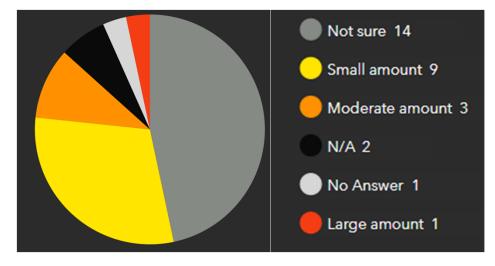
### 6) Stream Bed Material

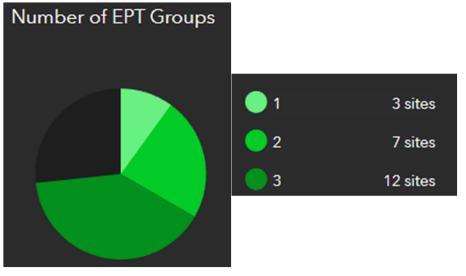
 Marked difference between upper NFCR (gravel dominated) and lower NFCR (boulder dominated)



#### 7) Ash and Aquatic Macroinvertebrates

- Where observers were confident (n=13), only 4 (31%) had moderate to large amounts of ash in stream bed samples
- Where observers looked for aquatic macroinvertebrates (n=22), all locations showed at least 1 EPT group, more than half had 3 EPT groups





# Thank You, Happy to Answer Questions or Schedule a Field Trip



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