

MapUnitPolys

Spring deposits

- Qs
- sc

Neogene and Quaternary Strata

- QTC; QTc?

Surficial Deposits

- water
- Qoal
- Qc
- Lake
- Qpc
- ha
- af; af?
- Qt; Qt?
- Qls
- Qf
- Qal
- Qsn

Ophiolitic Melange

- Jom
- omgs
- ombu
- ombp
- omu
- omsp
- omg

Great Valley Sequence

- Ky
- Jk
- Kv
- KJssp
- KJgvl

Franciscan Assemblage Rocks

- Kfm

Coast Range Ophiolite

- msp
- pgb
- shb
- spb
- ab
- gb
- cb
- ffb
- Jobb
- Josp; Josp?
- mvbu
- mvbb
- mvpb

Clear Lake Volcanic Sequence

- Qva
- Qpf
- QTV
- Qlv
- Qwt

1 Mile



A mosaic approach to forb-and-grass-land restoration in a heterogenous landscape

Paul Aigner
 University of California, Davis
 McLaughlin Natural Reserve

Esri, NASA, NGA, USGS, FEMA, County of Napa, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

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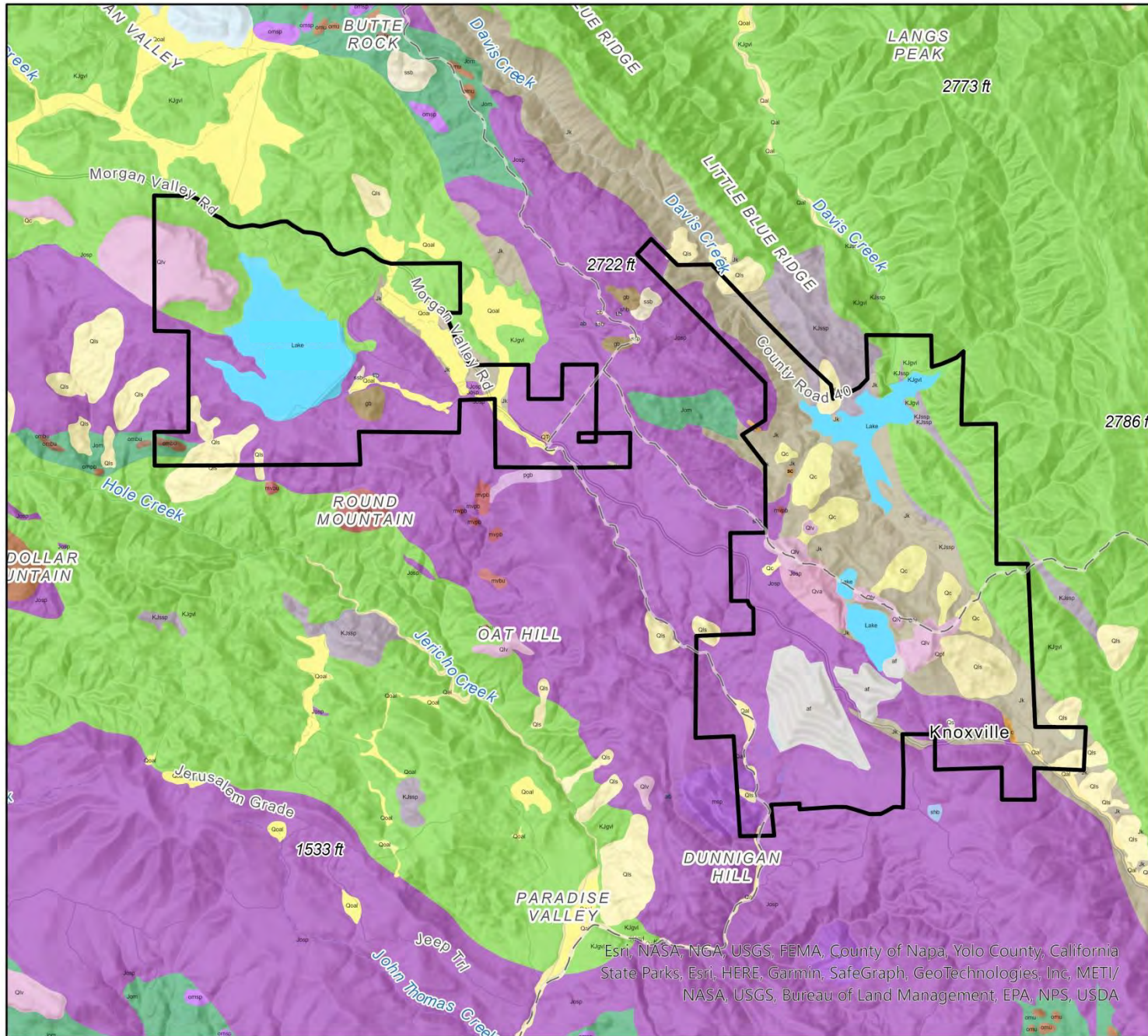
Qpf

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1 Mile



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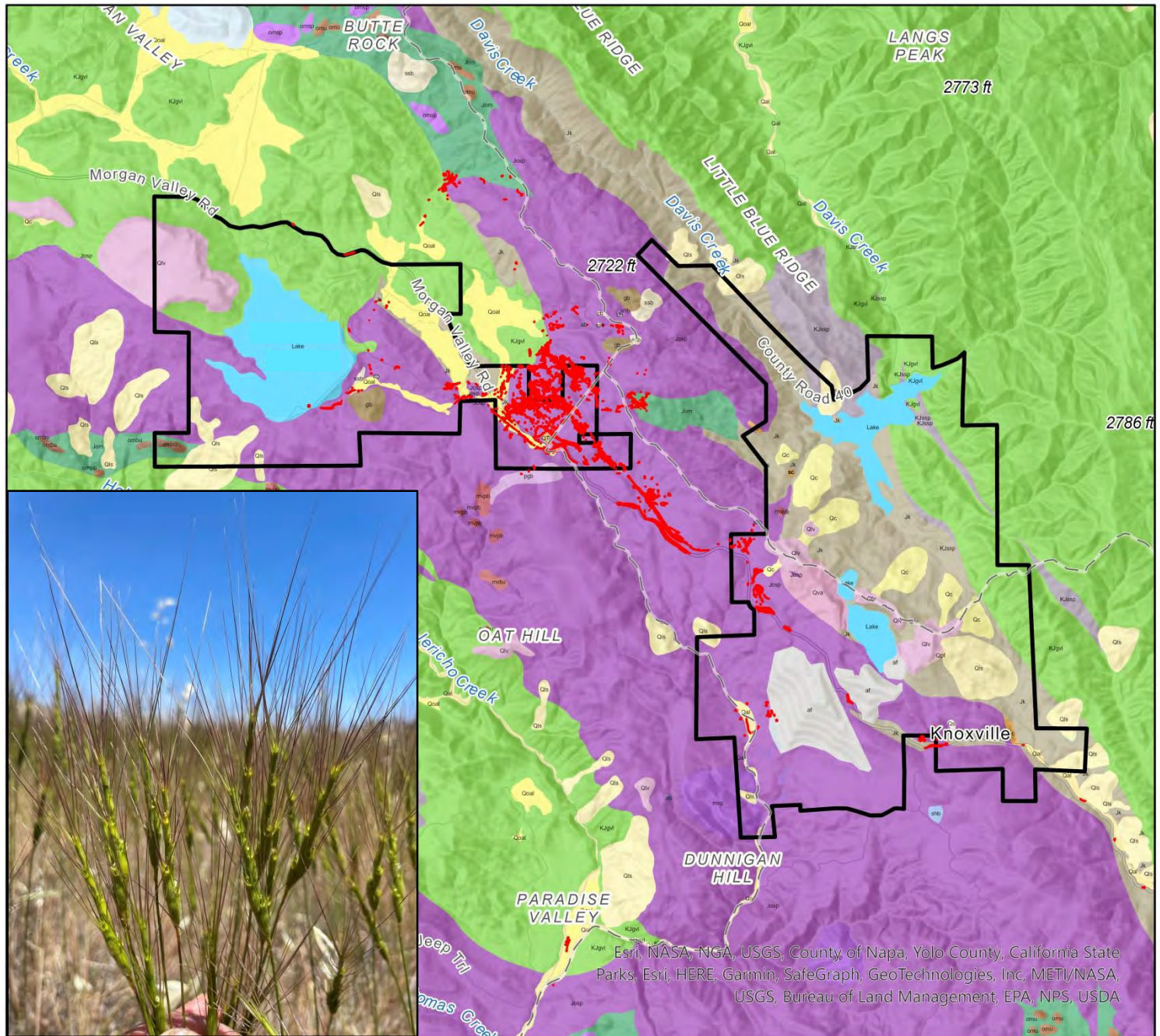
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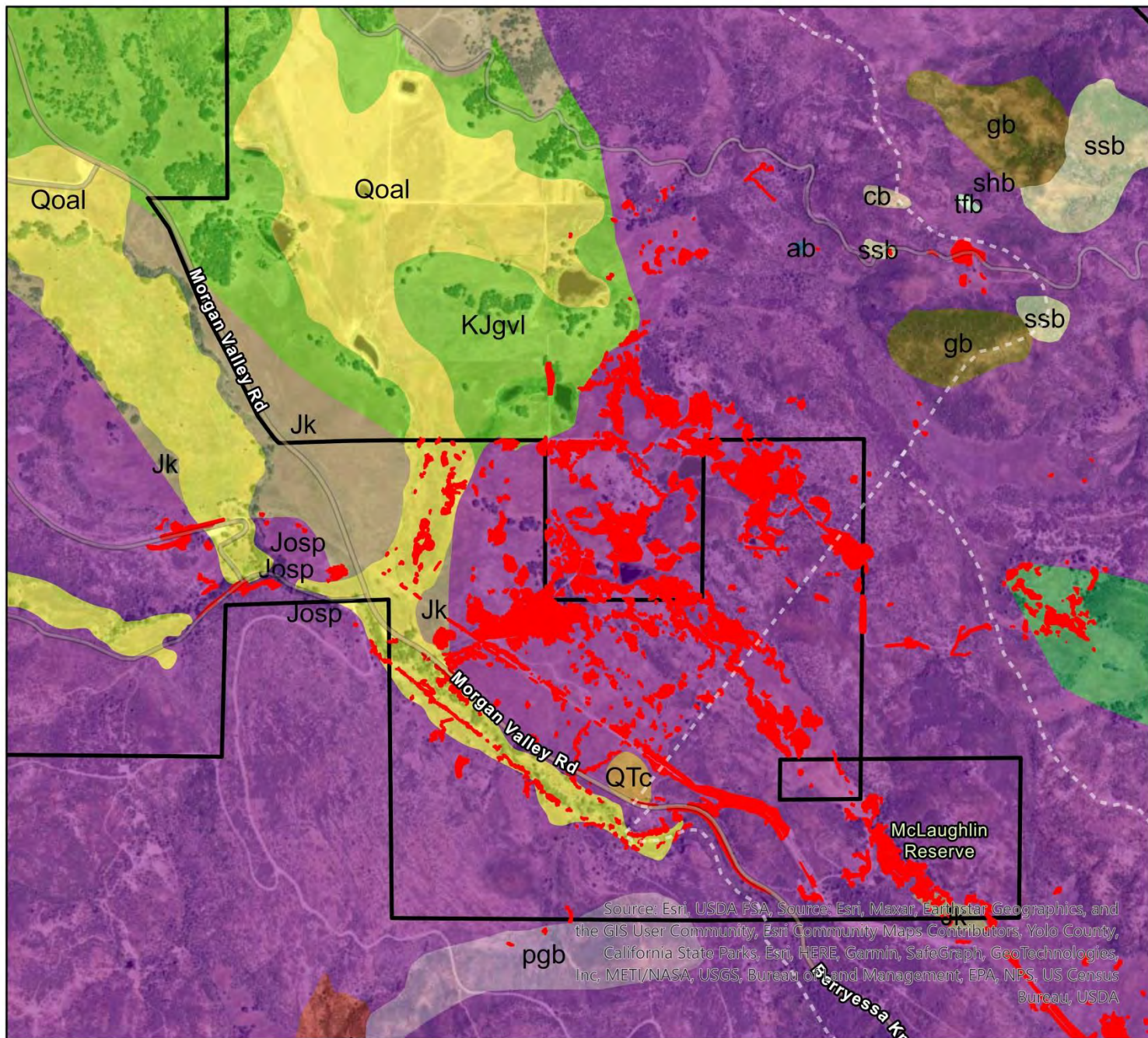
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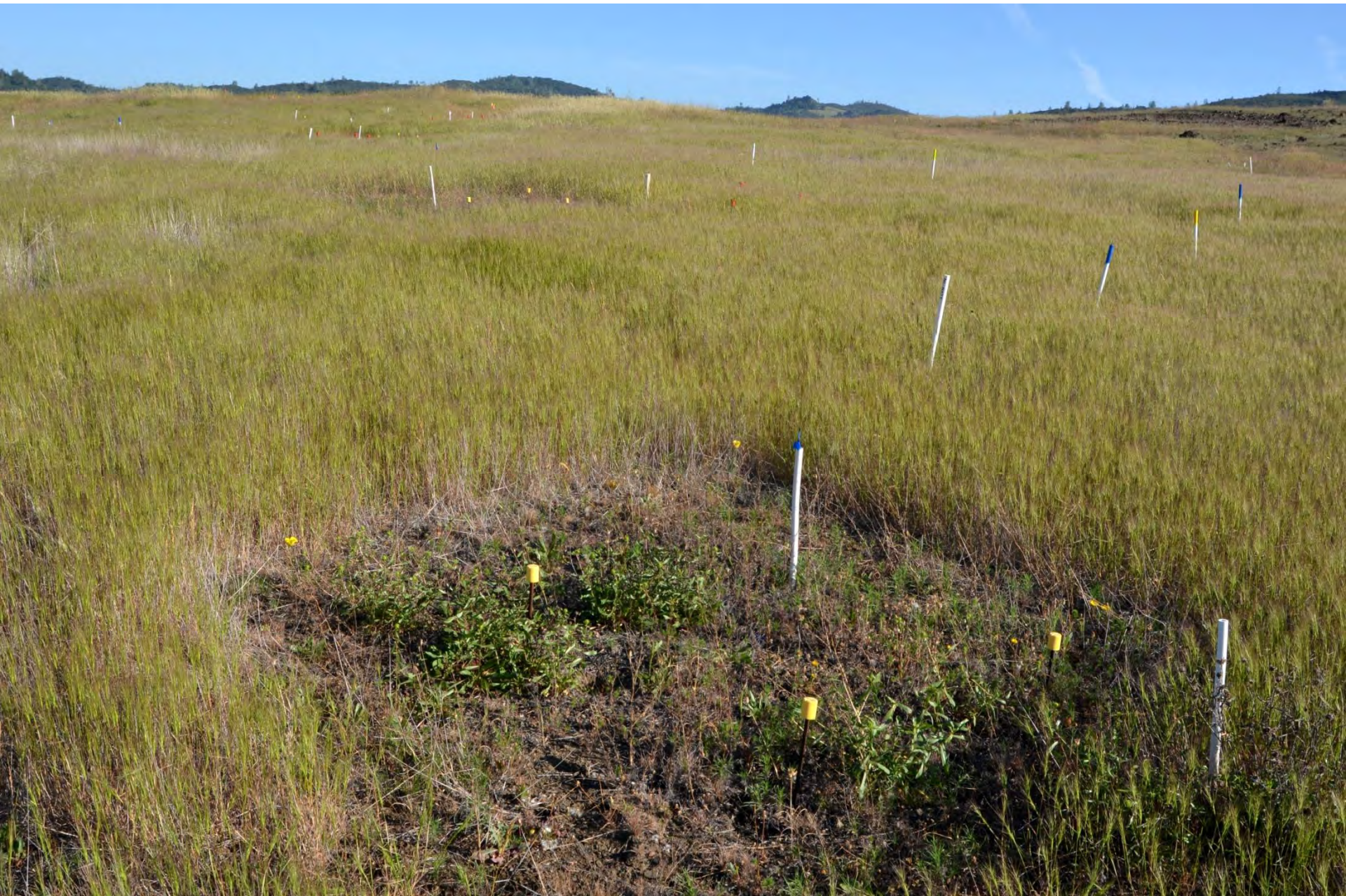
Qwt

0.25 Miles



Source: Esri, USDA FSA, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Esri Community Maps Contributors, Yolo County, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA











Barbed goatgrass

Red brome

Soft chess

Italian rye grass

Wild oats

Medusahead

Hairy vetch

Annual sweet clover

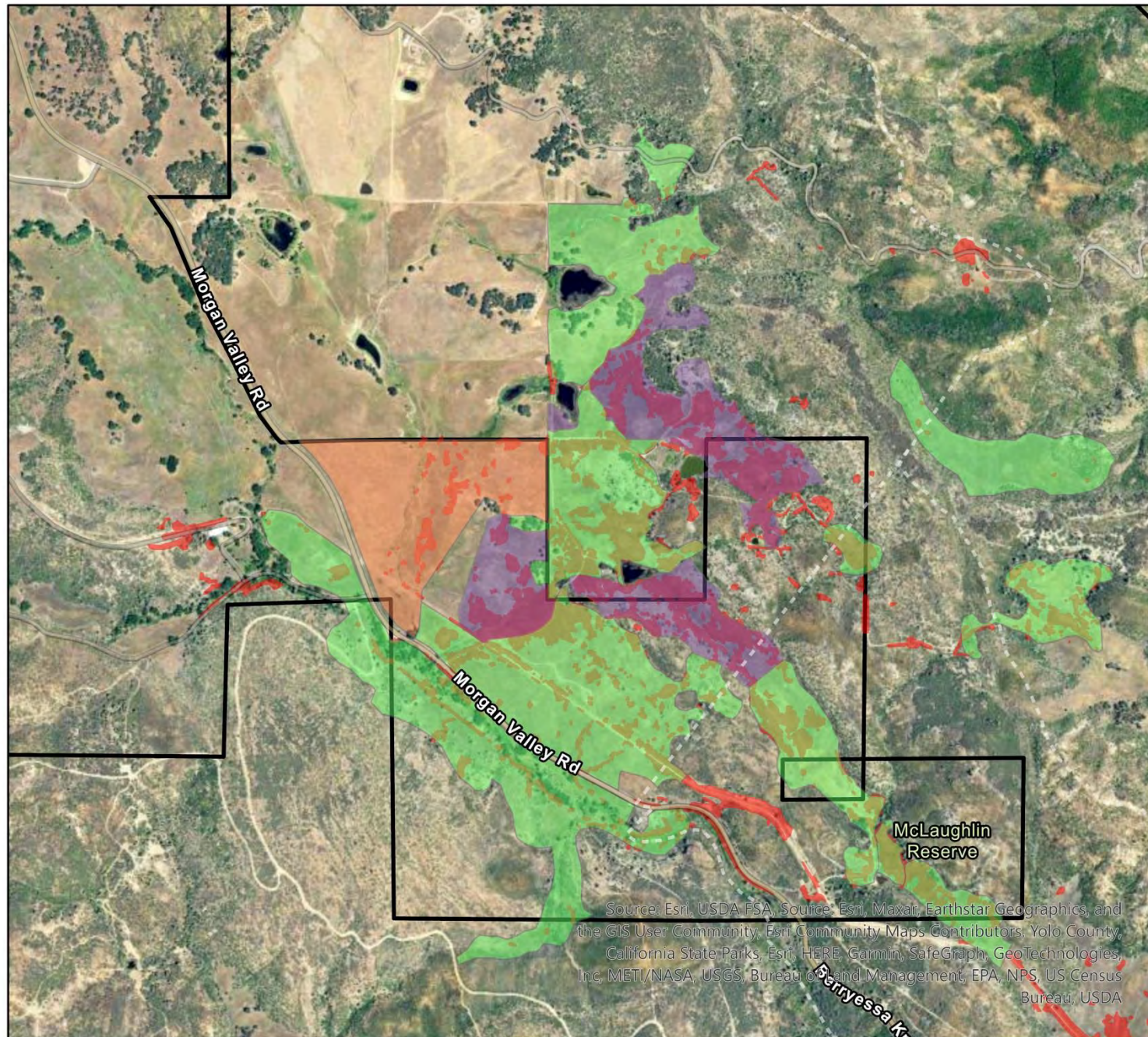
Yellow starthistle and Tocalote

- Work from areas with native plants towards weed-infested areas.
- Make minimal disturbance.
- Let native plant regeneration dictate rate of weed removal.

-Eileen and Joan Bradley

Management zone

- Control most non-natives
- Control barbed goatgrass
- Control barbed goatgrass + grazing



Generalized Work Progression

Year 1

- Prescribed burn or mow (optional).

Year 2-4

- Early-season clethodim boom-spray (avoiding pockets with broadleaf weeds) with follow up to catch resprouts.

Year 5-7

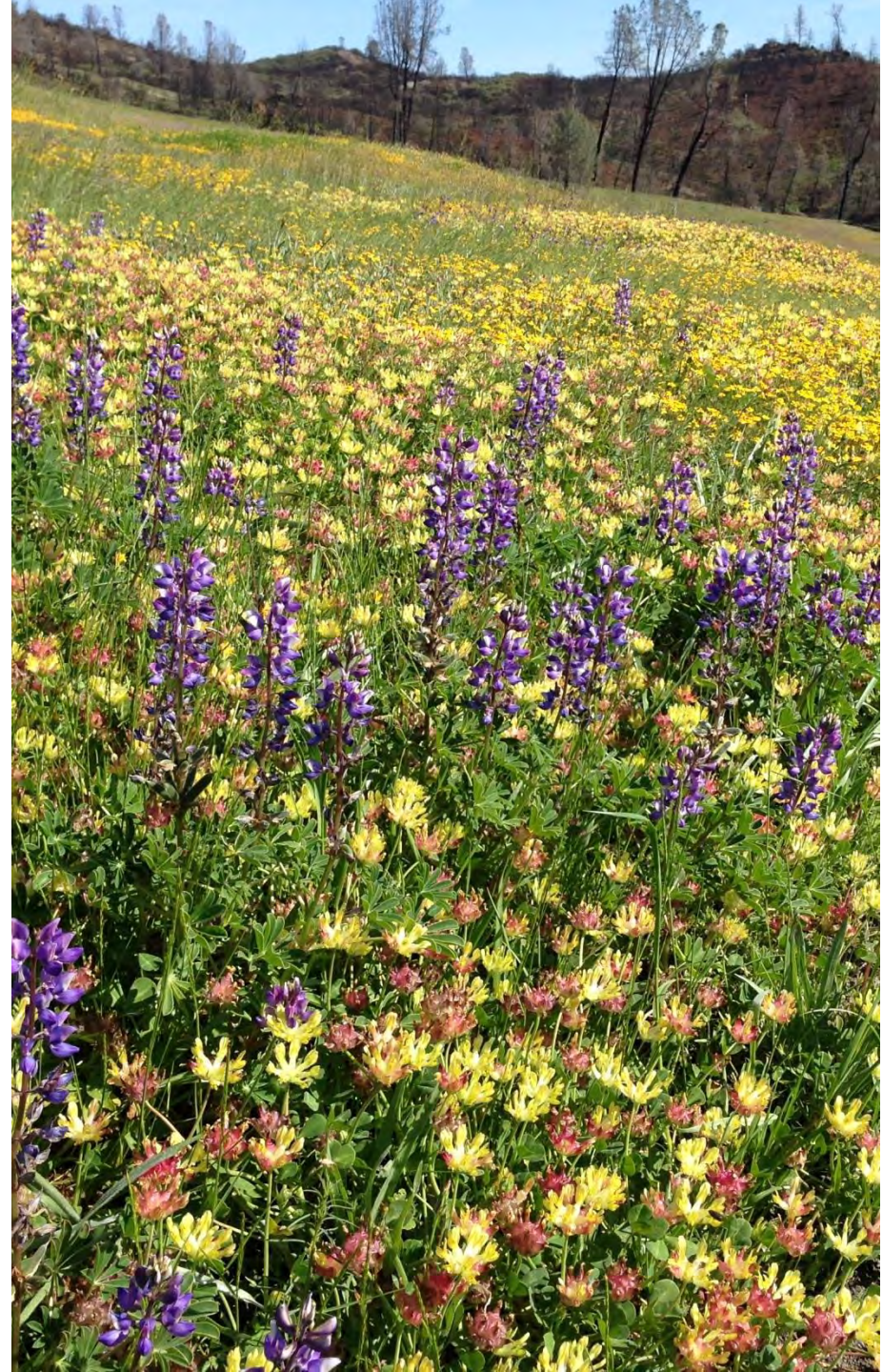
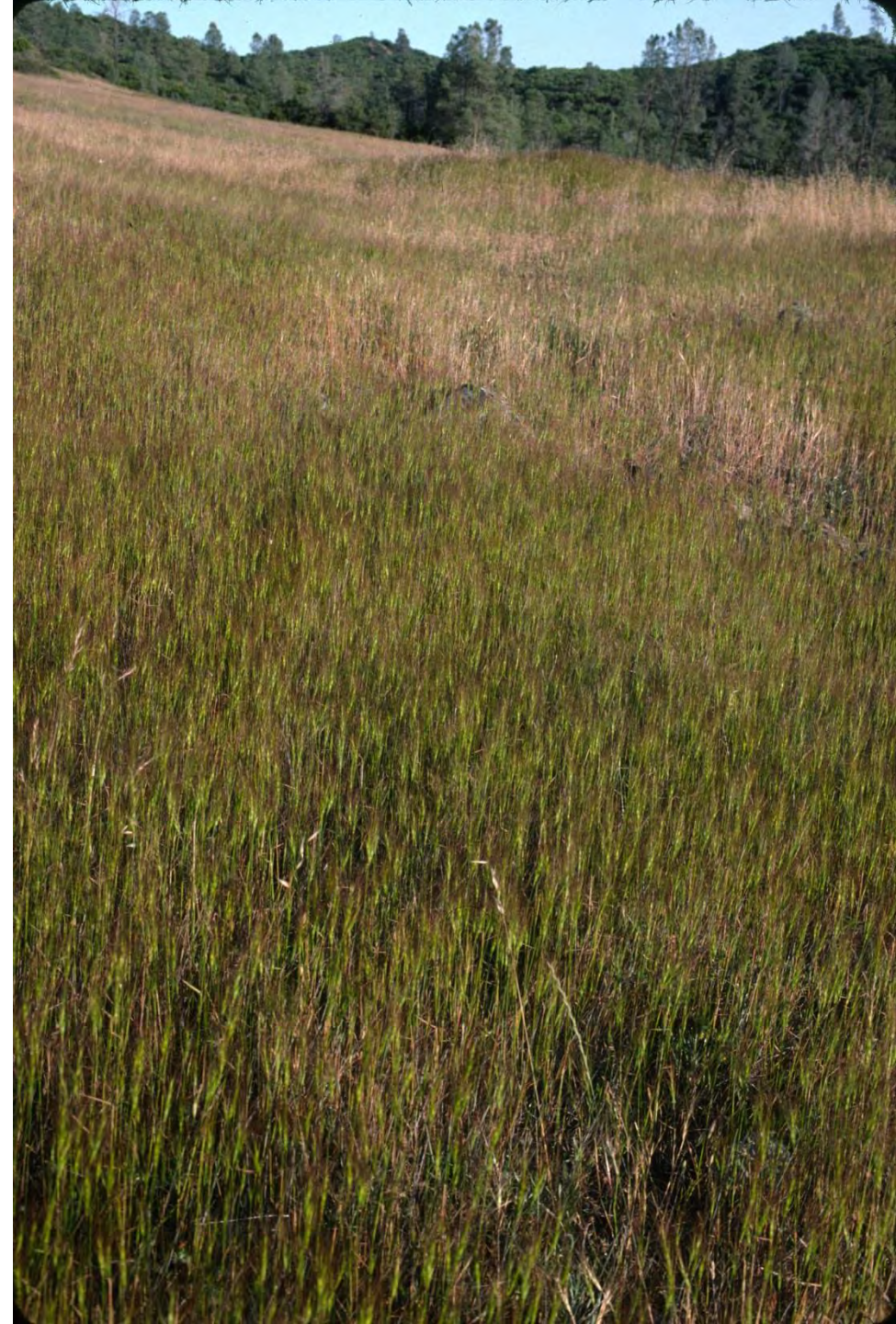
- Early and mid-season clethodim spot-spray for non-native annual grass (still avoiding broadleaf-weed pockets).
- Late-season hand-pull for barbed goatgrass.

Year 8-10

- Same as year 5-7 and expand clethodim applications to areas with grass and broadleaf weeds.
- Spot-spray (Transline or Milestone) and hand-pull *Centaurea* spp., *Vicia* spp., *Melilotus* spp., some others.

Year 11-19+

- Spot-spray and hand-pull as needed about twice a season.





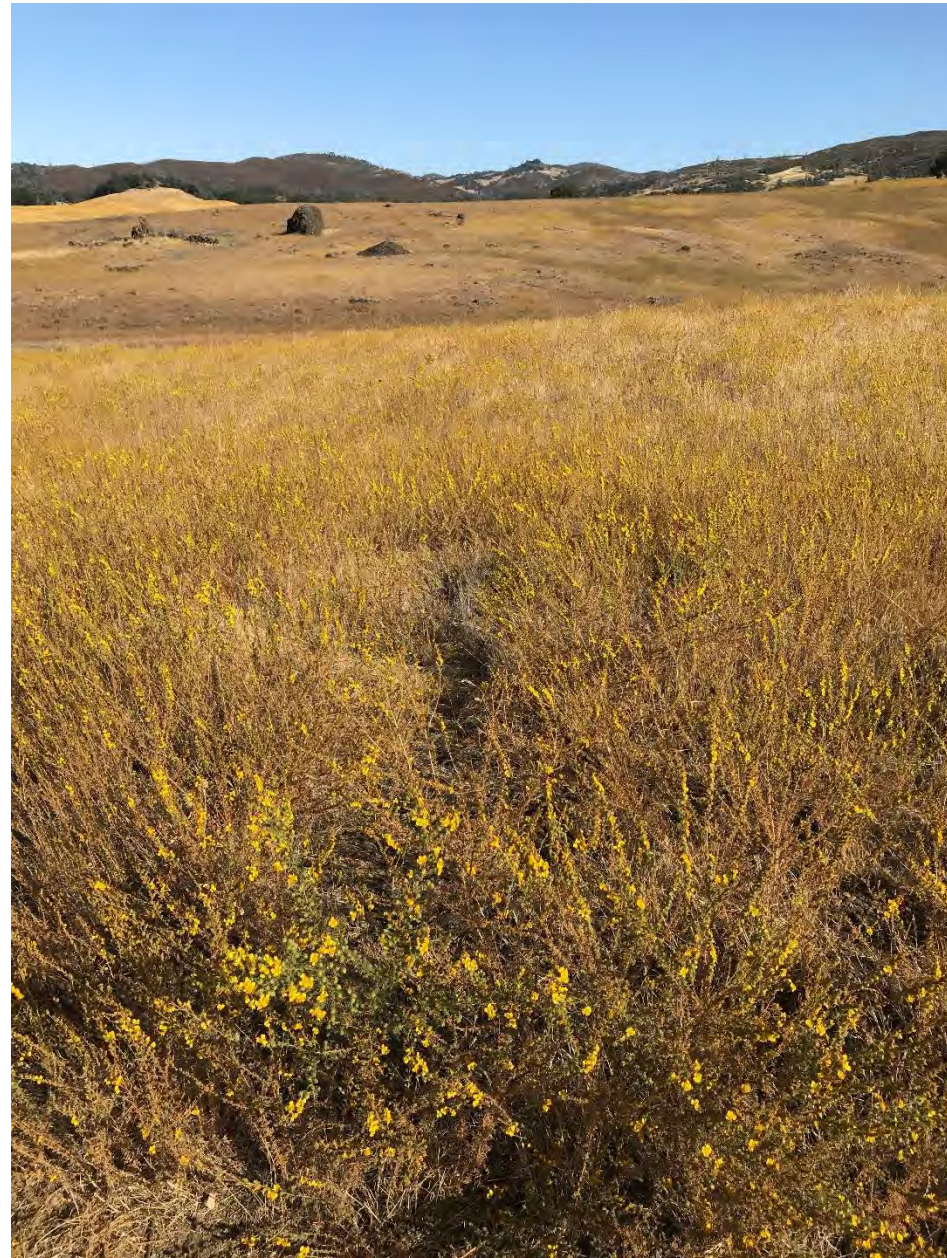








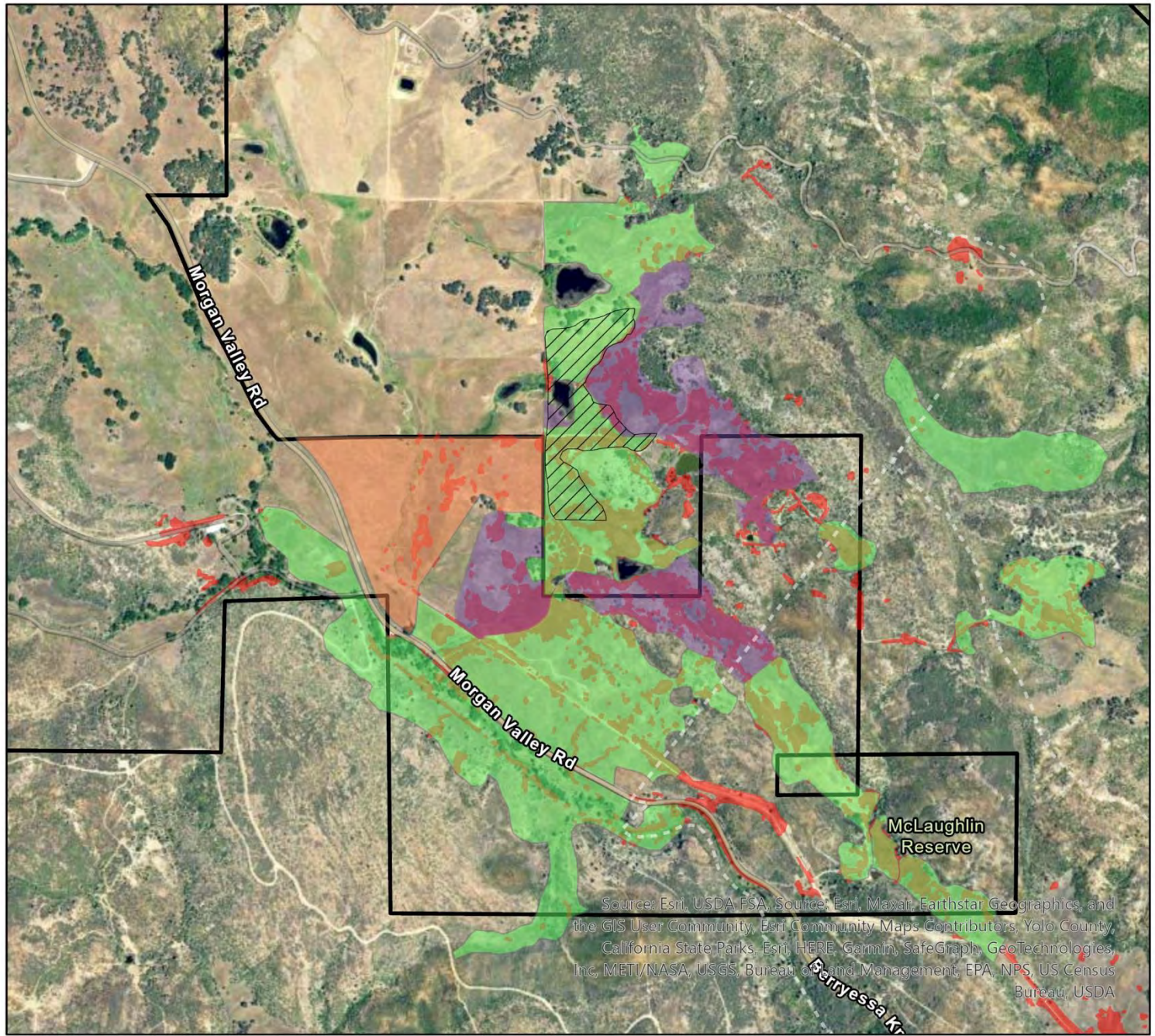






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- Control most non-natives
- Control barbed goatgrass
- Control barbed goatgrass + grazing
- Fall 2022 prescribed fire



0.25 Miles

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1/8 tsp *Lupinus bicolor*

1 scoop *Plantago erecta*

2 scoop *Clarkia purpurea* (Hedgerow)

3 scoop *Holocarpha virgata*

1/2 cup *Asclepias eriocarpa* (Hedgerow)

43 *Lupinus succulentus*

2 scoop *Achyrochaena mollis*

1/4 tsp *Cordylanthus pilosus*

1 1/2 tsp *Lasthenia* sp.

3 scoop *Microseris douglasii*

1 scoop *Trifolium fucatum*

2 tsp *Achillea millefolium*

1/4 tsp *Madia elegans*

pinch *Agoseris heterophylla*

~20 *Tritilleia laxa*

~10 *Madia gracilis* SCOOP

1 scoop *Hemizonia congesta*

pinch *Agoseris grandiflora*

seeds





Acknowledgements:
Cathy Koehler, Reserve Director
Land Management Interns

