### 2024 Northern California Botanists Symposium



# Floodplain restoration on disconnected gravel bars in the Sacramento watershed

Michael Rogner Associate Director of Restoration Science www.riverpartners.org





18,867

Acres of protected habitat restored for endangered and threatened species.



1,006,787

Metric tons of CO2, CO2e, or greenhouse gases captured.



10,270,207,000

Gallons of freshwater conserved.



212

River miles restored.



\$175,416,280

Channeled directly to the communities where we work.



4,078,494

Native trees & vegetation planted.



**58** 

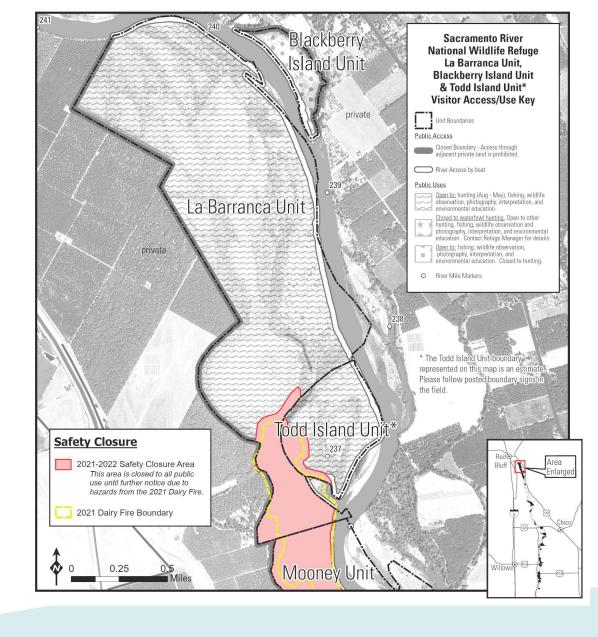
Priority wildlife species protected since 1998.

### Dos Rios Ranch – California's newest State Park!



# **Project Overview**

- •River Partners restored 316 acres of 1,066 acre Unit
  - 44,812 woody species
  - 44,787 herbaceous plugs
  - 2,8000 pounds native grass seed
  - 41 pounds late summer wildflower seed

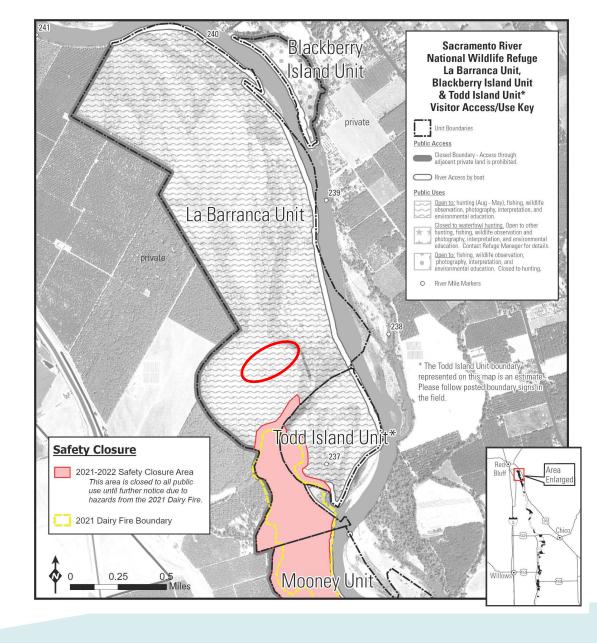




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Shasta Dam construction 1938-1945

Site Assessment

soils water source maintenance



Trichostema lanceolatum



Heterotheca oregona

#### Eriogonum nudum Eriogonum wrightii





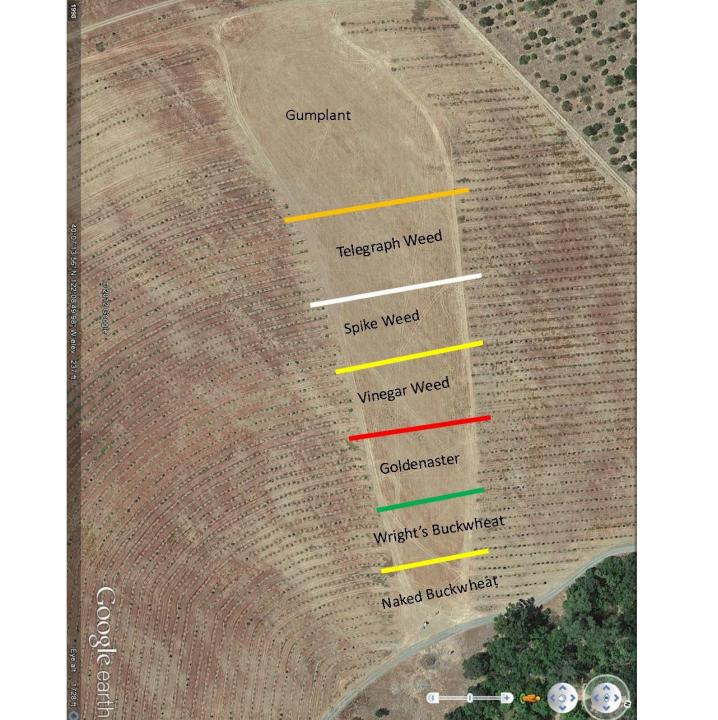
Heterotheca grandiflora

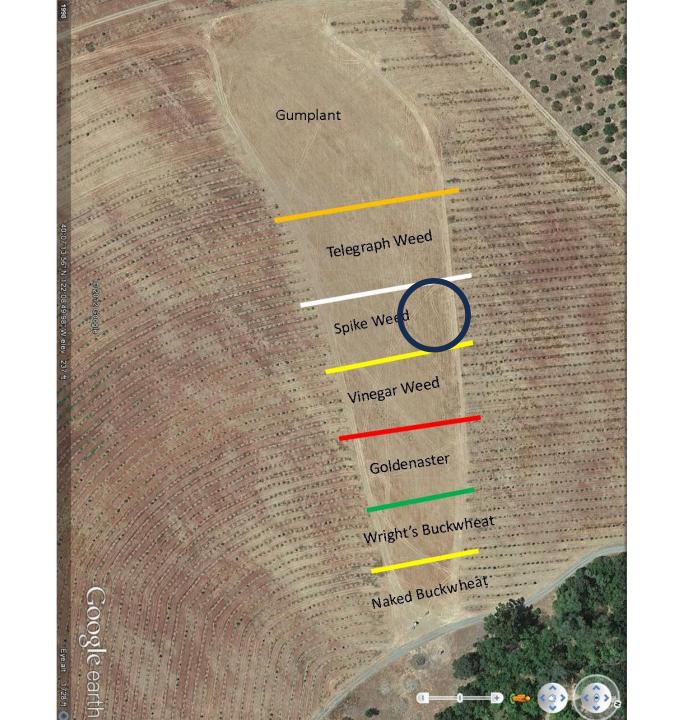
#### Centromadia fitchii





Grindelia camporum





# Maintenance?

- Light discing for field prep
- No weed control
- No irrigation



#### Monitoring Native Forb Restoration at a Sacramento River Gravel Bar Site: Improving Methods for the Future

#### Lexi Smith

Independent Honors Research Project, 2016-2017

Department of Geological and Environmental Sciences, CSU, Chico



Restoration of Native Forb Species on a Sacramento River Gravel Bar: A Follow-Up Study



HE WHO PLANTS A TREE
PLANTS A HOPE.

- LUCY LARCOM

JESSICA SHIPPEN RIVER PARTNERS 580 Vallombrosa Ave, Chico, CA 95926



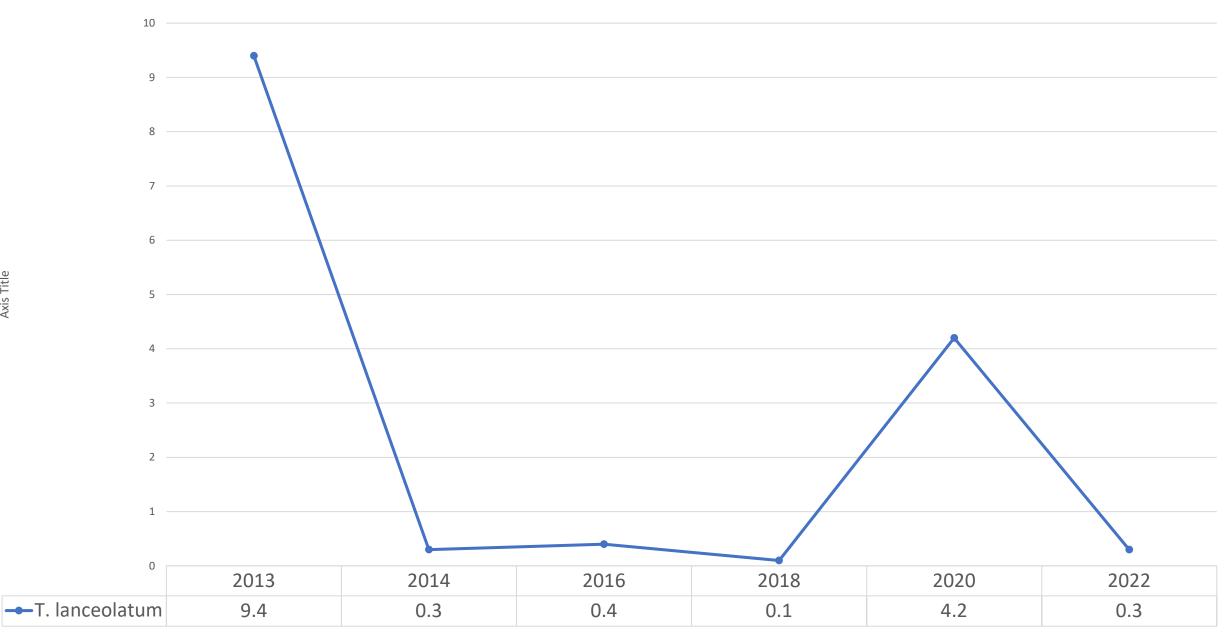
One m2 plots

Stem counts

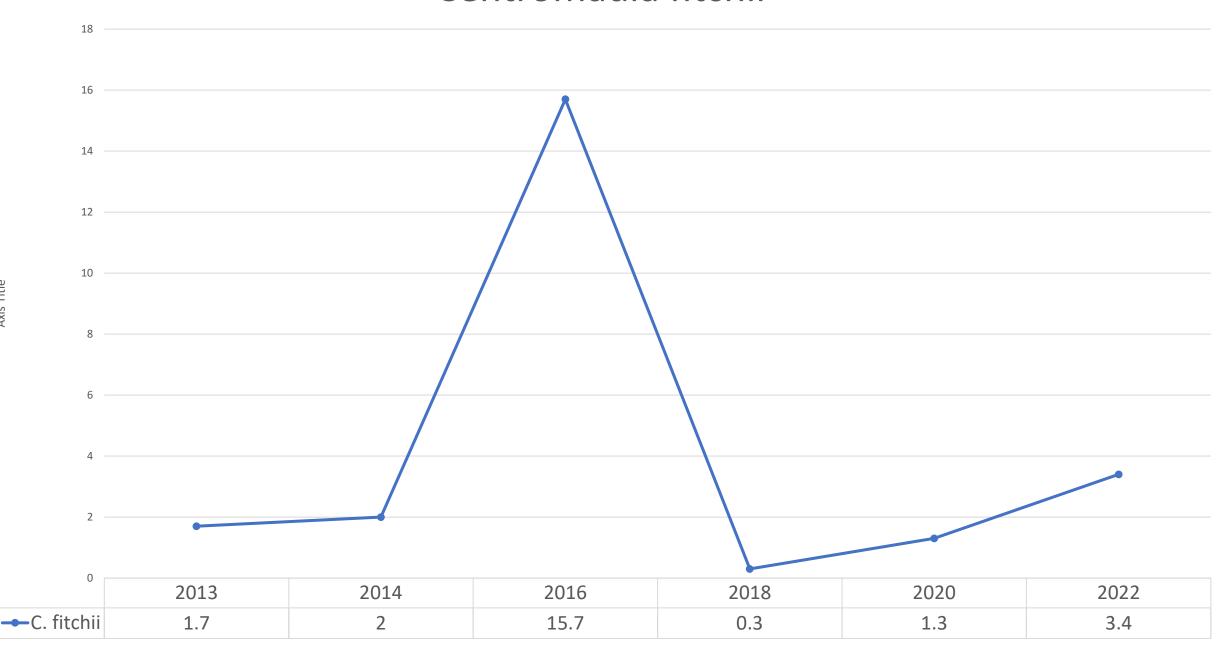
Random sampling within bins

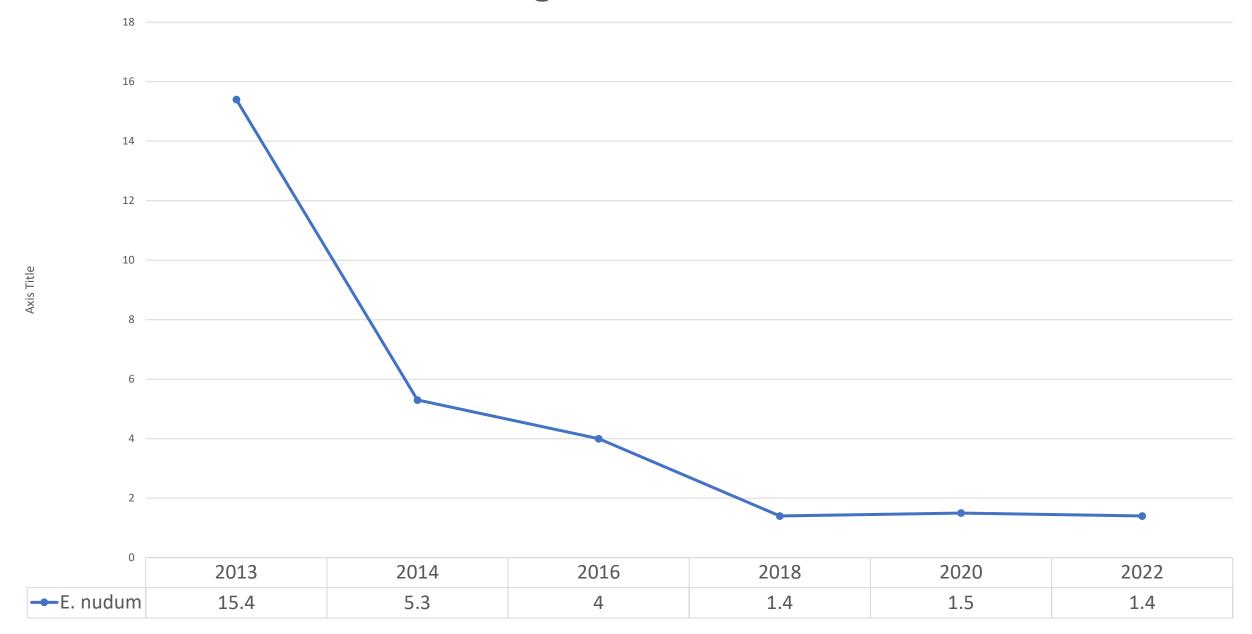
Monitored 2013, 2014, 2016, 2018, 2020, 2022, (2024), (2026), etc...

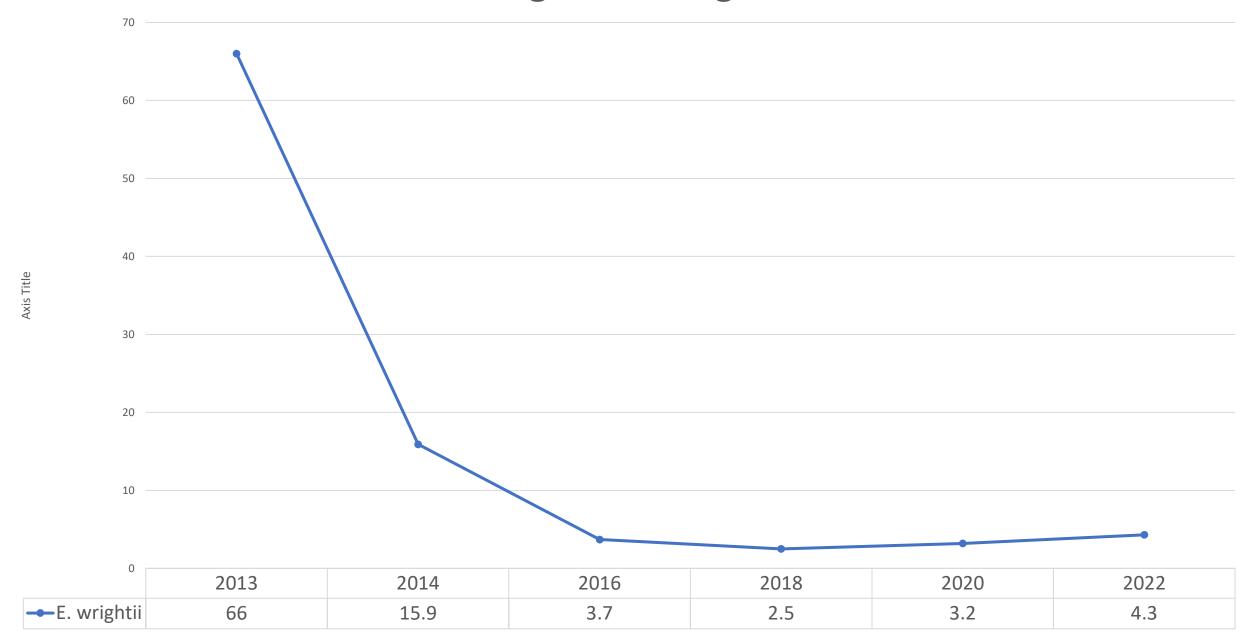
Goal (perennial): 1-stem per m2

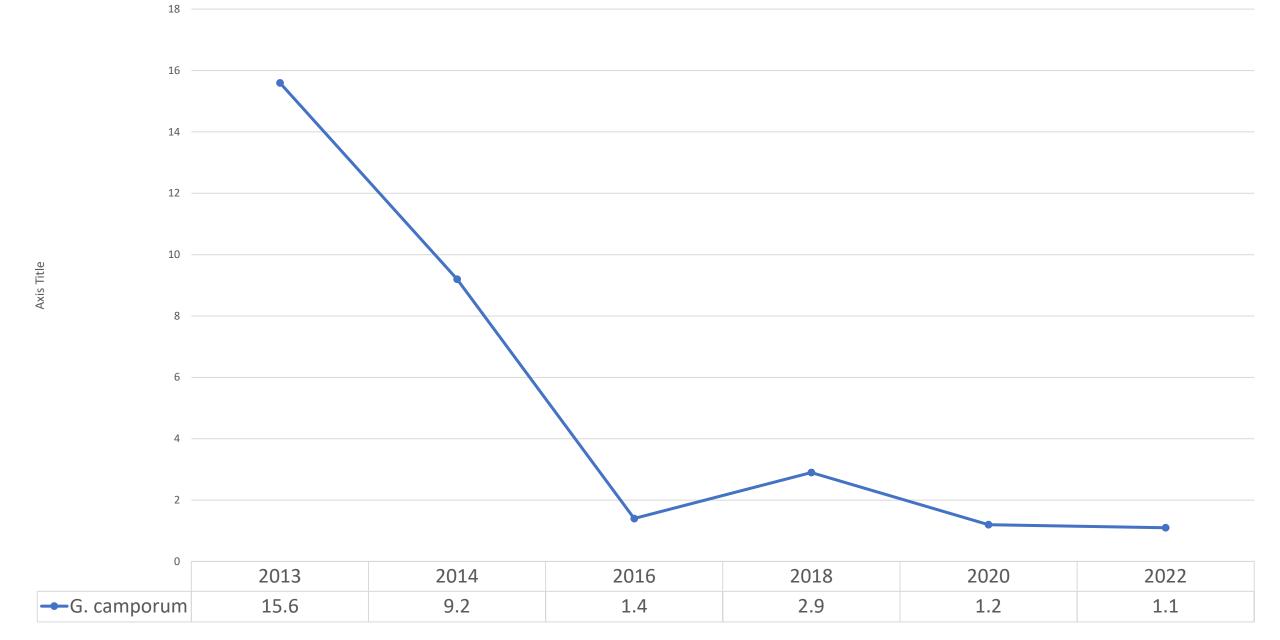


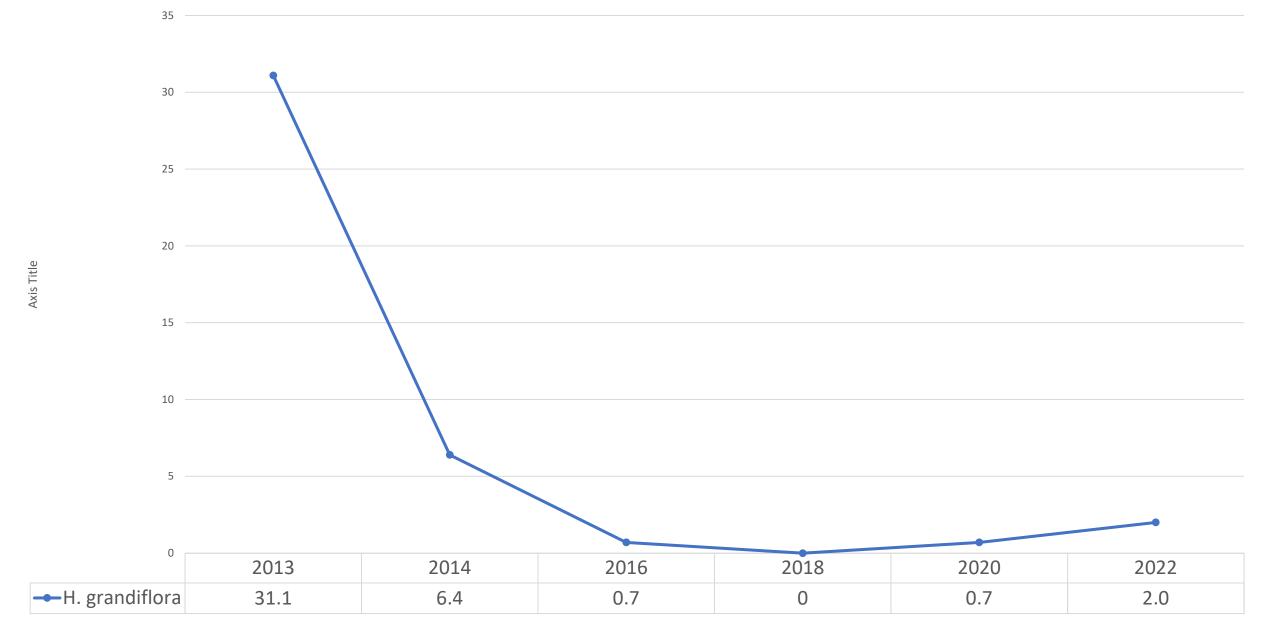
### Centromadia fitchii

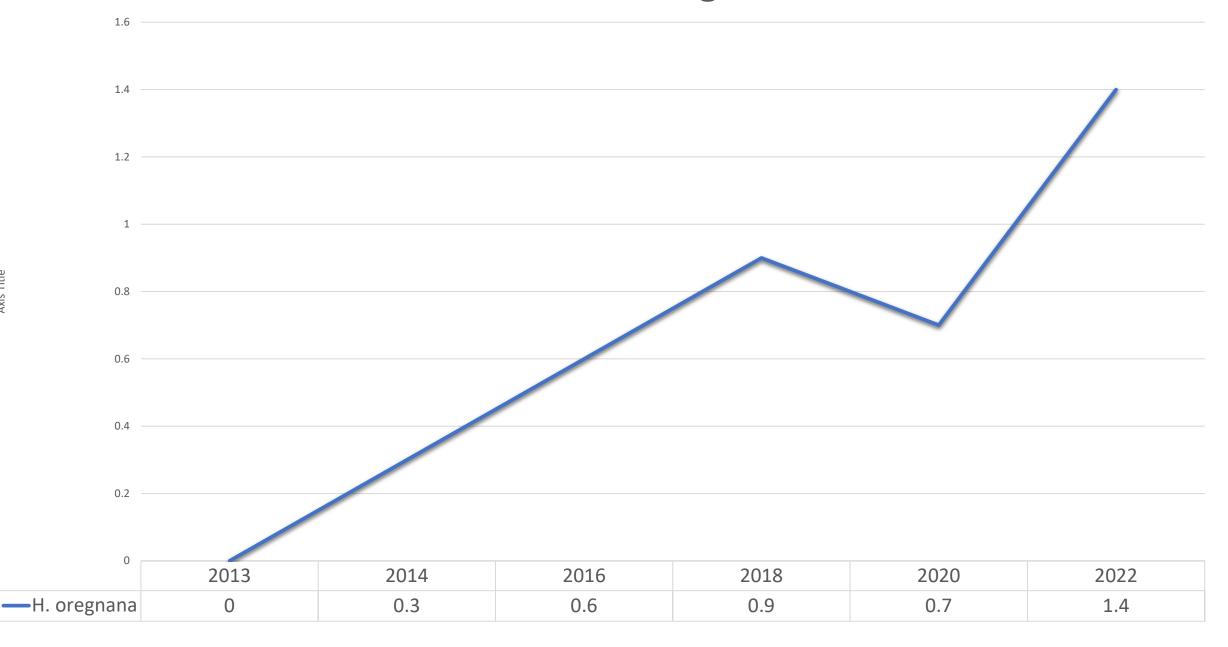




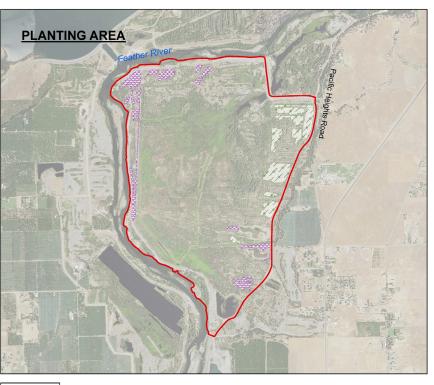








# **Next Steps**





Project Boundary (1,572 acres)

Riparian Woodland and Scrub Plantings (70.86 acres)

Gravel Understory Plantings (48.51 acres)

0 0.4 0.8 1.6 Mile:

1 inch = 2,000 feet

100% Design

SHEET L4

DATE 06-22-16

OWA RESTORATION Butte County, California

Riparian Restoration Planting Area



Prepared For: Sutter Butte Flood Control Agency Post Office Box M Yuba City, California 95991 530.755.9859



## Keep testing additional species



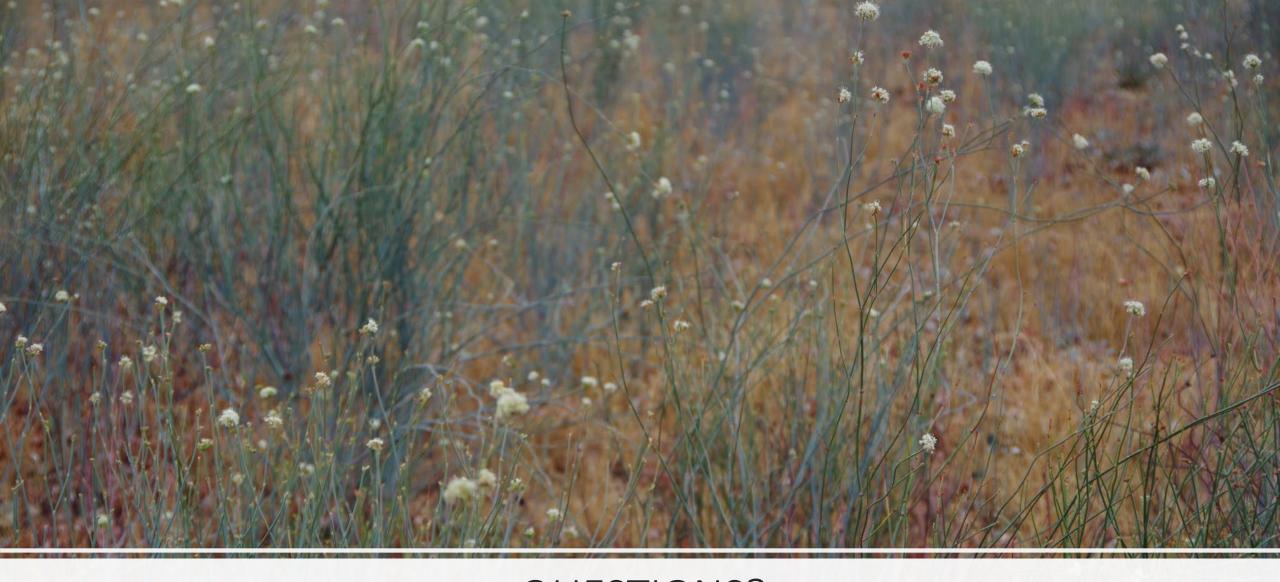




# Wildlife monitoring in partnership with the Xerces society







# QUESTIONS?