



# Stinkwort in Santiago Creek – an EDRR success story

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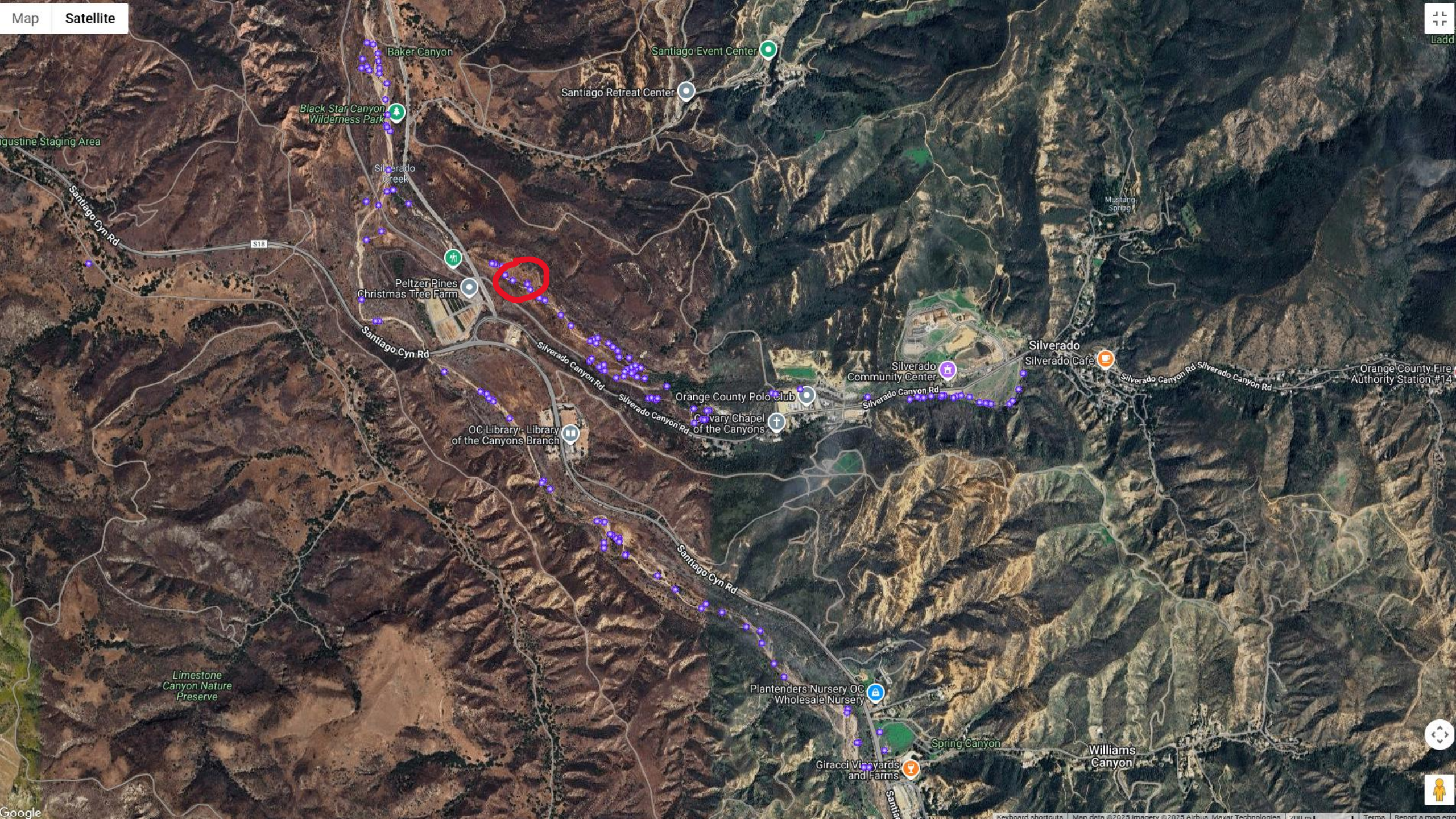












Map

Satellite

Ladd

igustine Staging Area

Baker Canyon

Santiago Event Center

Black Star Canyon  
Wilderness Park

Santiago Retreat Center

Silverado  
Creek

Peltzer Pines  
Christmas Tree Farm

Santiago Cyn Rd

Silverado Canyon Rd

Orange County Polo Club

Silverado  
Community Center

Silverado  
Silverado Cafe

Silverado Canyon Rd

Silverado Canyon Rd

Orange County Fire  
Authority Station #14

OC Library - Library  
of the Canyons Branch

Calvary Chapel  
of the Canyons

Santiago Cyn Rd

Limestone  
Canyon Nature  
Preserve

Plantenders Nursery OC  
- Wholesale Nursery

Spring Canyon

Williams  
Canyon

Giracel Vineyards  
and Farms

Google

Keyboard shortcuts | Map data ©2023 Imagery ©2023 Airbus, Maxar Technologies | 2/11/23 | Terms | Report a map error











# Stnkwort- *Dittrichea graveolens*



- Summer/fall annual
- High priority species
- 1-3 ft tall
- Aster family
- Small flowers
- Strong aromatic- Vics Vapor Rub
- Sticky leaves
- Conical shape –Christmas tree
- Look alike – *Conyza* spp's or Spanish sunflower *Pulicaria*



# Timeline



- 2023 (August)- first plant discovered in Silverado creek
- 2023 (Fall) - mapped extent of populations and handpulled all plants found. No resurveys conducted
- 2024 summer – survey/treat all populations within the 6 miles of creeks. Repeated at least once.
- Dense sites got ~3 visits
- 2025 summer/fall – survey/ treat all know populations. Checked all populations at least 3 times between July-October



# Challenges



- Not very conspicuous and looks like other weeds
- Can hide in plain sight
- Lots of opportunities to take hold- road/trailside, creeks, degraded areas
- Can creep in when you aren't paying attention "off-season"
- Can easily disperse- wind , water, soil, fur, clothing vehicles, etc





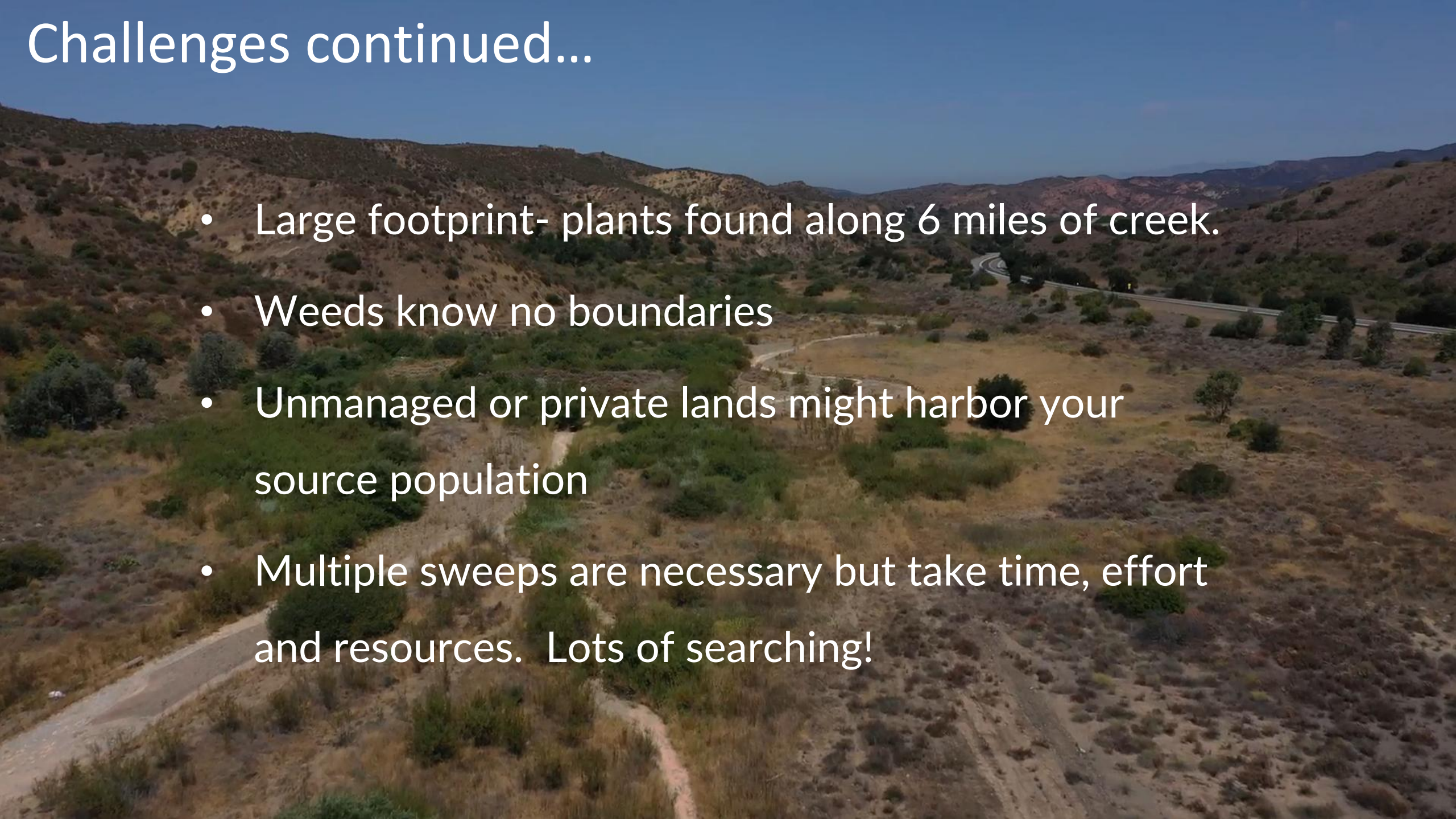
Can Feel Like...



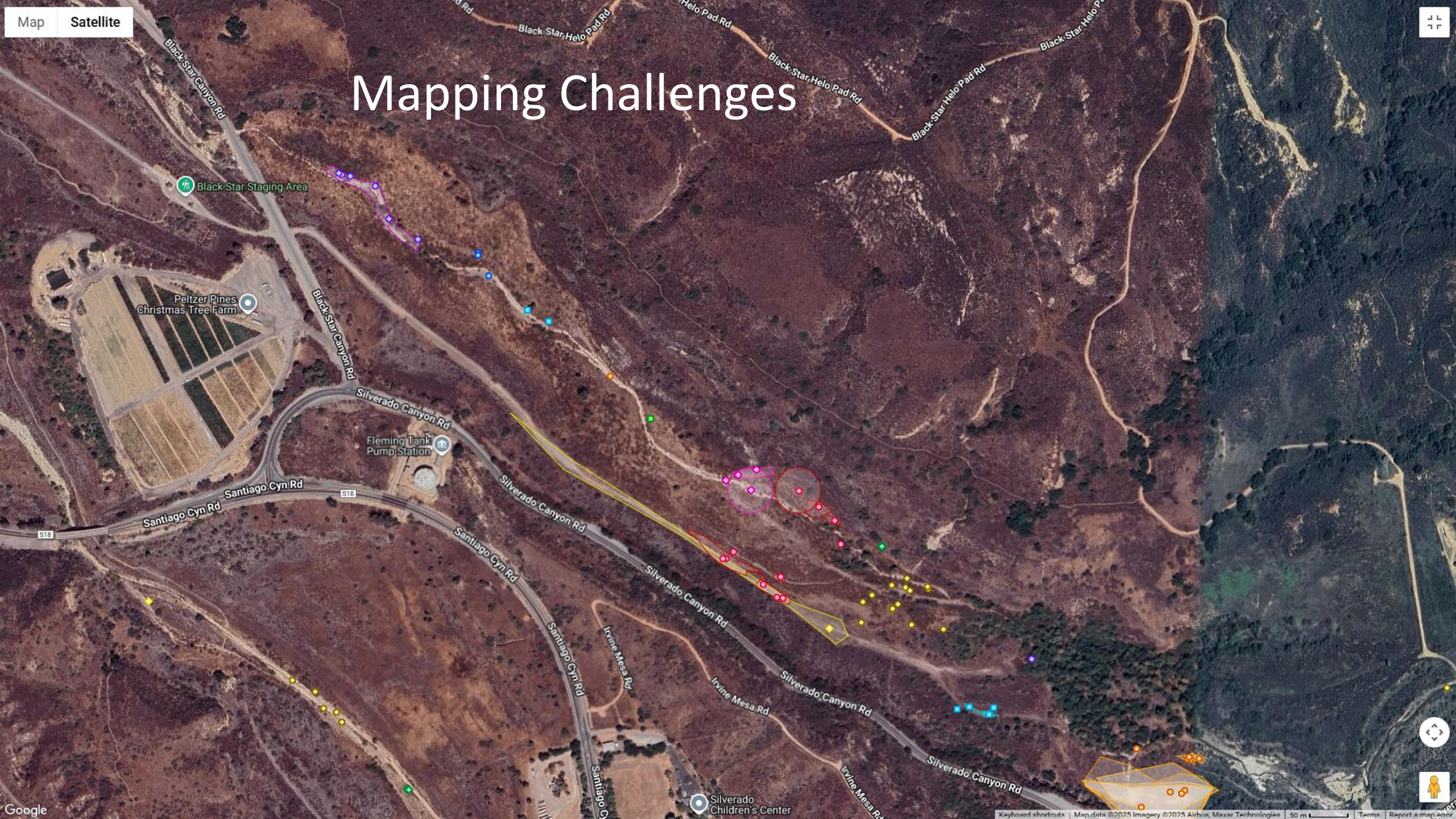


# Challenges continued...

- Large footprint- plants found along 6 miles of creek.
- Weeds know no boundaries
- Unmanaged or private lands might harbor your source population
- Multiple sweeps are necessary but take time, effort and resources. Lots of searching!



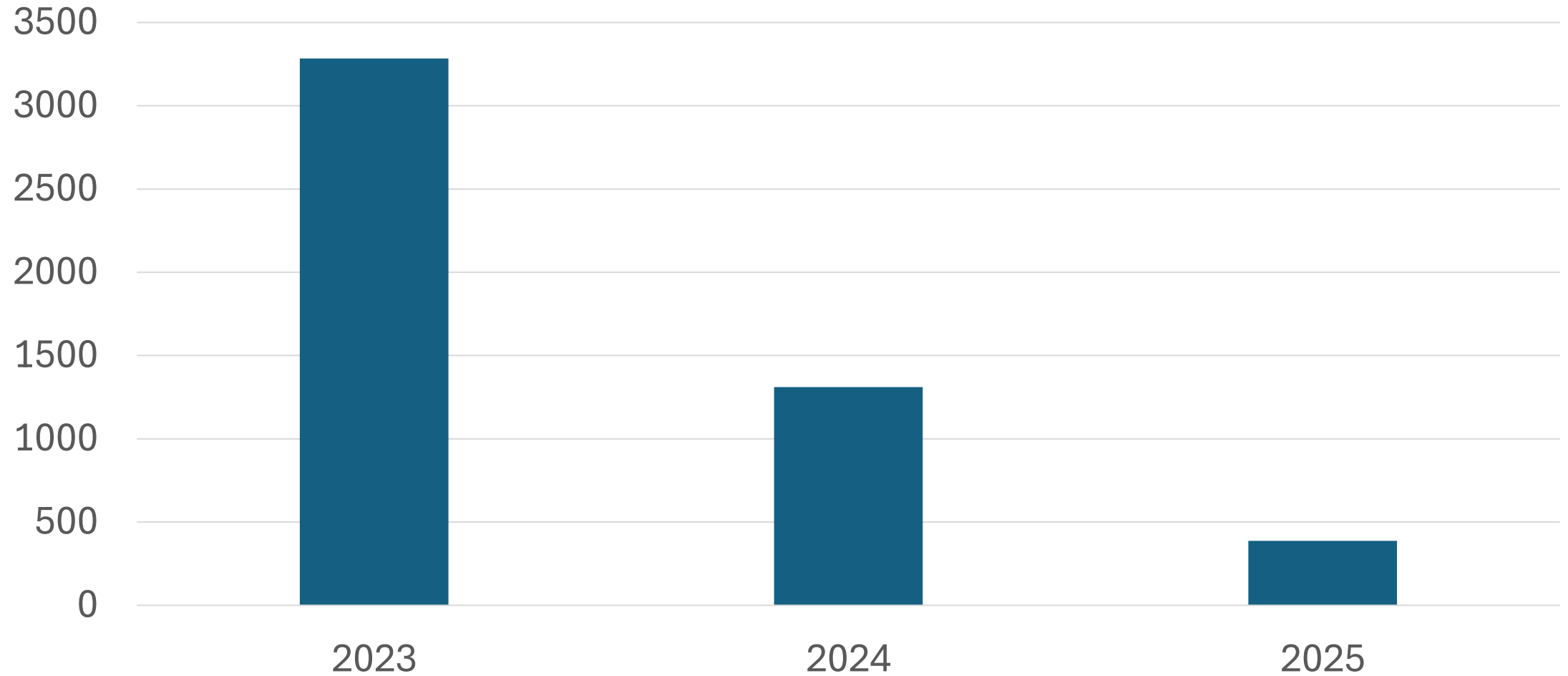




# Mapping Challenges

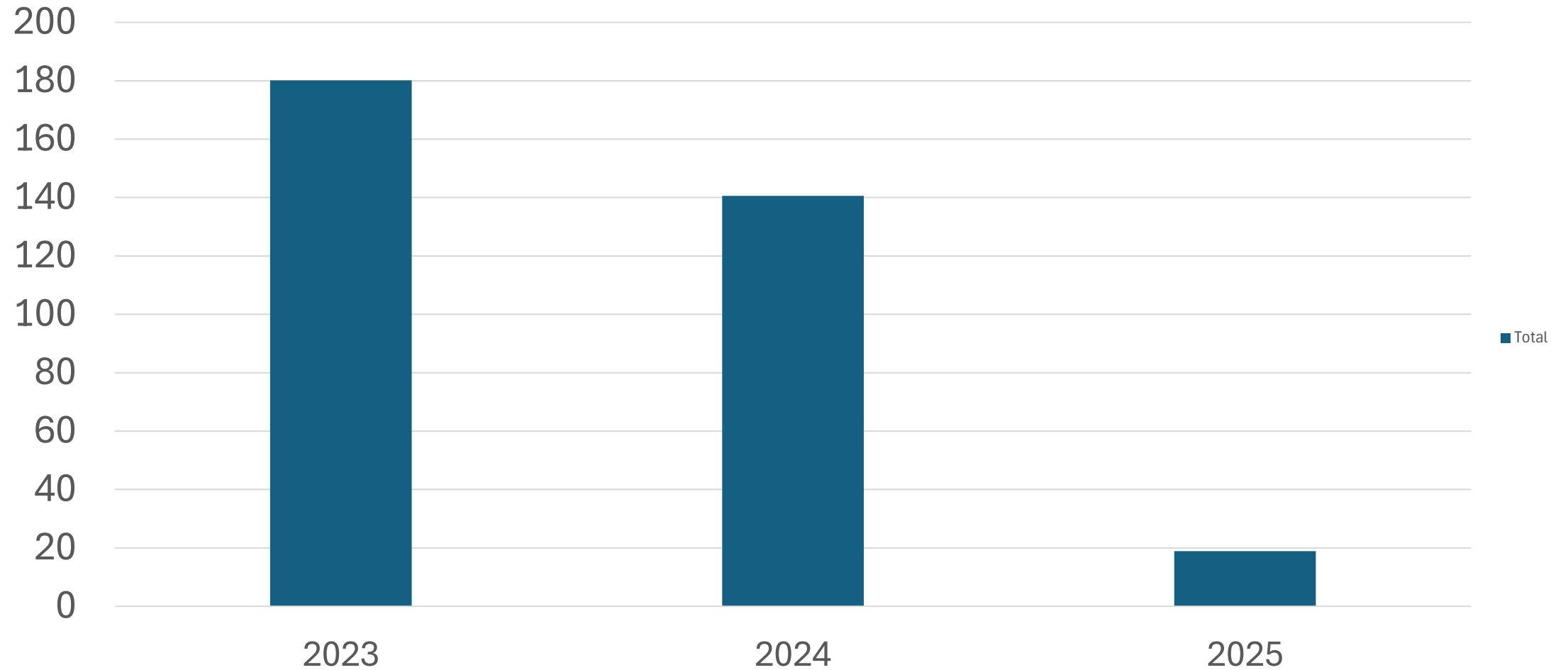


# Number of Plants



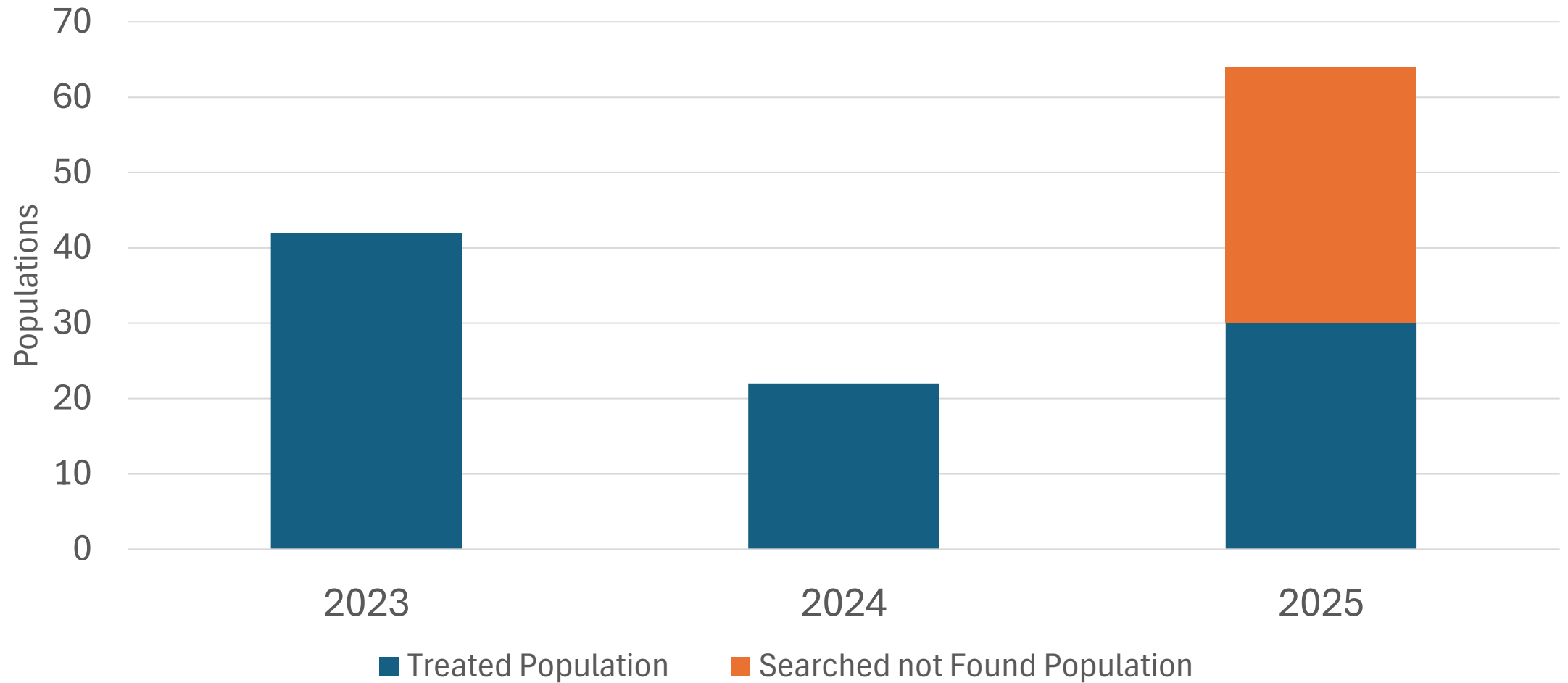


# Net Area (m2)





# Number of Populations





# Keys To Success

- ❖ A little bit of luck and good timing. Caught it early!
- ❖ Have eyes on the land for detection.
- ❖ Do EDRR **off** roads and trails too
- ❖ Multiple sweeps of your sites



# Other factors that helped with success



- Stinkwort growing when most weeds aren't (at least in SoCal)
- Compared to other annuals it has **fairly large window of opportunity for control**  
(June-November)
- Mostly confined to disturbed or degraded sites. This can include creeks/washes. Knew where to look.

















# Takeways

- ❖ Get outside- you'll probably find something !
- ❖ Revisit your sites
- ❖ No news is good news!
- ❖ Use “*Search But Not Found*” feature in CalFlora to track success.
- ❖ Hit it early to avoid bagging of seed
- ❖ Use volunteers
- ❖ Don't need lots of \$ or tech to be successful



An aerial photograph of a dry, hilly landscape. A dirt road winds through the center of the image, flanked by sparse vegetation and small trees. In the background, a range of mountains is visible under a clear sky.

# Thank You !

## Orange County Parks Natural Resources Staff

### IRC's Invasive Team

Yi-Chin Fang  
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Danna Ojeda  
Chrystene Newman

### IRC's Volunteer Weed Warriors

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