

**San Diego Association of Governments (SANDAG)
Memorandum of Understanding (MOU) #5004552**

**Strategic Control of Invasive Weed Species
*2nd Quarter Report - FY 2025-26: Report #44 for Project***

October 1st, 2025 – December 31st, 2025

Project: County of San Diego, Department of Agriculture, Weights & Measures –
Strategic Removal of Invasive Weed Species

To: Kim Smith
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Project:

Invasive plants are considered one of the biggest threats to endangered species and their habitats. A strategic plan for managing non-native invasive plant species in San Diego County was completed in 2012 through a SANDAG contract to the Conservation Biology Institute (CBI) (<http://sdmmp.com>). The Invasive Plant Strategic Plan (IPSP) is designed to develop a strategic approach towards the eradication and management of invasive plants in the San Diego region. The IPSP is meant to work in conjunction with the Management Strategic Plan for Conserved Lands in Western San Diego County (MSP) ([Management Strategic Plan](#)).

This Scope of Work will require the contractor to focus on the management of invasive plants identified in Levels 1, 2, and 3 of the IPSP. The following tasks have been identified as necessary to implement this effort:

This quarterly report covers work funded through the SANDAG Contract, which allowed work to occur from October 1st to December 31st 2025.

TASK 1 – Invasive Plant Species Coordinator:

Level of Effort: (25%) of overall contract

Right of Entry (ROE) work and coordination with property owners and crews:

Coordination with property owners, land managers and AWM crew occurred throughout the quarter. This supported work this quarter and preparation for the next quarter.

The coordinator worked on multiple species at sites across the county:

Current work sites were visited and assessed to time control work (Limonium, Boneseed, Santa Maria Fever-Few, Volutaria, and Ward's Weed). The coordinator pulled and bagged plants at some of these sites, maps and work descriptions are presented below.

Planning for field site treatments by crew occurred. Sites were ordered by priority and field day estimates generated.

Regulatory permits:

No new work.

Report preparation:

The quarterly report was prepared and submitted.

Mapping and occurrence data:

Reviewing iNaturalist EDRR observations (confirming and correcting IDs), as well as mapping and surveying for new populations occurred. GIS coverage of all sites was updated (points). GIS coverage of all work was updated (polygons).

Work plan:

Work crew priorities by species and sites were updated.

TASK 2 – AWM: Invasive Plant Level 1 Management

Level of Effort: (<10%) of overall contract.

Level 1 Management Species are EDRR targets that were **not known to occur** in the county when the IPSP was written (2012).

Crews surveyed and treated one level 1 species this quarter: Desert Knapweed. Maps for the site show treated areas (red polygons) and surveyed areas as white lines which track pathways used by crews to survey and control plants. AWM IPC carried out optimal plant control, either hand pulling or using pesticide applications, protected the natural environment by preventing off-site movement of pesticides, and utilized Best Management Practices (BMPs) that prevented unintentional discharges to surface waters. For each site, AWM IPC followed the following procedures:

1. Identified the pest species to be treated.
2. Reviewed site conditions, such as soil texture, slope, standing water, irrigation or storm drains.
3. Identified and avoided streamside management areas and surface waters to prevent drift and application of pesticides not labeled for aquatic use onto surface waters.
4. Identified most appropriate method of control based on integrated pest management methods, designed to minimize the scale and number of pesticide applications.
5. Applied the least persistent and least toxic pesticide that effectively mitigates the target pest.

Table 1. Summary of treatments performed by AWM on Level 1 species this quarter.

Scientific Name	Common Name	# of Sites Worked	Acres Surveyed	Acres Treated	Plants Controlled
<i>Volutaria tubuliflora</i>	Desert Knapweed	2	1.0	0.1	Pulled

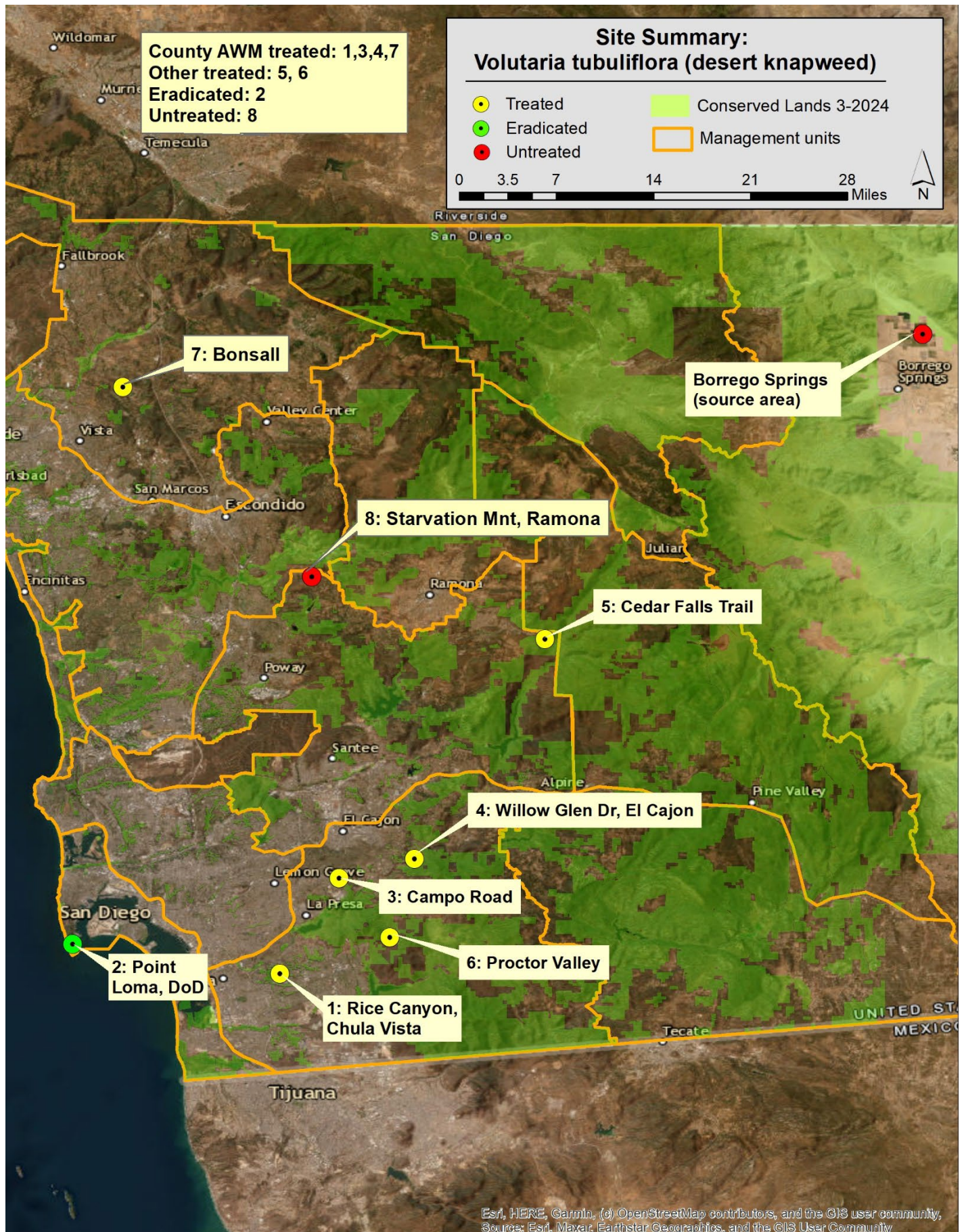


Table 2. Summary of treatments performed by AWM on *Volutaria tubuliflora* (Desert Knapweed).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #1: Rice Canyon, Chula Vista	Desert Knapweed	1	0.5	0	None seen

The coordinator visited this site on one day Dec 11th 2025, to check plant growth stage and pull plants if encountered (the areas in the map below were surveyed). No plants were observed, they would have been at early basal growth stage, based on the growth status of chrysanthemum. It was still a bit too early for the crew to treat the site, as the plants were not standing out from other mustards and chrysanthemum. The crew should return in mid to late January. This site has nearly reached eradication, 99% of plants have been controlled.

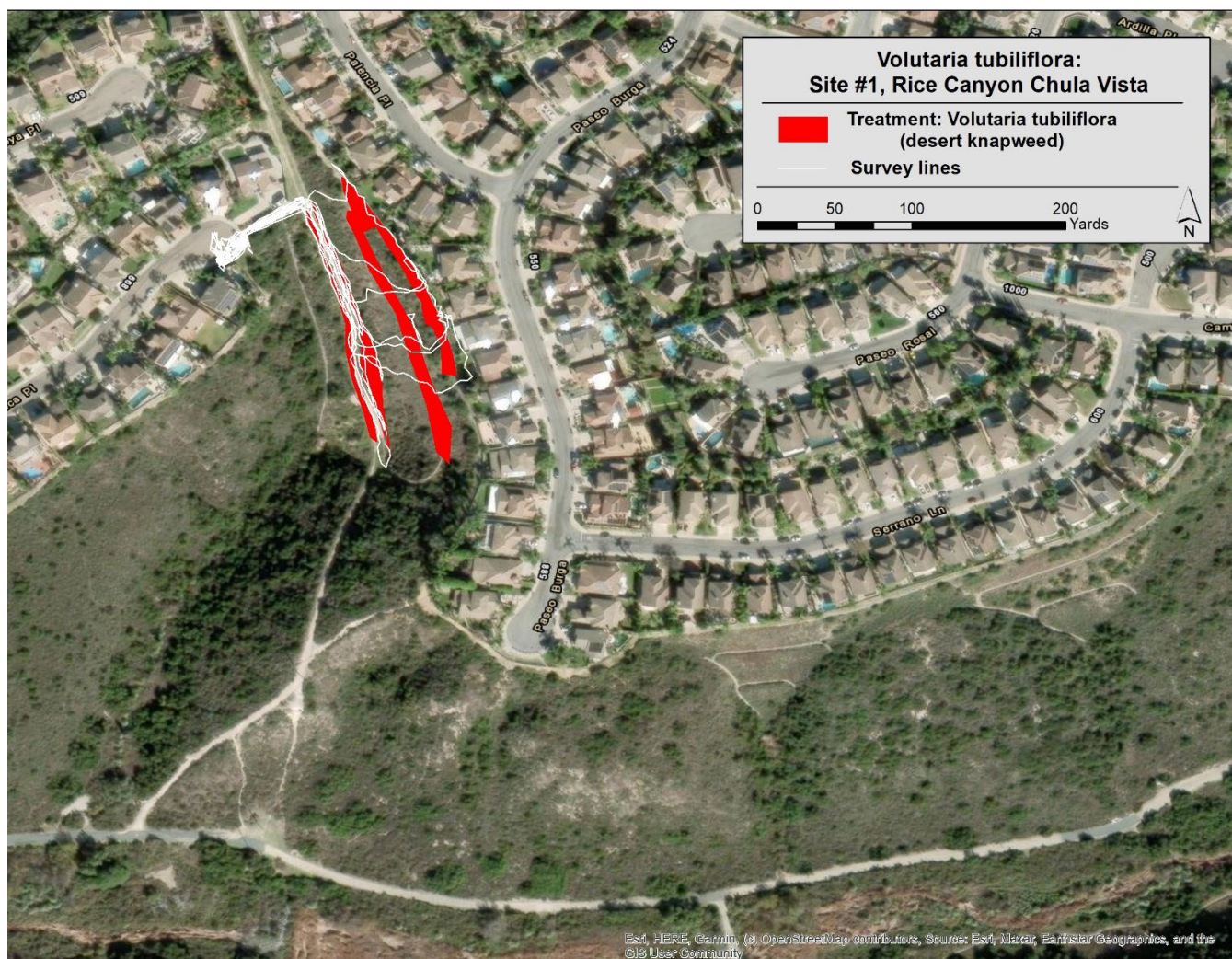
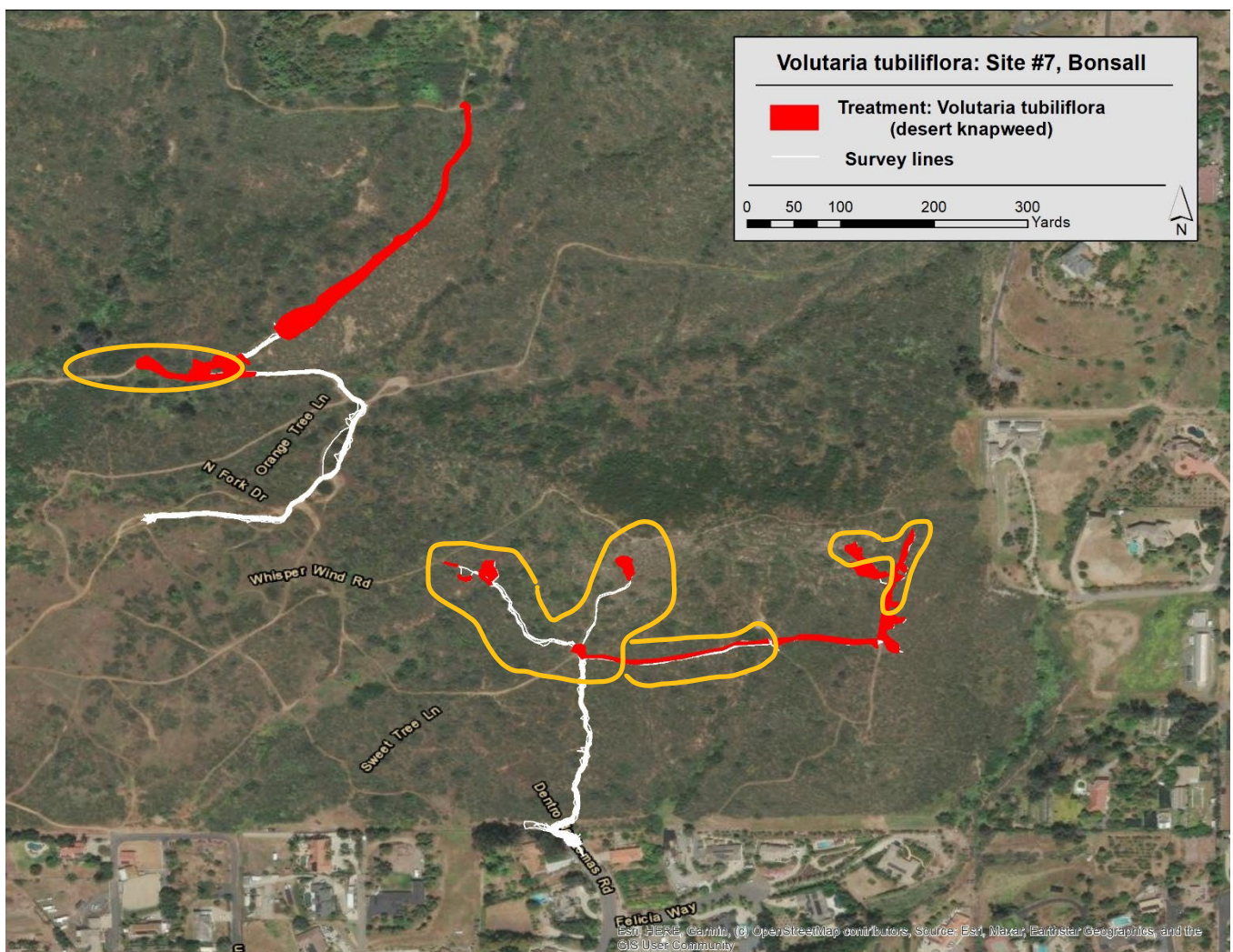


Table 3. Summary of treatments performed by AWM on *Volutaria tubuliflora* (Desert Knapweed).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #7 Bonsall	Desert Knapweed	1	0.5	0.1	300

The coordinator visited this site on one day Dec 23rd 2025, to check plant growth stage and pull plants if encountered (orange areas in the map below). Scattered plants were found in early basal growth stage. These plants were easy to see in areas where pre-emergent was used in previous seasons. Plants were pulled. The crew will return in mid to late January to complete control of the site. This is a newer site reported on iNaturalist in 2024. The site has good control in most areas.



TASK 3 – AWM: Invasive Plant Level 2 Management.

Level of Effort: (>40%) of overall contract

Level 2 Management Species are EDRR targets that were of limited distribution in the county when the IPSP was written (2012).

Crews surveyed and treated four Level 2 invasive weed species (Ward’s Weed, Limonium, Santa Maria Feverfew and Boneseed) at four sites this quarter. AWM IPC made optimal pesticide applications, protected the natural environment by preventing off-site movement of pesticides, and utilized Best Management Practices (BMPs) that prevented unintentional discharges to surface waters. For each site, AWM IPC followed the following procedures:

1. Identified the pest species to be treated.
2. Reviewed site conditions, such as soil texture, slope, standing water, irrigation or storm drains.
3. Identified and avoided streamside management areas and surface waters to prevent drift and application of pesticides not labeled for aquatic use onto surface waters.
4. Identified most appropriate method of control based on integrated pest management methods, designed to minimize the scale and number of pesticide applications.
5. Applied the least persistent and least toxic pesticide that effectively mitigates the target pest.

Table 4. Summary of treatments performed by AWM on Level 2 species this quarter.

Scientific Name	Common Name	# of Sites Worked	Acres Surveyed	Acres Treated	Plants Controlled
<i>Carrichtera annua</i>	Ward’s Weed	1	6.1	3.6	10,000
<i>Chrysanthemoides monilifera</i> ssp. <i>monilifera</i>	Boneseed	2	0.4	0.1	4
<i>Limonium duriusculum</i>	European Sea Lavender	1	0.2	0.1	200
<i>Parthenium hysterophorus</i>	Santa Maria Feverfew	1	0.1	0.1	100



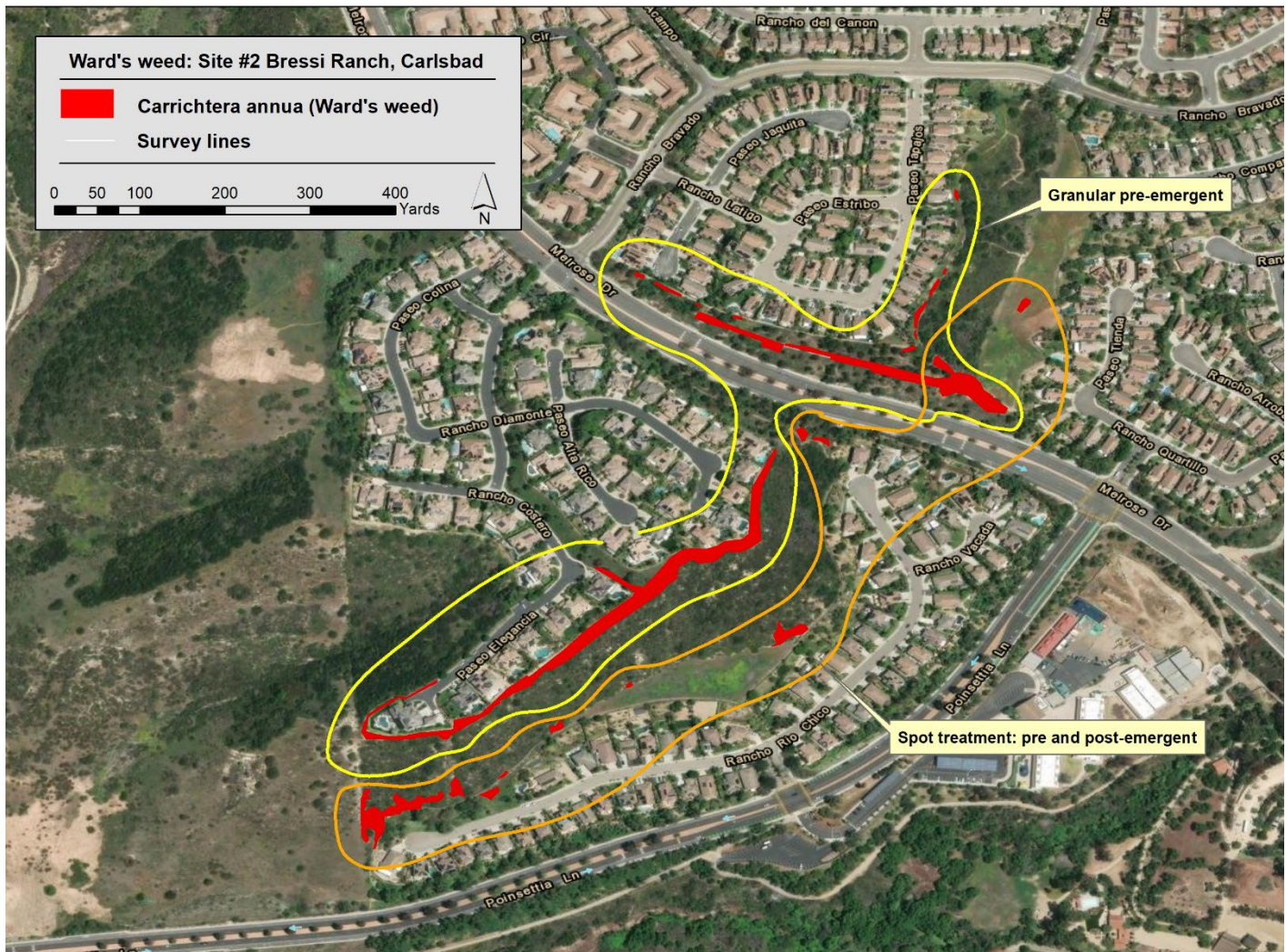
Carrichtera annua, Ward's Weed, Site #2 Bressi Ranch

Table 6. Summary of treatments performed by AWM on *Carrichtera annua*, Ward's Weed.

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #2 Bressi Ranch, Carlsbad	Wards Weed	1	6.1	3.6	10,000

The Bressi Ranch (City of Carlsbad) Ward's Weed site is a very large site (>200 acres) covering rolling hills with many property owners (city, open space, and private yards). A group collaboration has been working on the site since 2019: City of Carlsbad and The Nature Collective are working on the northern and western portions of the site and County AWM has worked on the southern and eastern portions of the site. CNLM is taking the lead on the eastern La Costa Greens site.

The County AWM crew started treatments at Bressi Ranch with application of granular pre-emergent prior to germination of Ward's Weed. Two to three crew members worked five days from November 12th to the 26th 2025. The crew returned after November and December rains; plants were just beginning to emerge. Two crew members worked for three days from December 23rd to the 30th 2025. Over 10,000 seedlings were treated with pre and post emergent herbicide. The crew is continuing treatments in early January.



Chrysanthemoides monilifera ssp. monilifera, Boneseed:

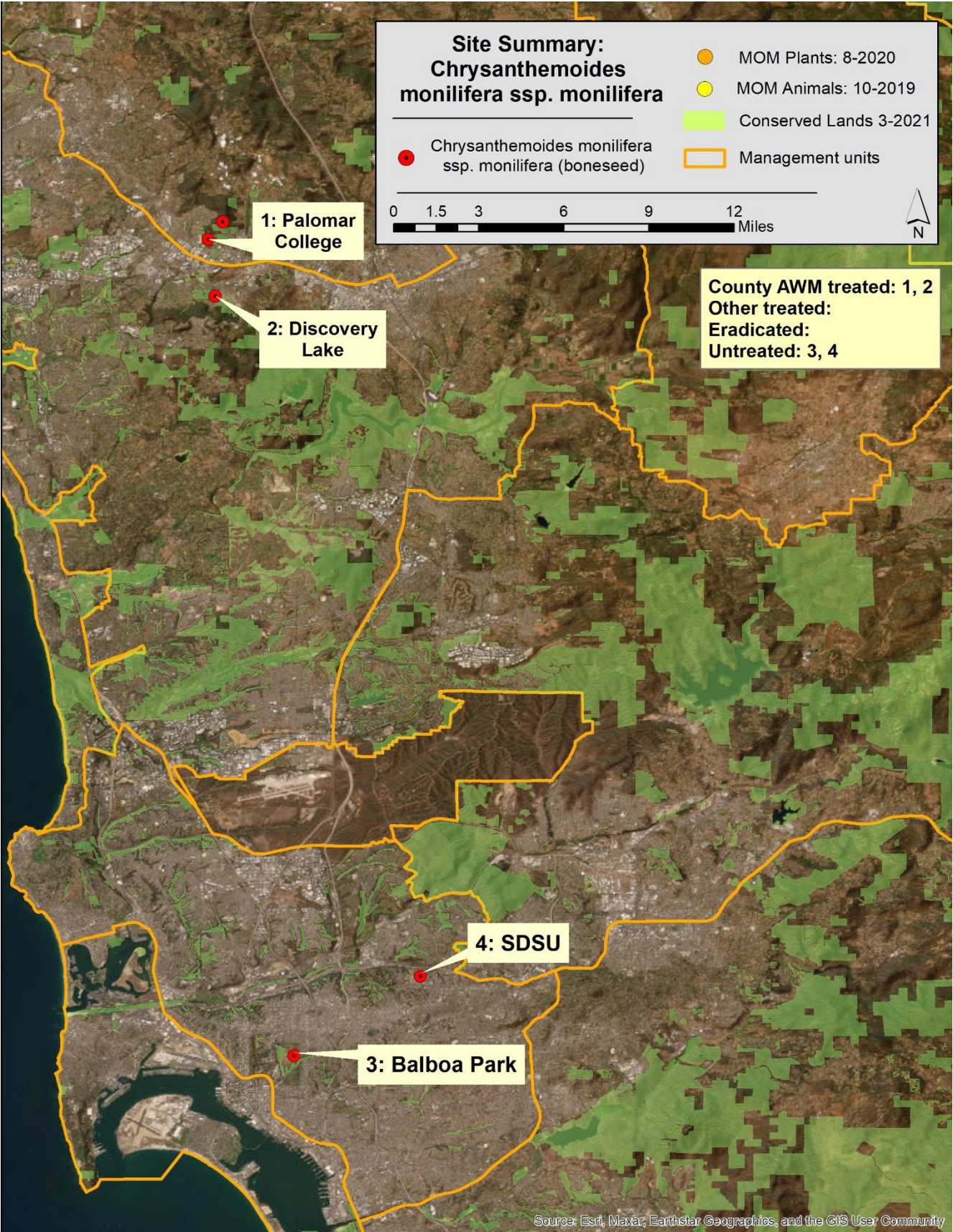


Table 7. Summary of treatments performed by AWM on *Chrysanthemoides monilifera* ssp. *monilifera* (Boneseed).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #1 Palomar College, San Marcos	Boneseed	1	0.3	0.1	4

The coordinator surveyed the site on December 26th 2025. 4 seedlings were hand pulled from two areas. Control is >99%.

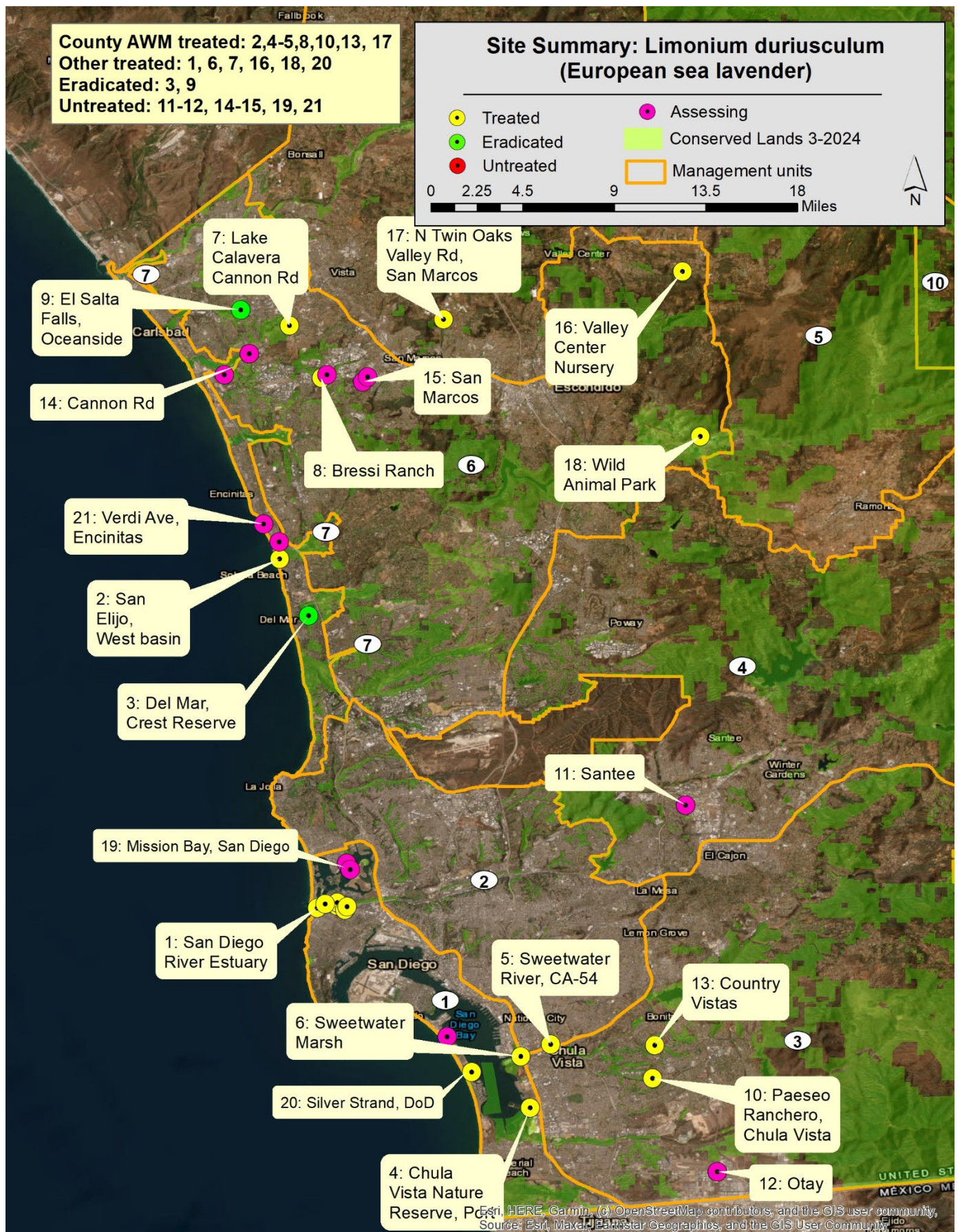


Table 8. Summary of treatments performed by AWM on *Chrysanthemoides monilifera* ssp. *monilifera* (Boneseed).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #2 Discovery Lake, San Marcos	Boneseed	1	0.1		0

The coordinator surveyed the site on December 26th 2025. No plants were observed, the population may be eradicated as this is the second year with no plants observed.





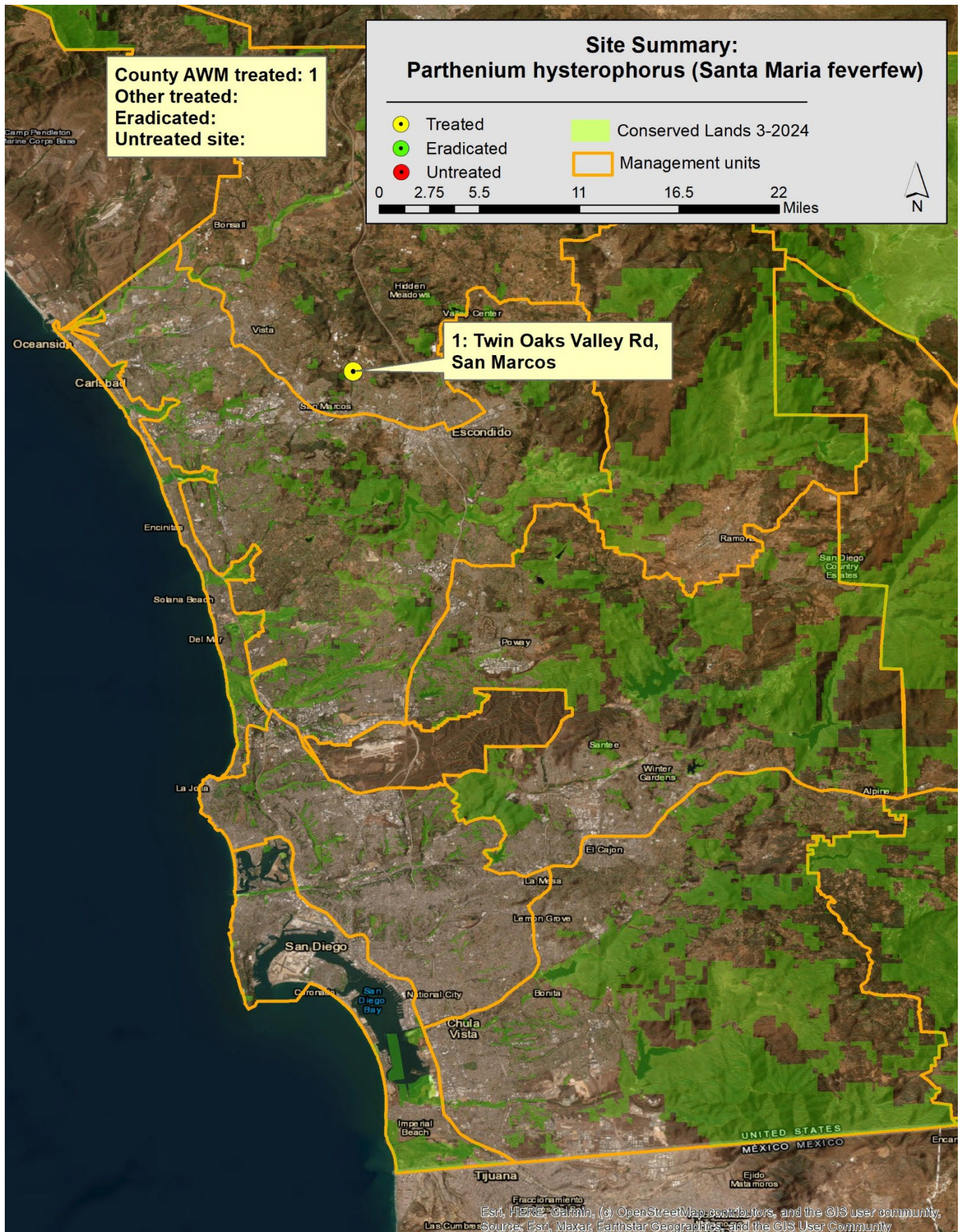
Limonium duriusculum, European Sea Lavender: Site #17 N Twin Oaks Valley Rd

Table 11. Summary of treatments performed by AWM on *Limonium duriusculum* (European Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #17 N Twin Oaks Valley Rd	European Sea Lavender	1	0.1	0.1	200

The coordinator surveyed the site on December 26th 2025. 200 seedlings were observed and pulled. The population is about 80% reduced.





Parthenium hysterophorus, Santa Maria Feverfew: Site #5 La Costa Ave Carlsbad

Table 12. Summary of treatments performed by AWM on *Parthenium hysterophorus* (Santa Maria Feverfew).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #1 Twin Oaks Valley Rd	Santa Maria Feverfew	1	0.1	0.1	100

The coordinator surveyed the site on December 26th 2025. 100 plants were observed and pulled. The population is about 80% reduced.



TASK 4 – AWM: Invasive Plant Level 3 Management.

Level of Effort: (<20%) of overall contract

Level 3 Management Species are invasive non-native targets that of a wider distribution in the county (they cannot be eradicated), but still limited enough that they can be contained to portions of the county or they may be eradicated from watersheds or large landscape level units, when the IPSP was written (2012). These species may also be worked on to suppress them in high resource value areas.

Crews surveyed and treated no weed species this quarter. AWM IPC made optimal pesticide applications, protected the natural environment by preventing off-site movement of pesticides, and utilized Best Management Practices (BMPs) that prevented unintentional discharges to surface waters. For each site, AWM IPC followed the following procedures:

1. Identified the pest species to be treated.
2. Reviewed site conditions, such as soil texture, slope, standing water, irrigation or storm drains.
3. Identified and avoided streamside management areas and surface waters to prevent drift and application of pesticides not labeled for aquatic use onto surface waters.
4. Identified most appropriate method of control based on integrated pest management methods, designed to minimize the scale and number of pesticide applications.
5. Applied the least persistent and least toxic pesticide that effectively mitigates the target pest.

Table 18. Summary of treatments performed by AWM on Level 3 species this quarter.

Scientific Name	Common Name	# of Sites Worked	Acres Surveyed	Acres Treated	Plants Controlled
<i>None</i>					

TASK 5 – Coordinator: Tracking and Updating Invasive Species for Priority Removal.

Level of Effort: (5%) of overall contract

- Co-ordination to continue control of Ward's Weed in Carlsbad.
- Reviewing and surveying reports from iNaturalist.
- Co-ordination with San Diego Weed Management Area at the quarterly meeting.
- Presentation covering EDRR work at the Statewide Weed Management Area meeting.
- Co-ordination to survey and control European and Algerian Sea Lavender species in South San Diego Bay. Managers from FWS, DoD, SDMMP and CBI discussed expanded and coordinated surveying and treatment.

Work Anticipated for 3rd Quarter Period, January 1st – March 31st 2026

This work will be under a new Agreement.

Task 1 – Invasive Plant Species Coordinator:

- Coordinate ROE work with AWM, update database.
- Monitor and coordinate with AWM during implementation.
- Survey and map sites as needed.
- Prepare quarterly report.

Task 2 – AWM: Invasive Plant Level 1 Management.

- Survey, map, and treat any reported sightings of target Level 1 plants: Barbed Goat Grass and Volutaria.
- Supervision of staff, provide training, guidance, and preparation for field work.
- Collect GIS treatment polygons and survey routes (lines) of targeted weeds.

Task 3 – AWM: Invasive Plant Level 2 Management.

- Survey, map, and treat any reported sightings of target Level 2 plants: Ward's Weed, Eupatory, and Limonium.
- Re-treatment of sites: Ward's Weed, Limonium, Eupatory, and Volutaria.
- Supervision of staff, provide training, guidance, and preparation for field work.
- Coordinate and finalize tracking methods for work completed.
- Initiate and continue work outlined in work plan.
- Obtain signed ROEs.

- Collect new GIS treatment polygons and survey routes (lines) of targeted weeds. Upload data to Calflora.

Task 4 – AWM: Invasive Plant Level 3 Management.

- Survey, map, and treat any reported sightings of target Level 3 plants: Stinknet.

Task 5 – Coordinator: Tracking and Updating Invasive Species for Priority Removal.

- Continue coordination with: Department of Defense, California State Parks, City Department of Parks and Recreation, San Diego Weed Management Area and County of Orange CNPS EDRR invasives group.
- Continue to aggregate data and track new prospective EDRR target species.
- Present at SDMMP land manager meeting, working group and other meetings as requested.
- Provide population status of EDRR regional targets to CDFA statewide assessment.
- Work with the Natural History Museum ‘Urban Canyons Survey Project’, provide EDRR materials to facilitate reporting of EDRR targets.