

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

**Strategic Control of Invasive Weed Species
*1st Quarter Report - FY 2025-26: Report #43 for Project***

July 1st, 2025 – September 30th, 2025

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

To: Kim Smith
San Diego Association of Governments (SANDAG)
401 B Street, Suite 800
San Diego CA 92101

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 July 1st to September 30th 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. Two new ROEs were obtained in the Julian area for work on Spotted Knapweed. A new ROE was secured for Yellow Star Thistle in Japatul. Bridal Broom ROEs were also secured. A Temporary Access Permit (TAP) was obtained from City of San Diego Public Works for Lake Murray Reservoir.

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

Current work sites were visited and assessed (Yellow Star Thistle, Barbed Goat Grass, Spotted Knapweed, Limonium, Sridal Broom, and French Broom). The coordinator pulled and bagged plants at some of these sites.

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: Barbed Goatgrass. Maps for the site show treated areas (red polygons). 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>Aegilops triuncialis</i>	Barbed Goatgrass	1	0.9	0.1	2,500

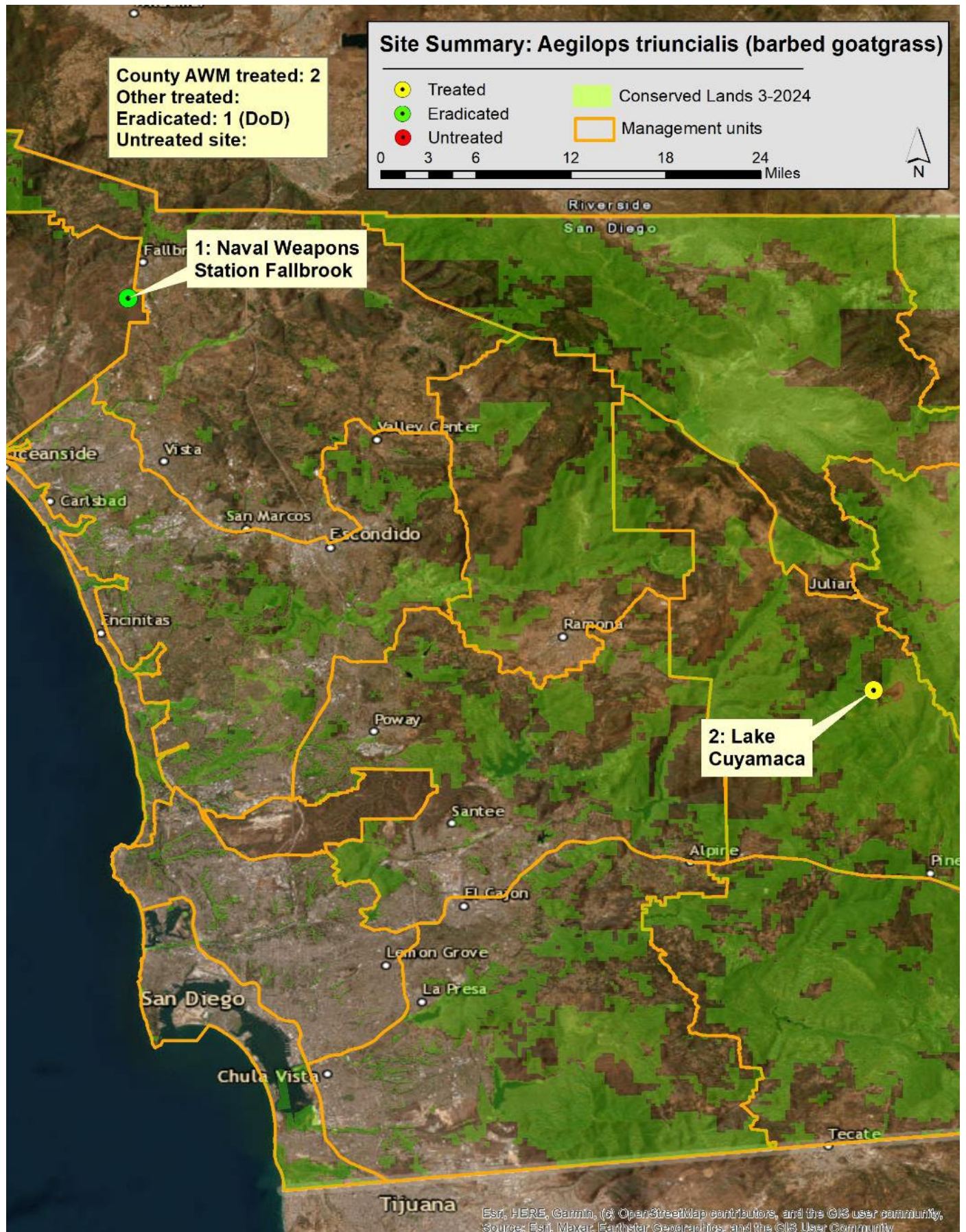


Table 2. Summary of treatments performed by AWM on *Aegilops triuncialis* (barbed goatgrass).

Work Site	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants Controlled
Site #2 Lake Cuyamaca	Barbed Goatgrass	1	0.9	0.1	2,500

***Aegilops triuncialis* (Barbed Goatgrass): Site #2 Lake Cuyamaca**

A coordinator crew of one to two individuals controlled Barbed Goatgrass over 2 days between July 25-26, 2025. Plants were scattered, sometimes in patches, they were hand pulled and disposed of.



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 three Level 2 invasive weed species (Yellow Star Thistle, Spotted Knapweed, and Canary Island St. John's Wort) at eight 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 3. 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>Centaurea solstitialis</i>	Yellow Star Thistle	3	14.3	1.8	5,470
<i>Centaurea stoebe</i>	Spotted Knapweed	3	5.5	0.4	1,400
<i>Genista monosperma</i>	Bridal Broom	1	2.0	0.1	25
<i>Genista monspessulana</i>	French Broom	1	0.6	0.1	95
<i>Hypericum canariense</i>	Canary Island St. John's Wort	2	3.6	0.4	260
<i>Limonium duriusculum</i>	European Sea Lavender	2	2.5	0.2	330
<i>Limonium ramosissimum</i>	Algerian Sea Lavender	6	12.9	0.7	1,750

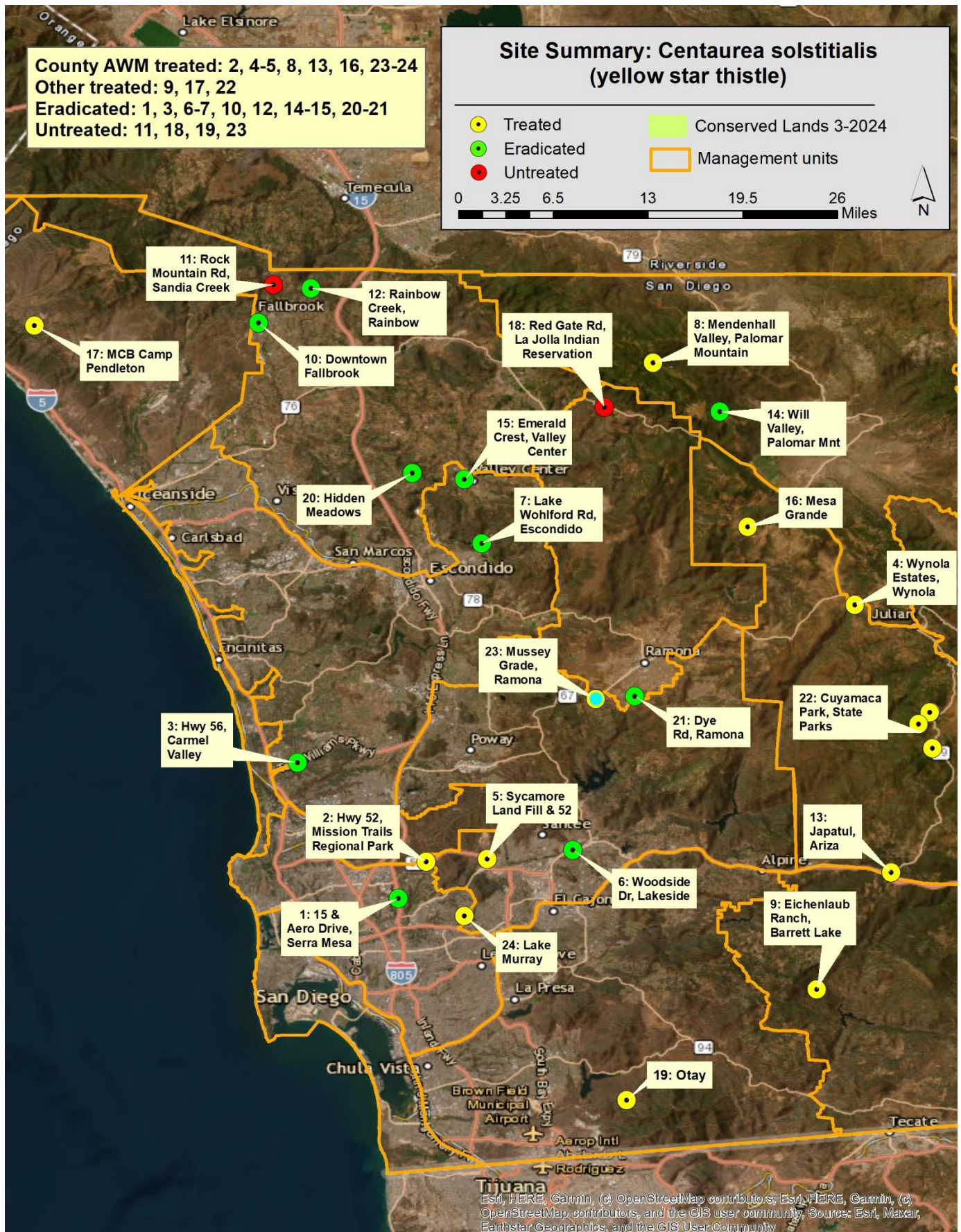
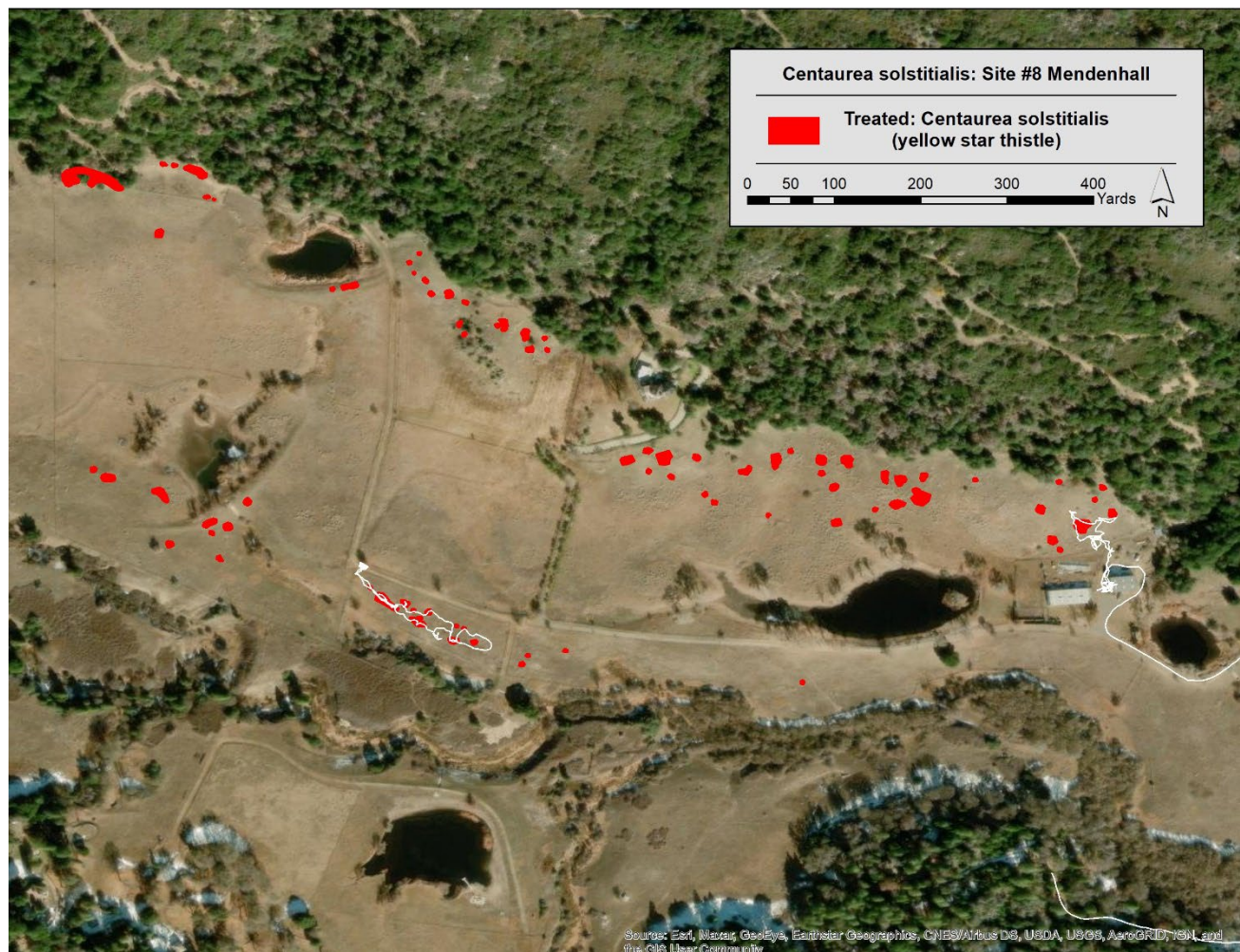


Table 4. Summary of treatments performed by AWM on *Centaurea solstitialis* (Yellow Star Thistle).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #8, Mendenhall, Palomar	Yellow Star Thistle	1	9.3	1.0	2,350
Site #13, Japatul, Ariza	Yellow Star Thistle	1	3.0	0.4	2,600
Site #16, Mesa Grande	Yellow Star Thistle	1	2.0	0.4	520
Site #23, Mussey Grade, Ramona	Yellow Star Thistle	1	0.7	0.2	85

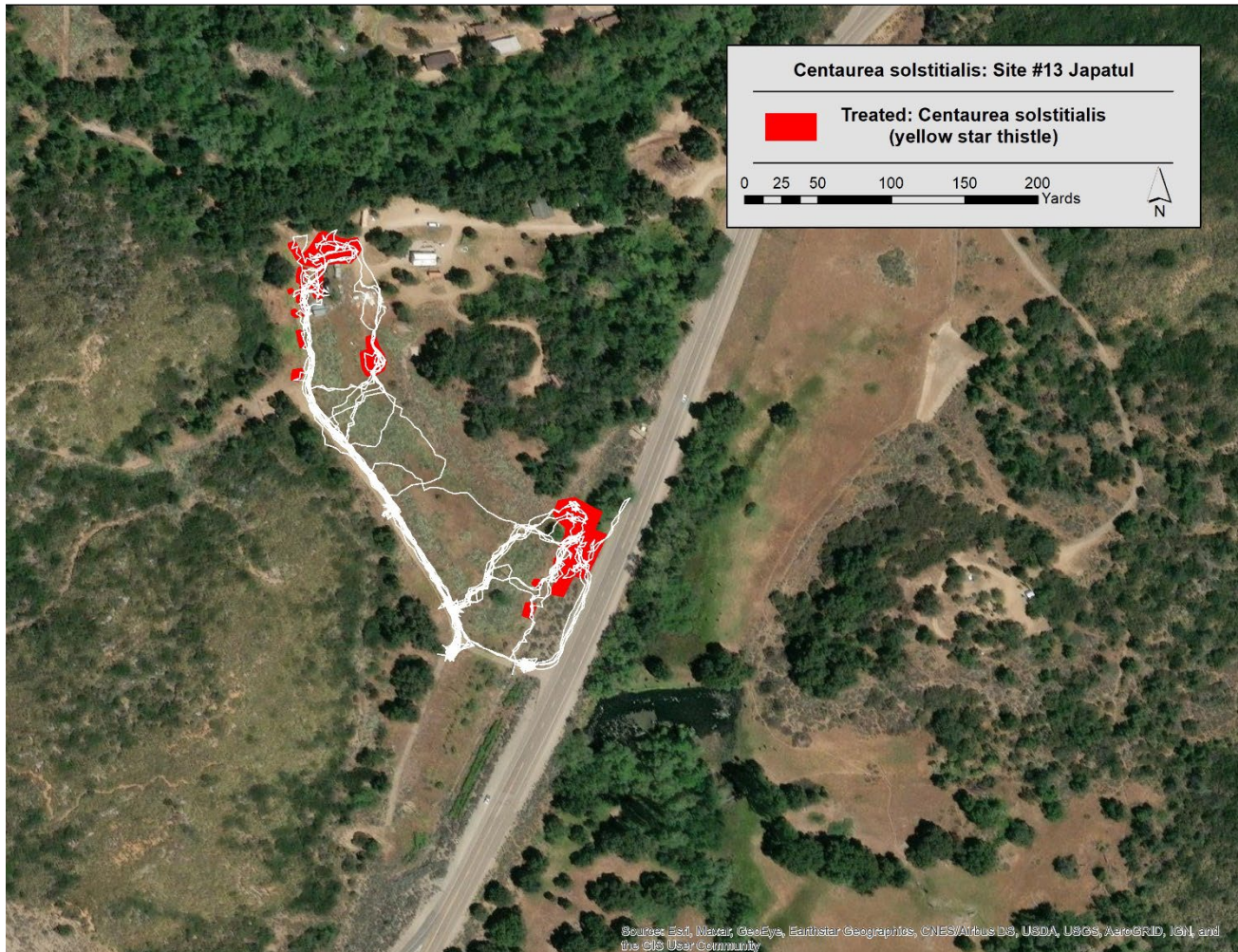
***Centaurea solstitialis*, Yellow Star Thistle: Site #8 Mendenhall**

2,350 plants were found and treated with a post emergent herbicide during treatment of the site. A crew of one individual visited the site over ten days between August 15-29, 2025. Historic treatments: 430 plants were controlled in 2024, 380 plants were controlled in 2023, 265 plants in 2022 and 1,005 plants in 2021.



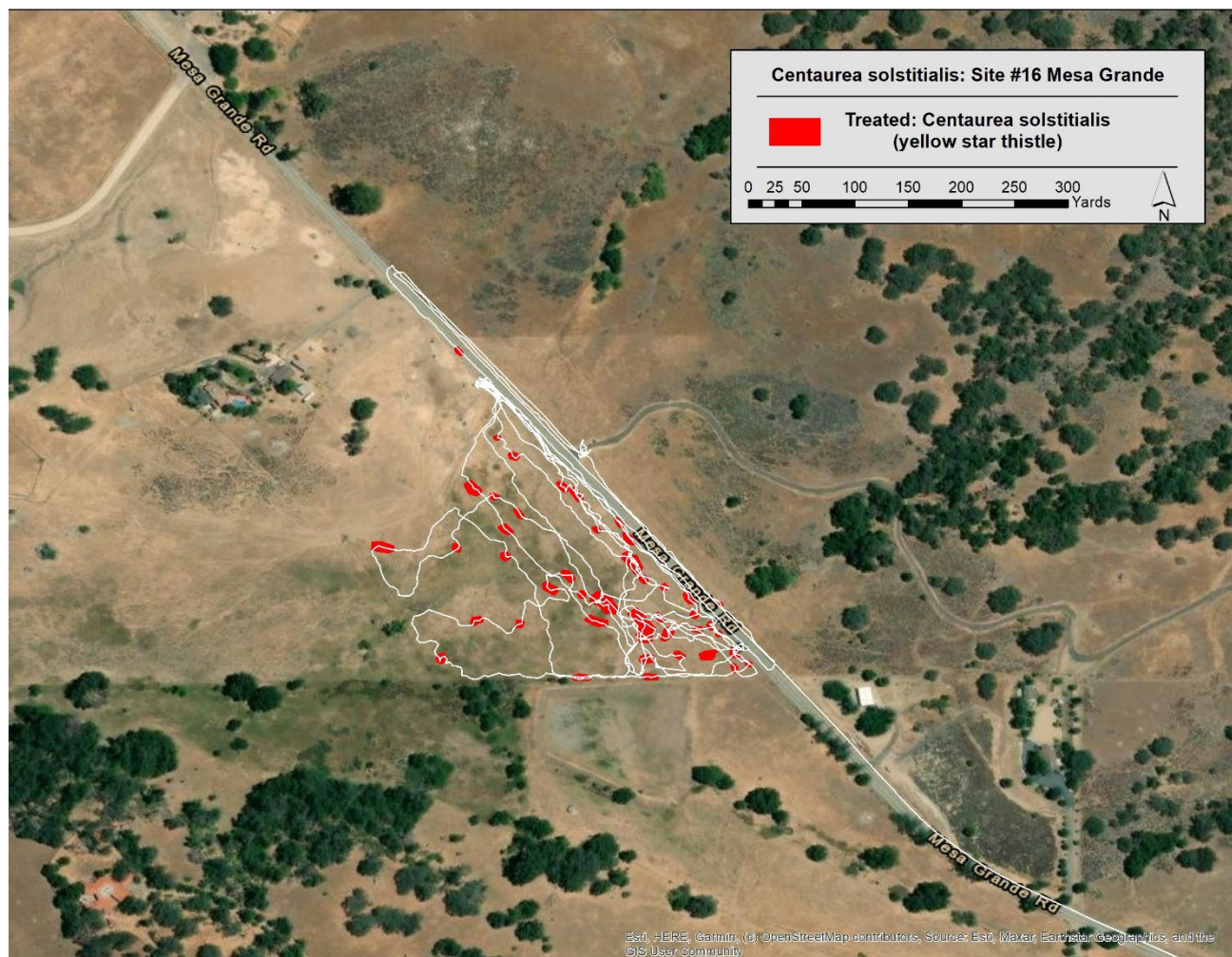
Centaurea solstitialis, Yellow Star Thistle: Site #13 Japatul

The treatment area expanded from the road shoulder to the adjacent parcel. The property owner was tracked down and permission was granted. 2,600 plants were found and treated with post emergent. A crew of one to three individuals visited the site between July 31st and August 7th 2025.



Centaurea solstitialis, Yellow Star Thistle: Site #16 Mesa Grande

520 plants were controlled. A crew of one individual visited the site between August 11-14, 2025. 85 plants were treated in 2024, 60 plants were controlled in 2023 and 5 plants in 2022.



Centaurea solstitialis, Yellow Star Thistle: Site #23 Mussey Grade, Ramona

No plants were observed or controlled. A crew of one individual visited the site on August 1st 2025. A correctly IDed report on iNaturalist found plants at this site in the past.



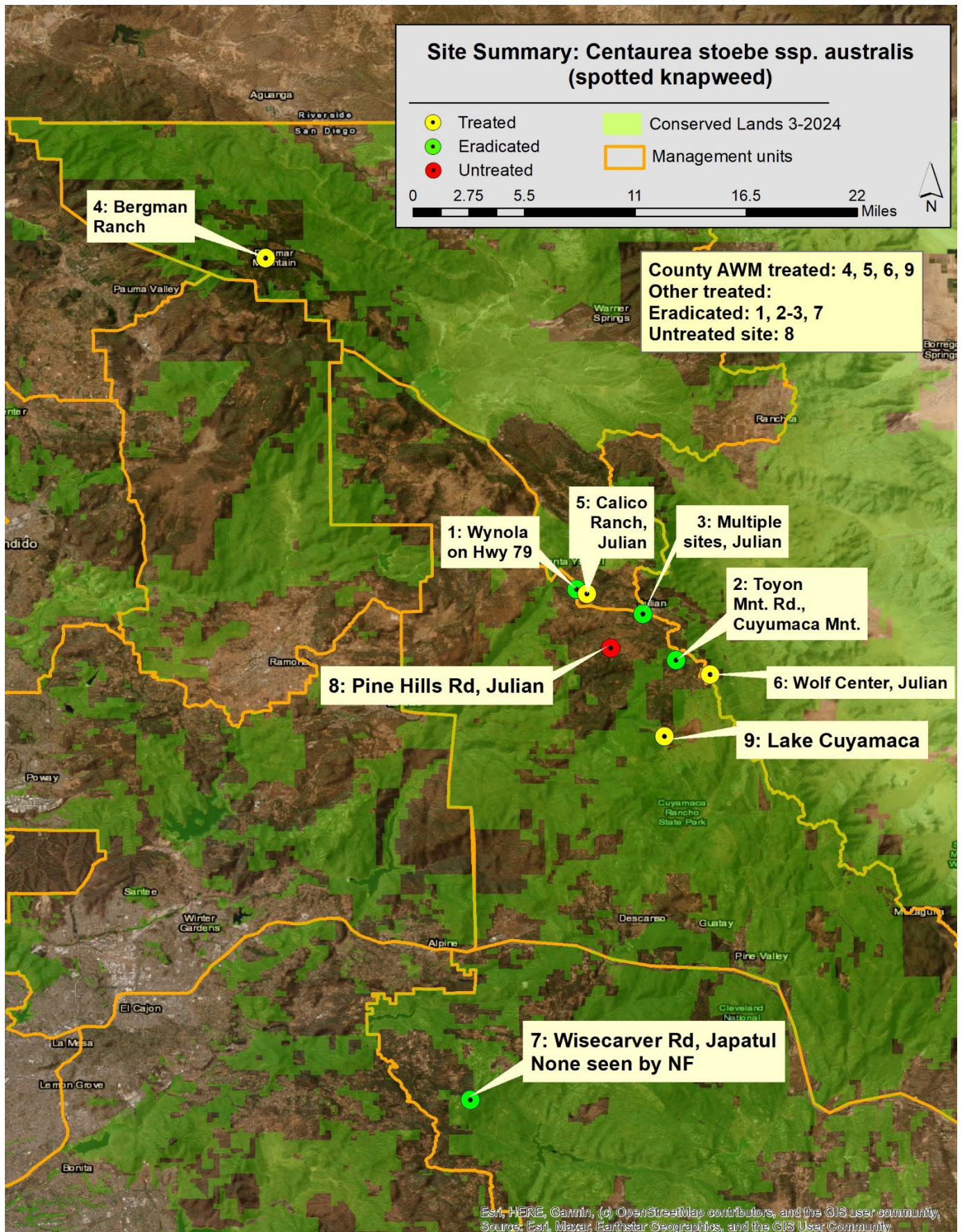
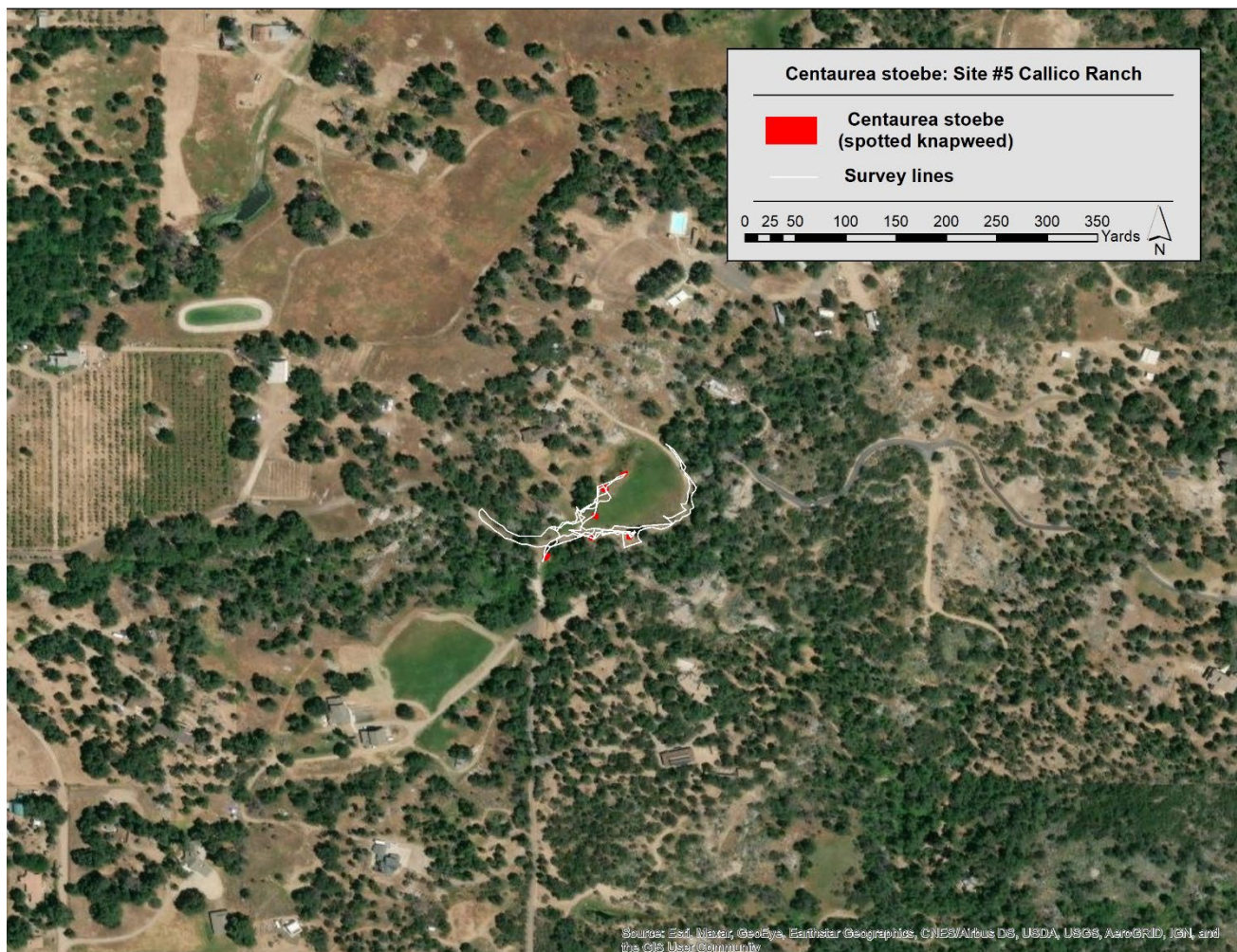


Table 5. Summary of treatments performed by AWM on *Centaurea stoebe* (Spotted Knapweed).

Site Name	Common Name	# of Visits	Acres Surveyed	Acres Treated	Plants treated
Site #5 Calico Ranch	Spotted Knapweed	1	0.3	0.1	20
Site #6, Wolf Center	Spotted Knapweed	1	4.2	0.2	1,080
Site #9 Lake Cuyamaca	Spotted Knapweed	1	1.0	0.1	300

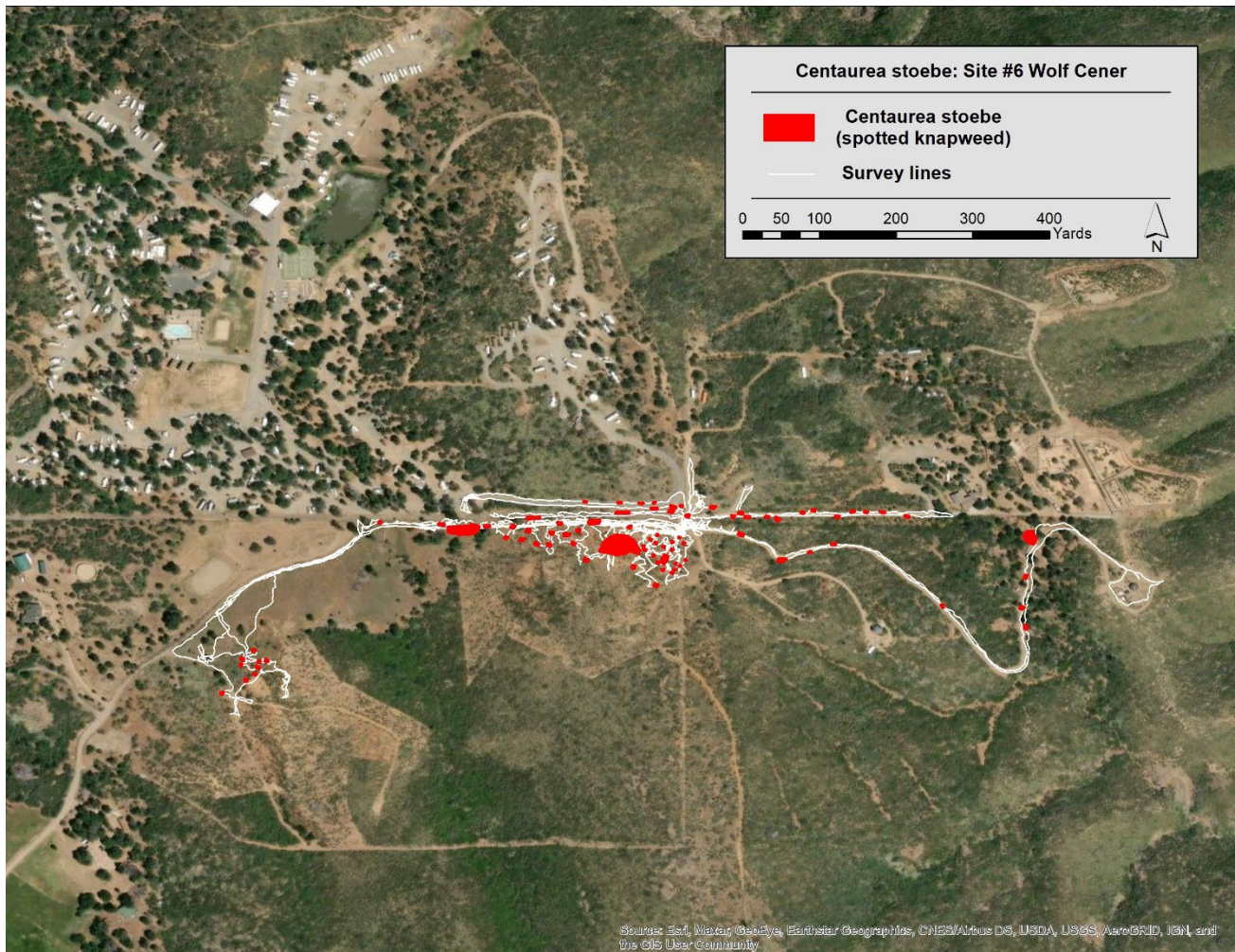
***Centaurea stoebe*, Spotted Knapweed: Site #5 Calico Ranch, Julian**

20 plants were treated with a post emergent on August 19th 2025. 12 plants were controlled in 2024, 50 plants in 2023, 39 plants in 2022 and 100 plants in 2021.



Centaurea stoebe, Spotted Knapweed: Site #6 Wolf Center, Julian

1,080 plants were treated with a post emergent by a crew of one over seven days, between July 18th and August 19th 2025. 980 plants were controlled in 2024, 2,500 plants in 2023, 1,184 plants in 2022 and 1,870 plants in 2021.



Centaurea stoebe, Spotted Knapweed: Site #9 Lake Cuyamaca

300 plants were pulled and bagged by a crew of one over two days, between July 25, 26, 2025. This was a new treatments site, first reported on iNaturalist.



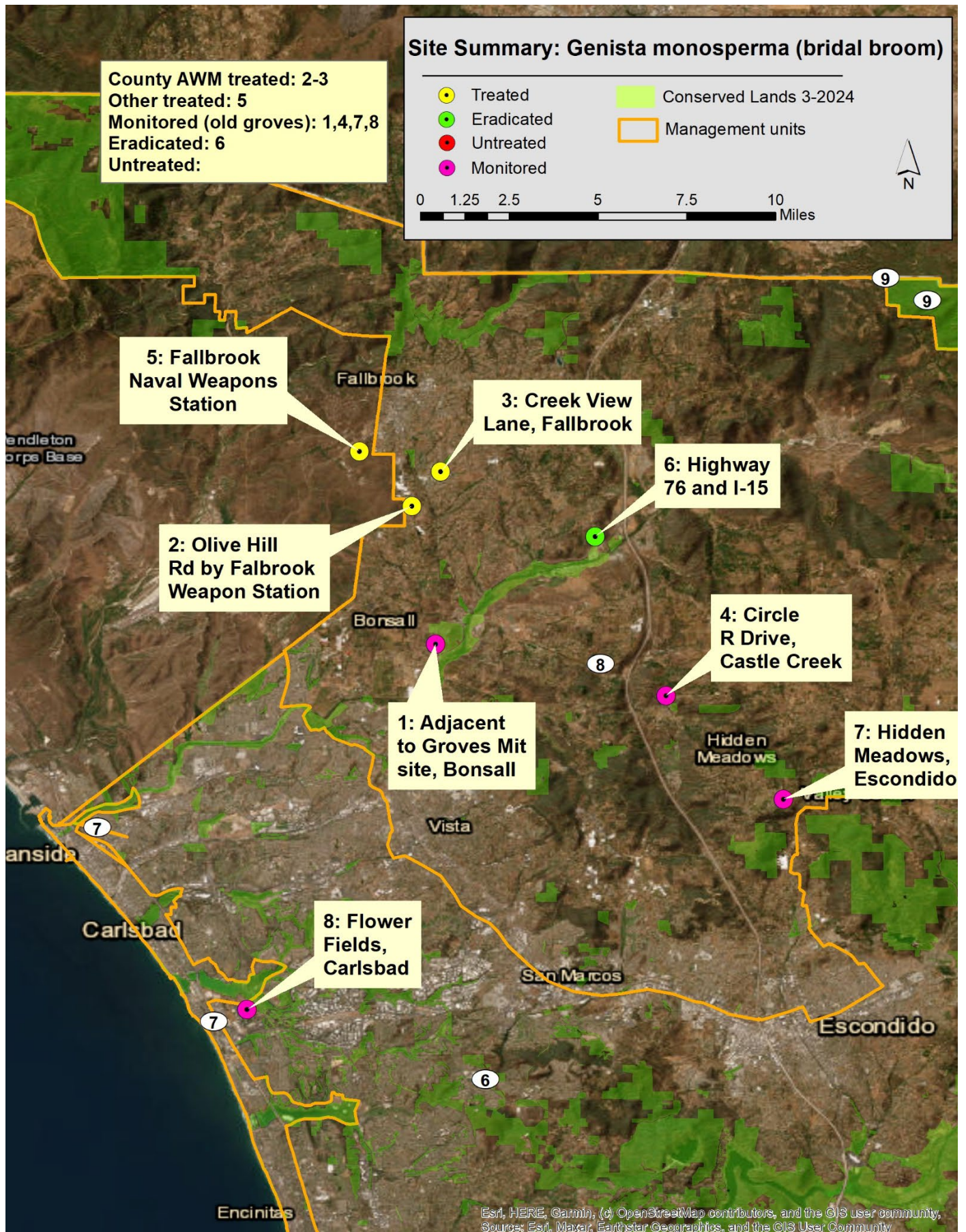


Table 6. Summary of treatments performed by AWM on *Genista monosperma*, Bridal Broom:

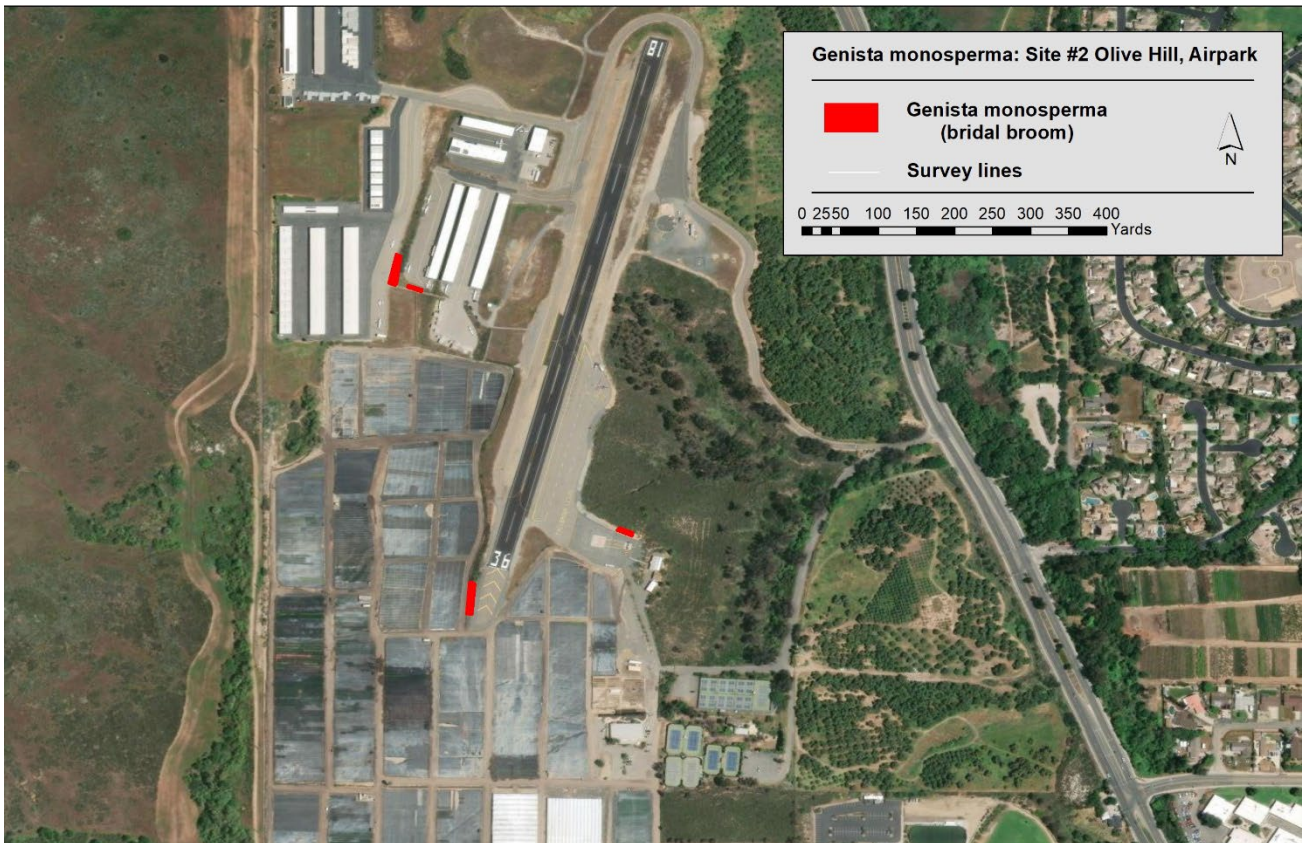
Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #2 Olive Hill Rd	Bridal Broom	1	2.0	0.1	25

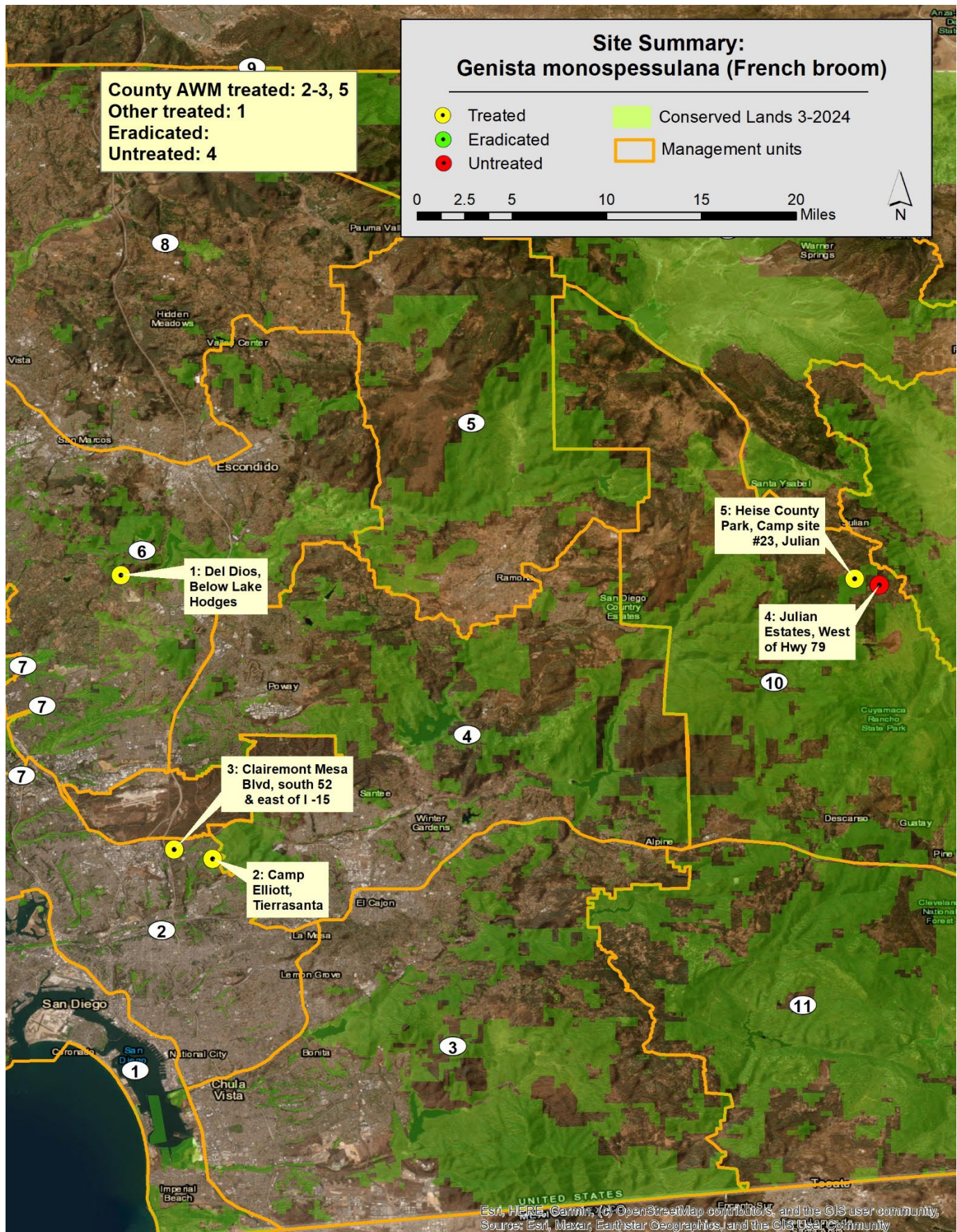
***Genista monosperma*, Bridal broom: Site #2 Olive Hill Rd**

Two AWM workers visited this site on September 4-5, 2025. 15 plants were controlled with post emergent. 13 of these were on the nursery property. To the south, two very large plants with seed were discovered and controlled. Seed was vacuumed and swept up (see photos). A private property also controlled two very large plants and removed seed. This plant was by a pond so it may have been extra vigorous. A new property owner has built two houses in an area that once had many plants. We could see no plants on their property. The coordinator will try to wank the site and see if they will control plants or if they will grant access to AWM. 5 plants were controlled in 2024, 125 in 2023 and 80 seedlings were treated in 2022.

Additional plants were discovered at the Fallbrook Air Park by Fallbrook Weapons station staff. 10 plants were controlled at the air park on September 4th 2025. Five of these plants were very large with multiple stems. Fortunately, they were not producing seed this year.





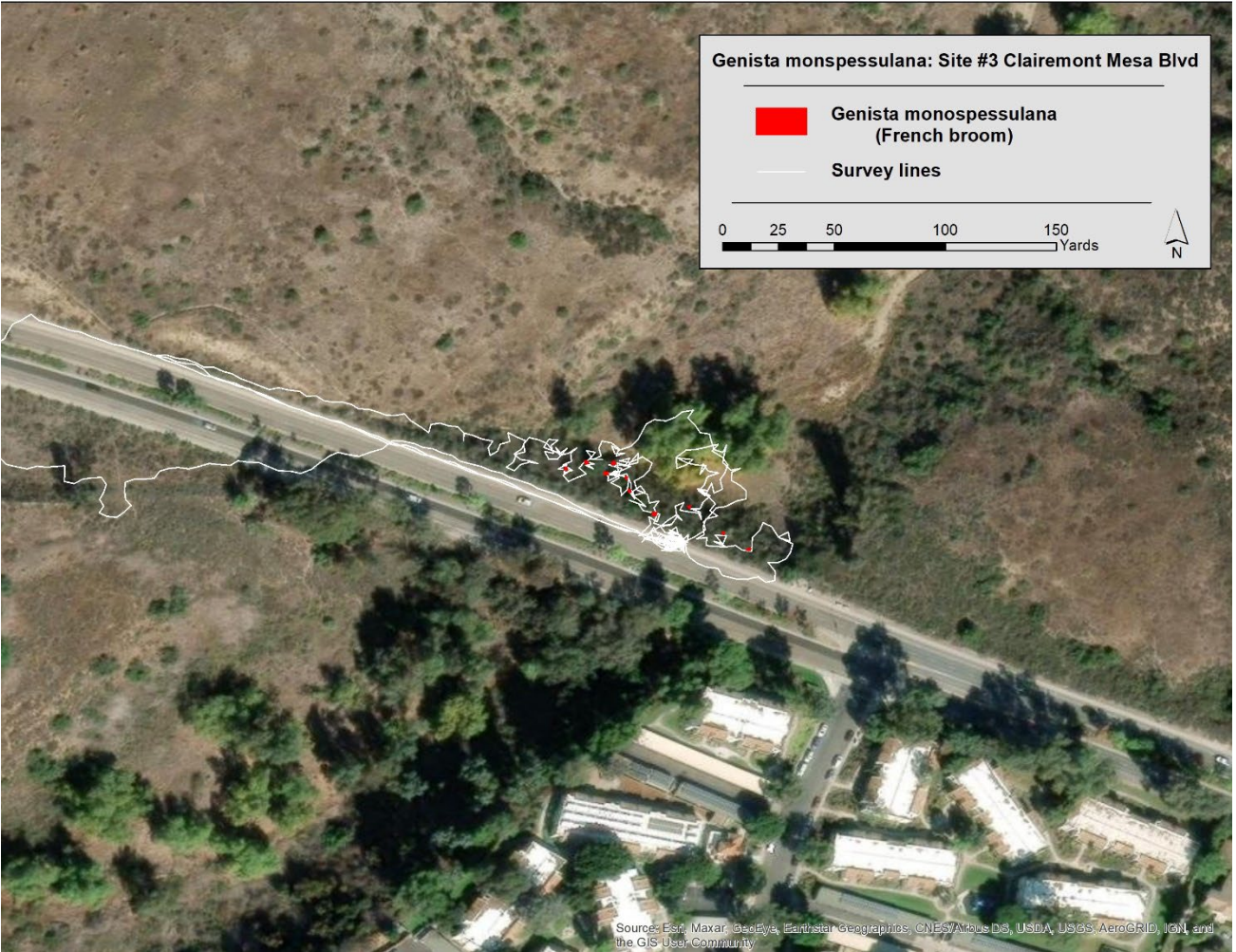


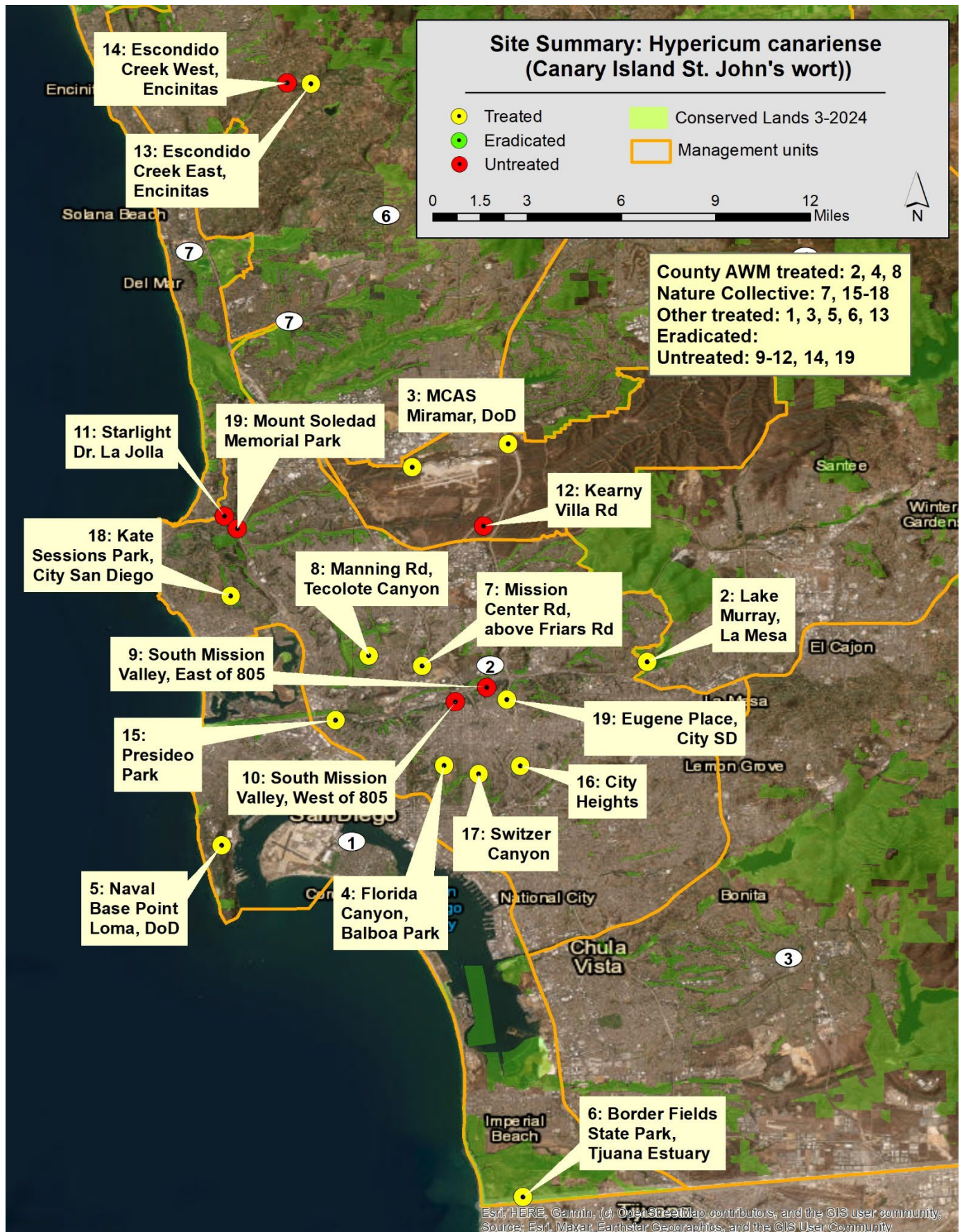
***Genista monspessulana*, French broom: Site #3 Clairemont Mesa.**

Table 7. Summary of treatments performed by AWM on *Genista monspessulana*, French Broom.

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #3 Clairemont Mesa	French Broom	1	0.6	0.1	95

A AWM worker visited this site on September 2nd 2025. 95 plants were treated with post emergent. 125 plants were controlled in 2024, 550 plants in 2023 and 72 seedlings were treated in 2022.





***Hypericum canariense*, Canary Island St. John's Wort: Site #2 Lake Murray**

Table 8. Summary of treatments performed by AWM on *Hypericum canariense*, Canary Island St. John's Wort.

Site Name	Common Name	# of Visits	Acres Surveyed	Acres Treated	Plants treated
Site #2 Lake Murray	Canary Island St. John's Wort	1	1.7	0.2	110

A crew of one individual visited the site over two days from July 7-24, 2025. Small plants were foliar treated with a post emergent herbicide. Plants had gone too dormant, due to low rainfall, by late July so work was stopped before the entire site was completed. 745 plants were controlled in 2024, and 850 plants were controlled in 2023.



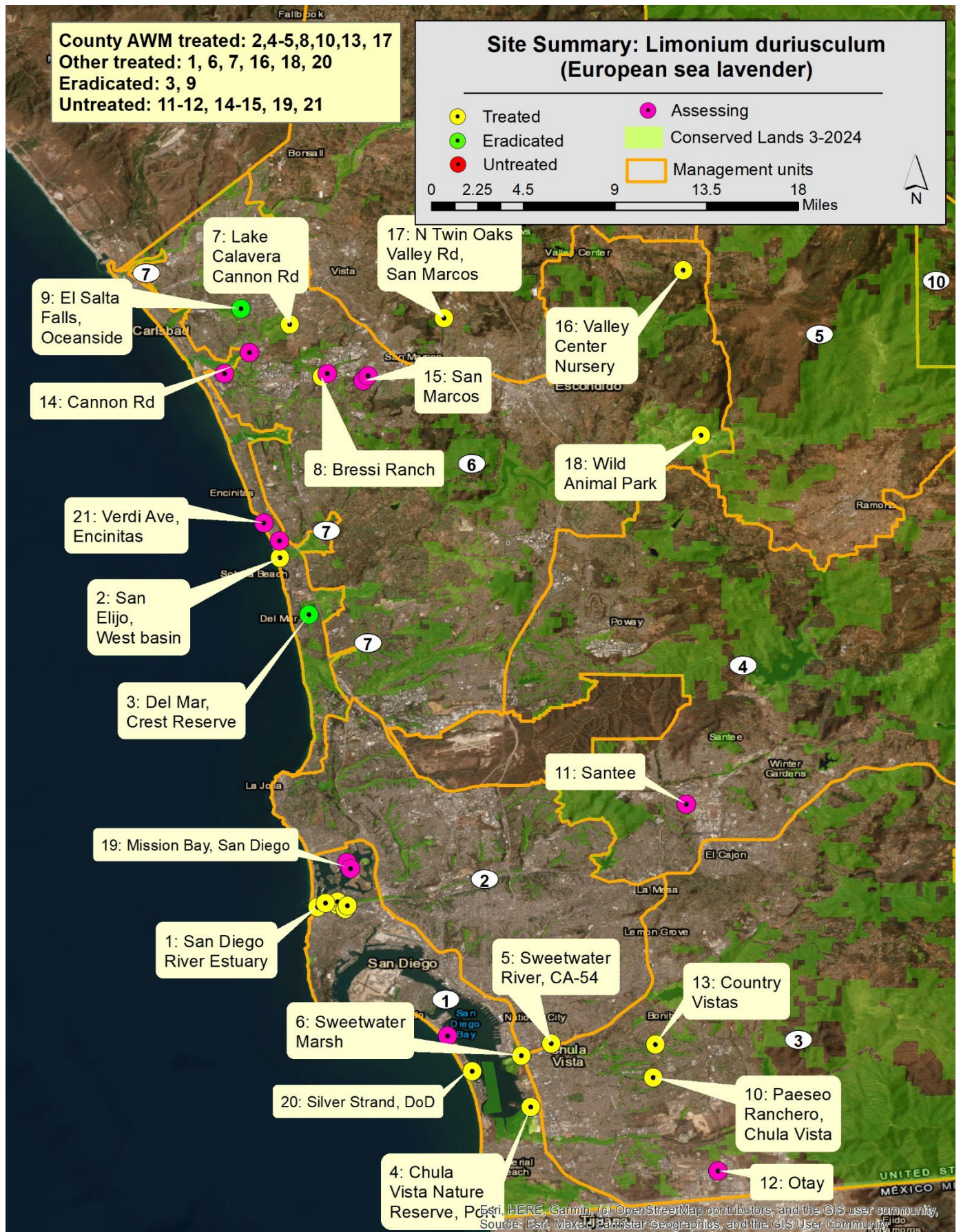
Hypericum canariense, Canary Island St. John's wort: Site #4 Balboa Park

Table 9. Summary of treatments performed by AWM on *Hypericum canariense*, Canary Island St. John's wort.

Site Name	Common Name	# of Visits	Acres Surveyed	Acres Treated	Plants treated
Site #4, Balboa Park	Canary Island St. John's Wort	1	1.9	0.2	150

150 small plants (40%) and seedlings (60%) were treated with a post emergent. A crew of one individual visited the site over two days from July 1-17, 2024. Plants had gone too dormant, due to low rainfall, by late July so work was stopped before the entire site was completed. This added to work started last quarter when 530 plants were treated, so a total of 680 plants were treated at the site in 2025. Cover is greatly reduced (>95% cover reduction), but there were many scattered seedlings still emerging. The site had 2,270 plants were treated in 2024 and 1,715 plants treated in 2023.





Limonium duriusculum, European Sea Lavender: Site #8 Bressi Ranch, Carlsbad

Table 10. 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 #8 Bressi Ranch	European Sea Lavender	1	1.5	0.1	150

150 plants were foliar treated with post emergent by a crew of one individual on September 11th 2025. Cover is greatly reduced in past treatment areas (>95% cover reduction), but there are still some seedlings sprouting. 350 plants were treated in 2022 and 900 plants were treated in 2021.



Limonium duriusculum, European Sea Lavender: Site #10 Paseo Ranchero, Chula Vista

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 #10 Paseo Ranchero, Chula Vista	European Sea Lavender	1	1.0	0.1	150

1,100 plants were foliar treated by a crew of one individual on September 11th 2025. 1,100 plants were treated in 2024, 4,000 plants in 2023, 1,100 plants in 2022 and 5,000 plants in 2021.





Limonium ramosissimum, Algerian Sea Lavender: Site #5 La Costa Ave Carlsbad

Table 12. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #5 La Costa, Carlsbad	Algerian Sea Lavender	1	1.0	0.1	300

300 scattered seedlings and small plants were foliar treated with post emergent. A crew of one individual worked one day September 12th 2025. 1,200 plants were treated in 2024, 800 in 2023, 350 plants in 2022 and 2,000 in 2021.



Limonium ramosissimum, Algerian Sea Lavender: Site #10 Abeto Dr, Chula Vista

Table 13. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #10 Abeto Dr, Chula Vista	Algerian Sea Lavender	1	2.8	0.2	300

300 scattered seedlings and small plants were treated with post emergent. A crew of one individual worked two days September 23-24, 2025. 2,100 plants were treated in 2024, 7,500 plants in 2023, 1,500 plants in 2022 and 800 plants in 2021.



Limonium ramosissimum, Algerian Sea Lavender: Site #13 Country Vistas, Chula Vista

Table 14. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #13 Country Vistas, Chula Vista	Algerian Sea Lavender	1	3.0	0.2	330

330 scattered seedlings and small plants were foliar treated with glyphosate and imazapyr. A crew of one individual worked two days September 12th and 16th 2025. 330 plants were treated in 2024, 550 plants in 2023, 550 plants in 2022, and 450 in 2021.



Limonium ramosissimum, Algerian Sea Lavender: Site #14 Telegraph Canyon Rd, Chula Vista

Table 15. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #14 Telegraph Canyon Rd, Chula Vista	Algerian Sea Lavender	1	2.0	0.1	200

200 scattered seedlings and small plants were controlled with post emergent. A crew of one individual worked two days on September 25th and 26th 2025. 100 plants were controlled in 2024, 800 plants in 2023, 350 plants in 2022 and 220 plants were controlled in 2021.



Limonium ramosissimum, Algerian Sea Lavender: Site #15 Tierra Santa

Table 16. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #15 Tierra Santa	Algerian Sea Lavender	1	2.0	0.1	260

260 scattered seedlings and small plants were controlled with post emergent. A crew of one individual worked two days on September 5th and 8th 2025. 300 plants were controlled in 2024, 500 plants in 2022 and 340 plants were controlled in 2021.



Limonium ramosissimum, Algerian Sea Lavender: Site #21 Paradise Creek, National City

Table 17. Summary of treatments performed by AWM on *Limonium ramosissimum* (Algerian Sea Lavender).

Site Name	Common Name	# of Work Cycles	Acres Surveyed	Acres Treated	Plants treated
Site #21 Paradise Creek, San Diego	Algerian Sea Lavender	1	2.1	0.1	360

360 scattered seedlings and small plants were controlled with post emergent. A crew of one individual worked two days on September 9th and 11th 2025. 1,780 plants were controlled in 2024, 1,150 plants in 2023, and 2,160 in 2022.



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
None					

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.
- Co-ordination with the City of San Diego, considering control of *Myoporum acuminatum*, work on Stinknet.
- Reviewing and surveying reports from iNaturalist. Coordinating with Calflora.
- Co-ordination with San Diego Weed Management Area at quarterly 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 2nd Quarter Period, October 1st – December 31st 2025:

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 Goatgrass 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.
- Present at statewide WMA meeting at the Cal-IPC Symposium.
- 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.