

San Diego Association of Governments
Quarterly Progress Report #8
Reporting Period: Quarter 2 (April 1st to June 30th) 2023
SANDAG Contract Number: S833005 – Nature Collective Invasive Plant Treatment

Work Performed This Period:

Task 1- Project Management, Admin and Meetings

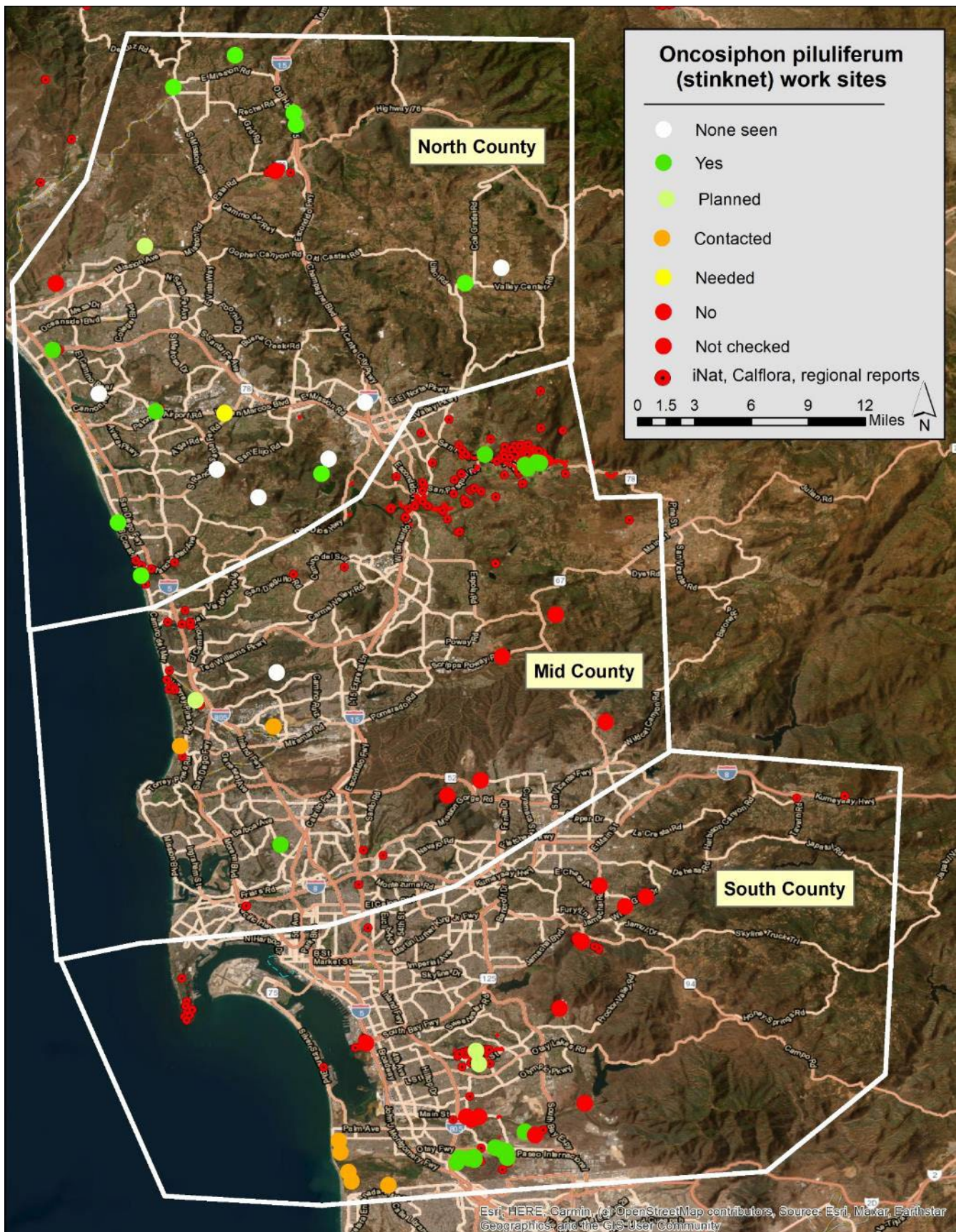
Nature Collective communicated with SANDAG, partners, contractors, and consultants to ensure compliance with agreements and contracts. Field contractors are under contract and registered under the labor compliance program. We are invoicing and completing quarterly reports to SANDAG. We have reviewed and signed MOUs, ROEs, and other agreements required for this project. We have held meetings, prepared for field work, and continued work on Tasks 2, 3 & 4.

Task 2- Stinknet (*Oncosiphon piliferum*) Treatment for Priority Species

Co-ordination and planning:

Set up treatments: apply Gallery pre-emergent where possible or apply mix of pre- and post-emergent. Small occurrences were hand pulled (Map 1). We are actively tracking approximately 64 sites based on iNaturalist, Calflora, regional and field observations. The sites vary in size from no plants observed to large infested areas.

- 1) North County: 20 sites are being followed. North County is the least invaded portion of the County and sites are typically small patches of plants under 0.25 acre in size. We treated a rock and gravel distribution property on North River Road with a pre and post emergent mix. Two large sites were not treated: Caltrans along highway 76 near I-15 and City of Oceanside near lake Wolford. We are working with these two groups to ensure treatments occur in fall 2023.
- 2) Mid County: 15 sites are being followed. One site was re-treated in Kearny Mesa.
- 3) South County: 29 sites are being followed. The City of Chula Vista granted permission for work. It was very late in the season, so we applied granular pre-emergent to several larger areas. Sweetwater River (City of SD and Chula Vista) may be complicated to obtain ROEs for, but we will pursue this in late 2023. There are also multiple private parcels in Jamacha/Steele Canyon area where we will be making an effort to pursue ROEs. There is a cement plant that has plants and other sites with heavy use that could be spreading the plant.



Map 1: Approximately 64 stinknet sites, varying in size, that are being visited to date

ROE or MOU work:

We submitted maps and ROE forms to various public and private landowners. This included City of Chula Vista, where the entry agreement process has gone through multiple steps and was just recently completed on April 19, 2023. Many of the private properties require on site visits to obtain permission.

Field work:

Seven sites were treated by crews in Q2 2023 (Map 2). The North River Road site was very important to treat as it was a rock and gravel distribution yard (Map 3, Photos 1-4). This site will be a priority for re-treatment as contaminated material will spread plants to many sites. We also pulled plants along the road indicating that seed is being dispersed when material is moved. We revisited several small populations at San Elijo Lagoon for hand pulling. The Kearny Mesa (City of SD property), a BMX facility, was re-treated with pre and post emergent (Map 4). The winter pre-emergent application was very effective, but we found scattered plants (<100). The City of Chula Vista population is very extensive- it covers miles of trails and roads. There are three east-west valleys that are invaded, two of them quite heavily. We were able to apply granular pre-emergent on the southern (H Street) and middle (Snake) canyons (Map 5, Photos 5-6). We also treated the western portion of the northern Rice Canyon. We plan to conduct extensive additional work in winter 2023/24 in these areas.



Map 2. Stinknet treatments by field crew in San Diego County



Map 3. Stinknet treatments by field crew on North River Road, dense plants

Photo 1: Q2 2023 Stinknet in rock yard, North River Road.



Photo 2: Q2 2023 Stinknet in rock yard, North River Road.



Photo 3: Q2 2023 Stinknet in rock yard growing in fork lift loader, North River Road.

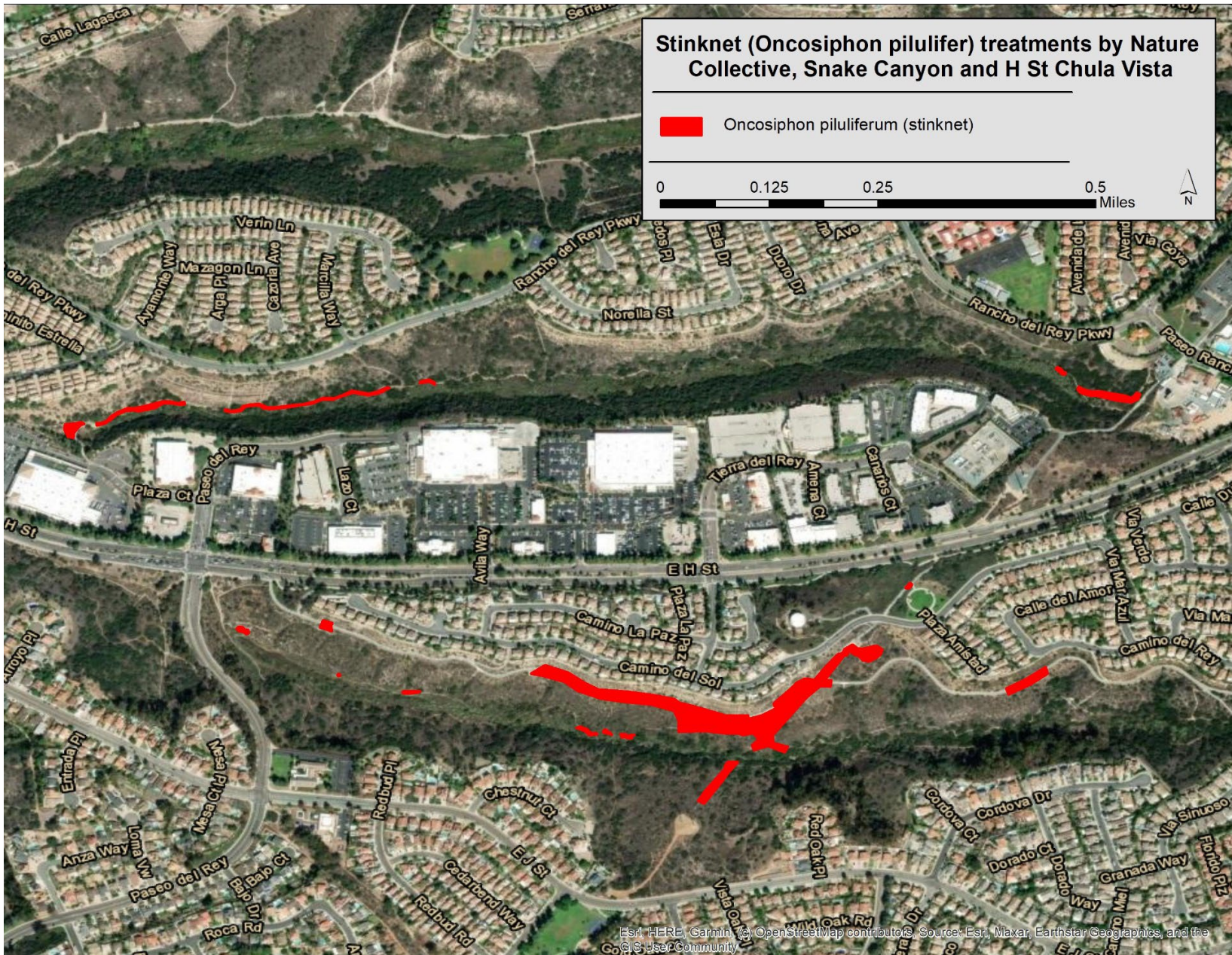


Photo 4: Q2 2023 Stinknet in rock yard, North River Road.





Map 4. Stinknet re-treatments of 100 plants by field crew, Kearny Mesa facility.



Map 5. Stinknet treatments by field crew, H Street and Snake Canyon.



Map 6. Stinknet treatments by field crew, western portion of Rice Canyon.

Photo 5: Q2 2023 Stinknet in mature CSS habitat adjacent to road in Chula Vista.



Photo 6: Q2 2023 Stinknet in mature Cholla/CSS habitat adjacent to road in Chula Vista.



Photo 7: Q2 2023 Stinknet in mature CSS adjacent to road in Chula Vista.



Photo 8: Q2 2023 Stinknet in mature CSS adjacent to road in Chula Vista.



Task 3- Arundo (*Arundo donax*) Re-treatment

Co-ordination and planning:

We started initial planning for Arundo treatments for fall 2023. We are coordinating permitting strategies going forward as many watersheds have expiring CDFW permits.

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No field work occurred.

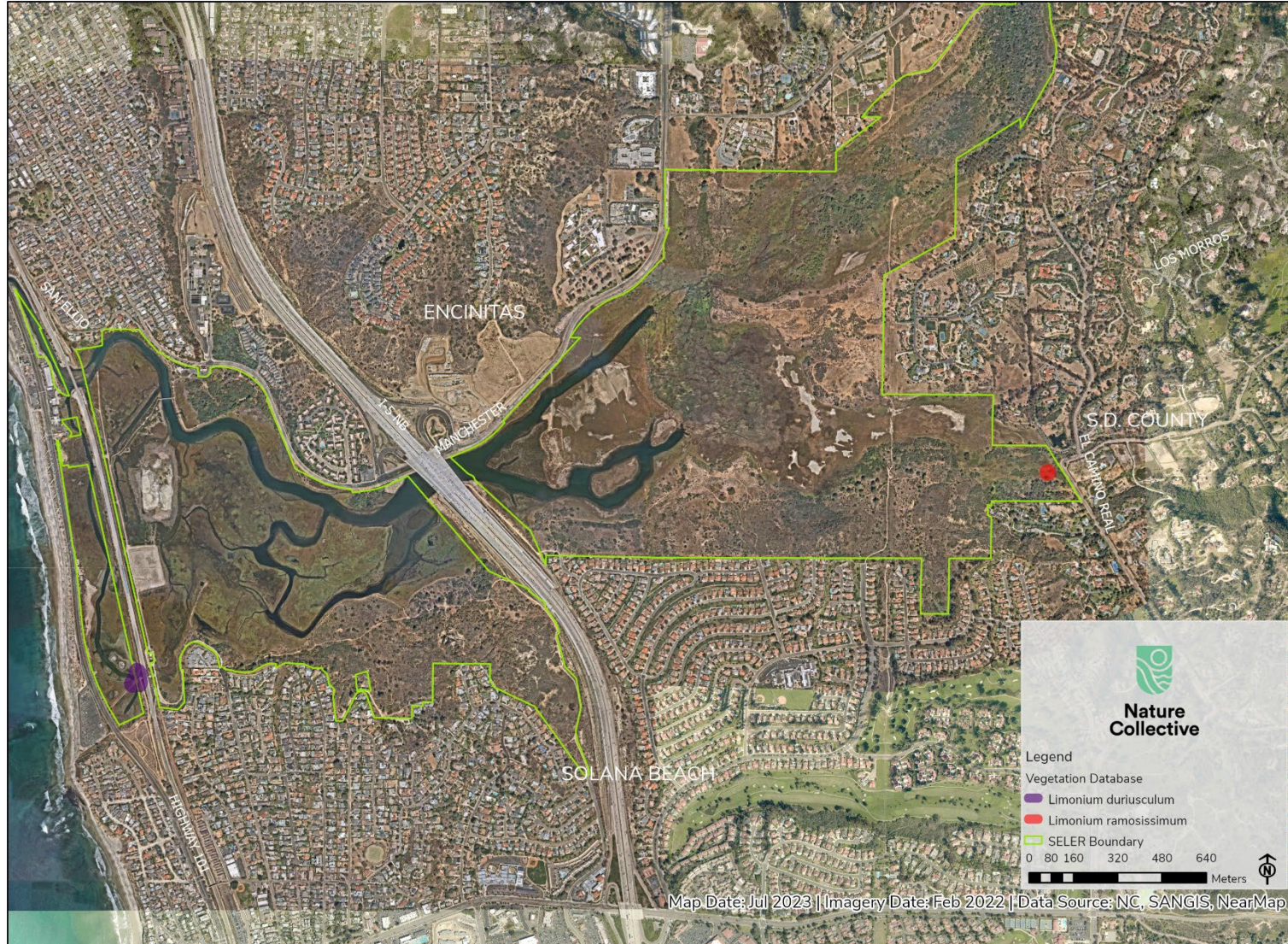
Task 4- EDRR Level 2 sites

Co-ordination and planning:

We conducted work for Algerian sea lavender (*Limonium ramosissimum*) at San Elijo Lagoon Ecological Reserve (SELER) and on Caltrans lands along I-5, we obtained a consent letter for access.

Field work:

We hand pulled Algerian sea lavender at SELER near La Orilla Trailhead off El Camino Real- approximately 100 individuals were found (Map 7, Photos 9). We treated under I-5 near Carmel Valley- approximately 400 plants were treated (Map 7, Photos 9-10).



Sea lavender (*Limonium* spp.) Treatments at San Elijo Lagoon Ecological Reserve - 2023

Map 7. *Limonium* species treated at San Elijo Lagoon



Map 8. Algerian sea lavender at I-5.

Photo 9: Q2 2023 Algerian sea lavender at San Elijo Lagoon Ecological Reserve



Photo 10: Q2 2023 Algerian sea lavender at I-5.



Photo 11: Q2 2023 Algerian sea lavender at I-5.



Co-ordination and planning:

We conducted work for European sea lavender (*Limonium duriusculum*) at San Elijo Lagoon Ecological Reserve (SELER) and on Caltrans lands along Highway 54, we obtained a consent letter for access.

Field work:

We treated European sea lavender at SELER within the West Basin- approximately 1000 plants were treated (Map 7, Photos 12). In the Sweetwater estuary- approximately >20,000 plants were treated (Map 8, Photos 11-13). There were many adults and extensive dense patches of seedlings. The area was revisited two months later, and our treatments were effective (Photos 14-16). We will treat scattered patches of untreated plants next quarter. The source areas are the slopes between the highway and levee road/rip rap. We will also treat these areas next quarter.



Map 9. European sea lavender on Sweetwater by highway 54.

Photo 12: Q2 2023 European sea lavender during treatments at San Elijo Lagoon



Photo 13: Q2 2023 European sea lavender at Sweetwater, mature plants and seedlings.



Photo 14: Q2 2023 European sea lavender at Sweetwater, mature plants at edge of rip rap.



Photo 15: Q2 2023 European sea lavender at Sweetwater, mature plants and seedlings at edge of rip rap.



Photo 16: Q2 2023 European sea lavender at Sweetwater, one month after treatment. Plants were controlled where treated, but scattered individuals were missed.



Photo 17: Q2 2023 European sea lavender at Sweetwater, one month after treatment. Plants were controlled where treated, but scattered individuals were missed.



Photo 18: Q2 2023 European sea lavender at Sweetwater, one month after treatment. Plants were controlled where treated, but scattered individuals were missed.



Co-ordination and planning:

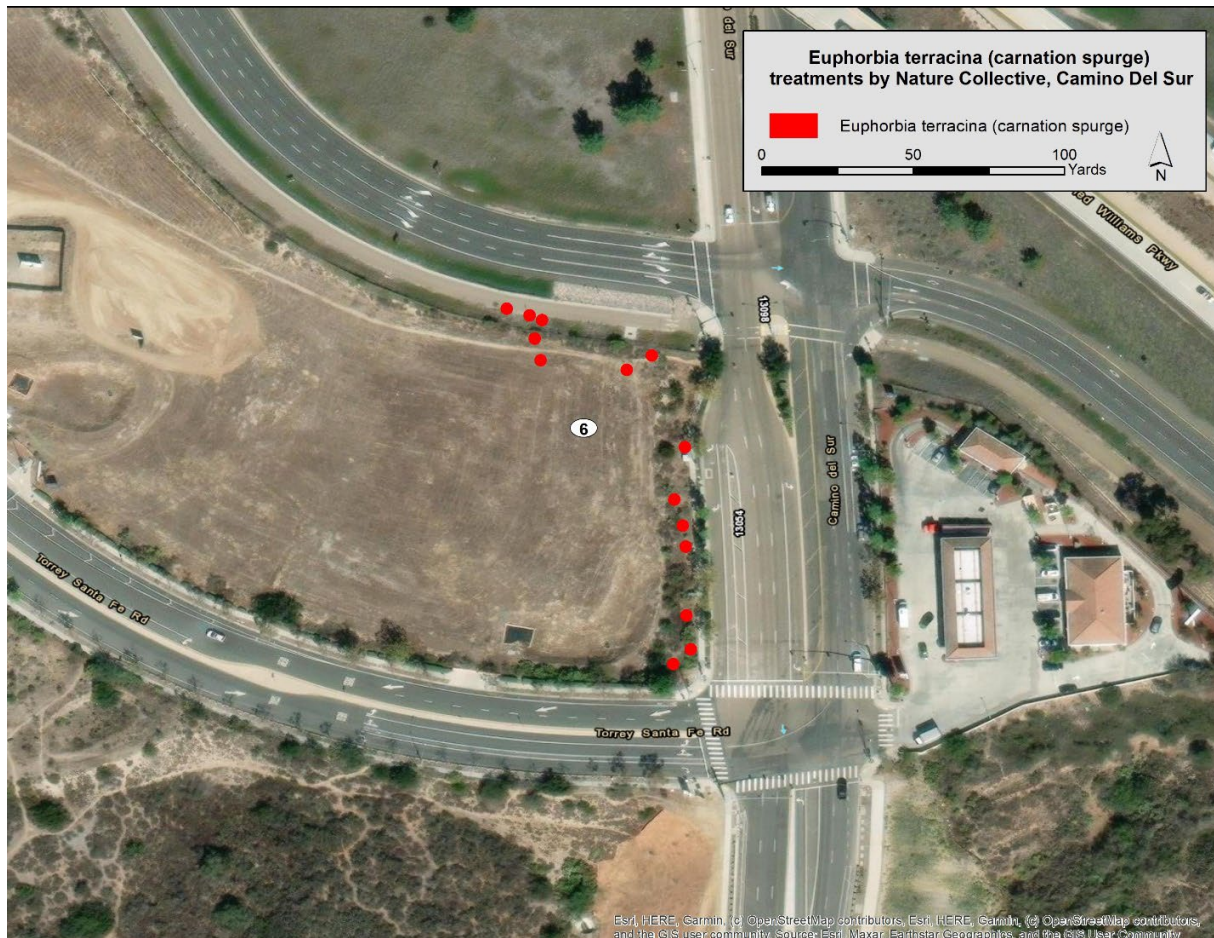
We conducted treatment on *Euphorbia terracina* at two sites: Carmel Mnt Road and Camino Del Sur.

Field work:

We treated *Euphorbia terracina* along Carmel Mnt Road-approximately 1,000 plants were controlled (Map 9, Photos 17). We treated approximately 1,000 plants at Camino Del Sur (Map 10).



Photo 19: Q2 2023 Euphorbia terracina on slope.



Map 11. Euphorbia terracina, Camino Del Sur, Caltrans bike lane and sidewalk.

Work Anticipated Next Period: Q3 2023

Task 1- Project Management, Admin and Meetings

We will continue to coordinate meetings, obtain ROEs and prepare for field work.

Task 2- Oncosiphon Treatment for Priority Species

We will continue to obtain ROEs for additional treatment sites.

Task 3- Arundo Re-treatment

We may begin an CEQA NOE and CDFW SAA (maintenance work) application on covering the entire county for Arundo re-treatments.

Task 4- EDRR Level 2 sites

We will scout and conduct treatments for multiple sites including: CISJW, purple loosestrife (*Lythrum salicaria*), sea lavender (*Limonium spp.*), rattlebox (*Sesbania punicea*), and other difficult to access areas/sites.