

San Diego Association of Governments Quarterly Progress Report #9

Reporting Period: Quarter 3 (July 1st to September 30th) 2023
SANDAG Contract Number: S833005 – Nature Collective Invasive Plant Treatment

Work Performed This Period:

Task 1- Project Management, Admin and Meetings

Communications occurred with SANDAG, partners, contractors, and consultants to ensure compliance with agreements and contracts. The field contractor is under contract and registered under the labor compliance program. Invoicing and Quarterly reporting to SANDAG is occurring. MOUs, ROEs, and other agreements required for project reviewed and signed. Meetings, preparation for field work, and continuation of work on tasks 2, 3 and 4 occurred.

Task 2- Oncosiphon Treatment for Priority Species

Co-ordination and planning:

Discussions with contractor of winter treatment. Chula Vista work and re-treatment of sites will be the priority. Additional new sites will be treated as well. Work with Caltrans to control population along 76 occurred. The City of Oceanside property on San Luis Rey is also a priority. San Pasqual State Parks was visited. The area around the museum looks very good. A battlefield monument to the west may be treated this winter.



Area around museum, no plants or skeletons observed.



Battlefield monument, dark stems are dense stinknet skeletons. This area may be treated in the winter. It is adjacent to cactus scrub, and it gets public use (trail to monument).

ROE or MOU work:

None

Field work:

None

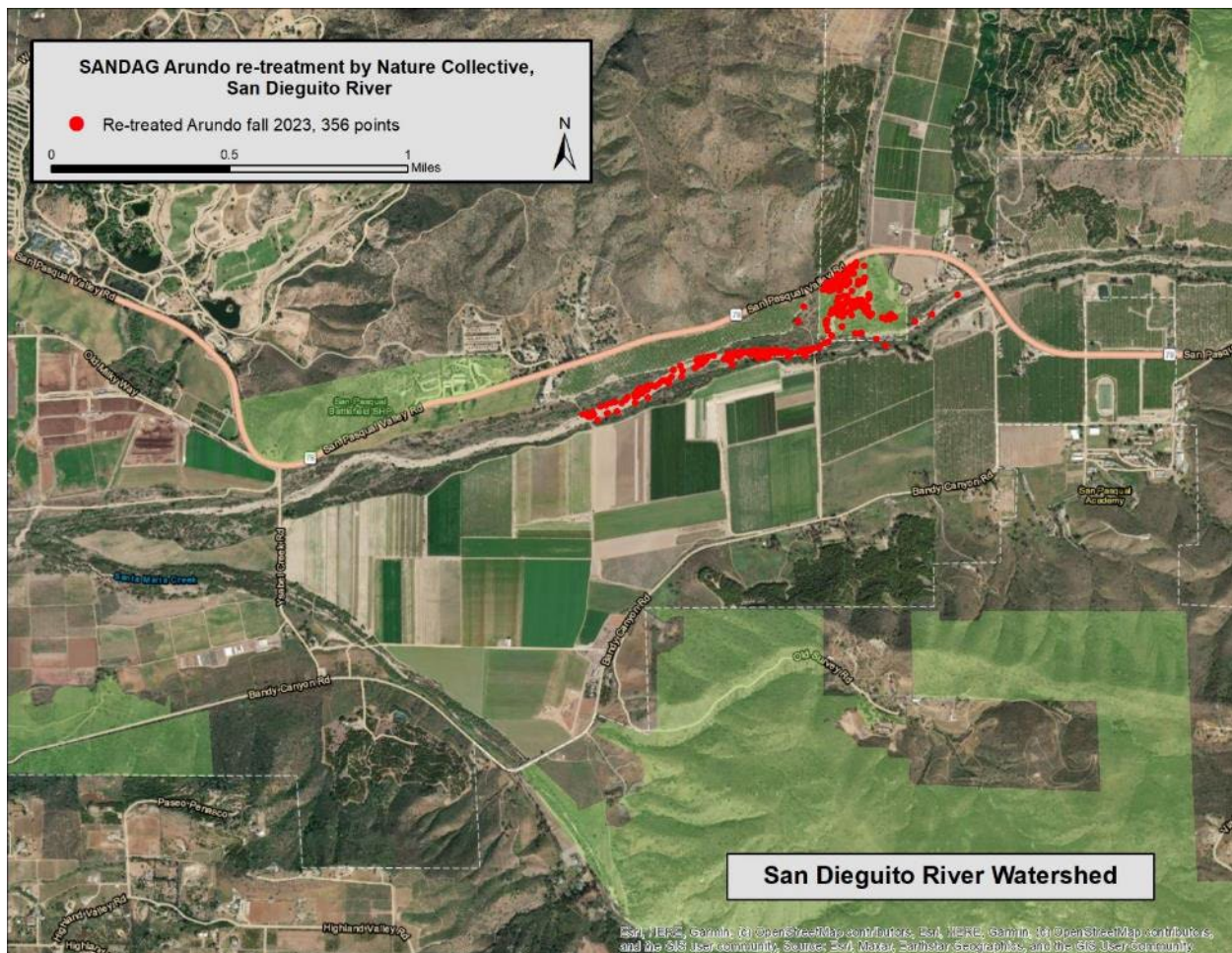
Task 3- Arundo Re-treatments

Co-ordination and planning:

Fall Arundo re-treatments have been discussed with the three watershed leads. The three watersheds outside Nature Collectives Carlsbad HU are: San Luis Rey (Mission RCD), San Dieguito (San Dieguito JPA), and San Diego River (San Diego River Conservancy). Work on San Dieguito Watershed started in Q3. The other work areas will be completed in Q4 2023.

Field work:

About 1/3 of the San Dieguito Watershed was re-treated. This work area will be completed in Q4.





Scattered Arundo re-sprouts and new propagules down stream of an untreated tributary (where the property owner has not allowed Arundo control work to date).



New propagules down stream of an untreated tributary (where the property owner has not allowed Arundo control work to date). The Arundo debris from the large upstream stands is clearly visible in the top photo, along with new clumps. The second photo shows the Arundo stands extending upstream for about $\frac{3}{4}$ of a mile.

Task 4- EDRR Level 2 sites

Co-ordination and planning:

Significant work on this task occurred this quarter. Multiple property owners (public and private) were coordinated with including Caltrans, City of San Diego, EHL, and Friends of Famosa Slough. The coordinator was present during the start of the work, and frequently during the entire treatment process. Nature Collective staff assisted in monitoring Limonium control in Batiquitos and Agua Hedionda Lagoons. This included pre-site checks for avian activity and pre-surveying Batiquitos to focus control work where there were plants that needed to be controlled. Work occurred on: Algerian sea Lavendar, European sea lavender, Canary Island St. John's Work, and sesbania (rattlebox).

Field work:

Algerian sea lavender was re-treated at Ocean Terrace in Carlsbad. This site had good initial control (>90%) but that left many plants (75 recorded points, about 1,000 plants) that needed to be re-treated.



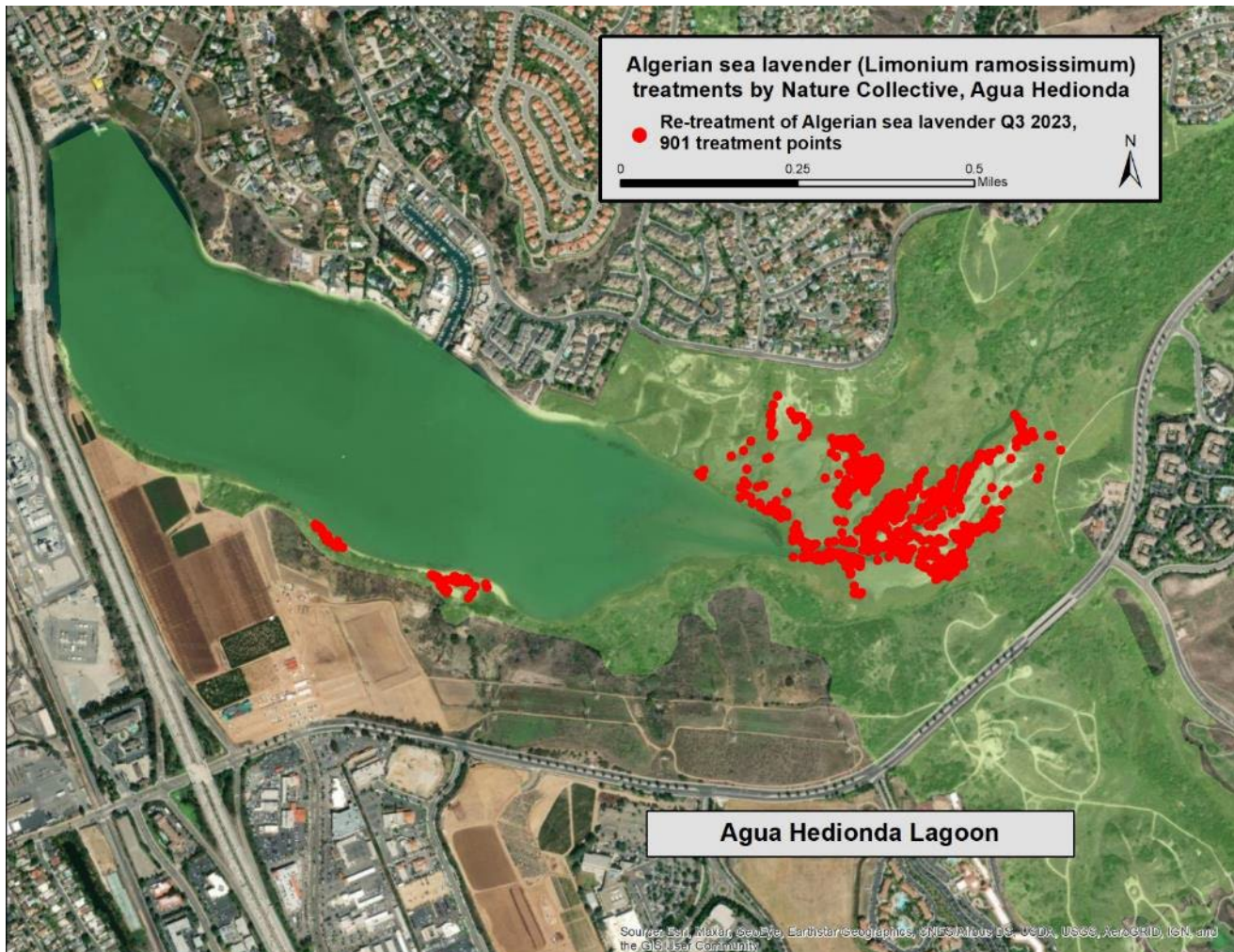
Map 1. Limonium ramosissimum re-treatment at Ocean Terrace.



Limonium ramosissimum at Ocean Terrace. Previous work controlled many plants, but there were patches and scattered plants that needed re-treating.

Field work:

Algerian sea lavender was re-treated at Agua Hedionda Lagoon in Carlsbad. This site had good initial control, but many seedlings sprout each year (901 recorded points, about 7,000 plants) that were treated. The site was last treated in fall 2021. The site should be treated annually.







Photos of Limonium control at Agua Hedionda Lagoon. Cover is much reduced from 2018 when large areas were carpeted with plants. A persistent seedbank keeps expressing itself. Re-treatments need to occur annually.

Field work:

Algerian sea lavender was re-treated at Batiquitos Lagoon in Carlsbad. This site had good initial control, but many seedlings sprout each year (615 recorded points, about 3,000 plants) that were treated. This site has not been re-treated for several years. It should be re-treated annually.



Field work:

Algerian sea lavender was controlled at La Orilla, upstream of San Elijo Lagoon in Encinitas. About 30 plants were hand pulled along the street and 15 plants were spot treated in the lagoon.



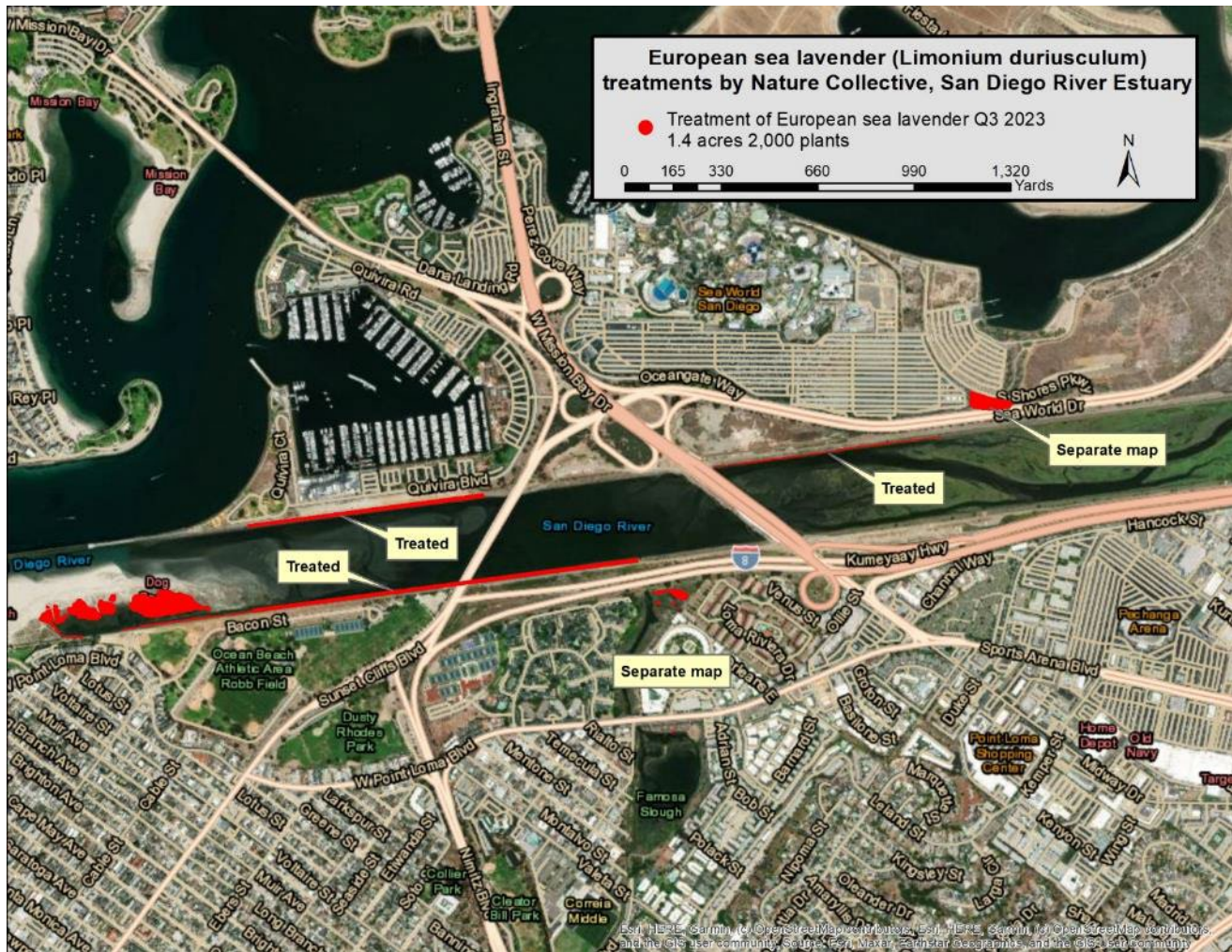
Field work:

Algerian sea lavender was controlled at South Mission Bay, City of San Diego. About 50 plants were hand pulled along the street.



Field work:

European sea lavender was treated in the estuary at the mouth of the San Diego River along the banks of the inlet (City of San Diego). Plants occurred along the narrow strip of habitat at the base of the rip rap. The historic large population in the central portion of the estuary has now been treated for several years (a Caltrans mitigation project). Plant cover there is quite low. These new treatments on the north and south banks of the estuary should help protect that enhancement. Approximately 800 plants were bagged or treated on the north bank, about 500 plants were controlled on the south bank. Famosa Slough was also addressed (see separate map).





European sea lavender scattered in rip rap along banks of estuary.

Field work:

European sea lavender was treated in the Famosa Slough estuary (City of San Diego) a side channel of the San Diego River estuary. About 3,000 plants occurred in the north basin of the slough, usually in dense patches. About 10 plants were found at one location in the south basin.





European sea lavender scattered the north basin of Famosa slough.

Field work:

European sea lavender was re-treated in the Sweetwater estuary (Caltrans). Nature Collective treated the lower areas in the estuary in Q1 2023. The treatments were very effective (>95% control of adults) but some plants were missed in areas. These areas were re-treated. The upland slopes below highway 54 were treated by county AWM in 2022. There were still thousands of adult plants that seemed stressed but were still flowering and thousands of seedlings. These areas were re-treated.





European sea lavender plants that were mostly controlled, but there were spots that needed re-treatment.



European sea lavender plants that were not well controlled on the slopes below highway 54.

Field work:

Canary Island St. John's wort re-treatment at Mission Center Drive (EHL Murray Preserve). Initial treatments were effective (>95%) but there were scattered re-sprouts (150) and many seedlings (750). A few scattered plants were controlled that had been missed in the first treatment.





Canary Island St John's wort re-sprouts and areas where initial treatment was 100% effective.



Canary Island St John's wort re-sprouts, seedlings and areas with a few untreated plants.

Field work:

Canary Island St. John's wort new treatment at Presidio Park (City of San Diego). Initial treatments
There were >46 large shrubs. These were cut and chipped on site. Cut stumps were treated. A visit
a few months later indicates that little re-sprouting is occurring.





Tall dense stand of Canary Island St John's wort.



Tall dense stand of Canary Island St John's wort, before and after.



Canary Island St John's wort treatment area two months after control.

Field work:

Canary Island St. John's wort new treatment in Switzer Canyon (City of San Diego and a private parcel). There were about 15 large shrubs. These were cut and chopped up on site. Cut sumps were treated





Tall stand of Canary Island St John's wort.

Field work:

Canary Island St. John's wort new treatment in City Heights (City of San Diego). There were about 44 large shrubs. These were cut and chopped up on site. Cut sumps were treated

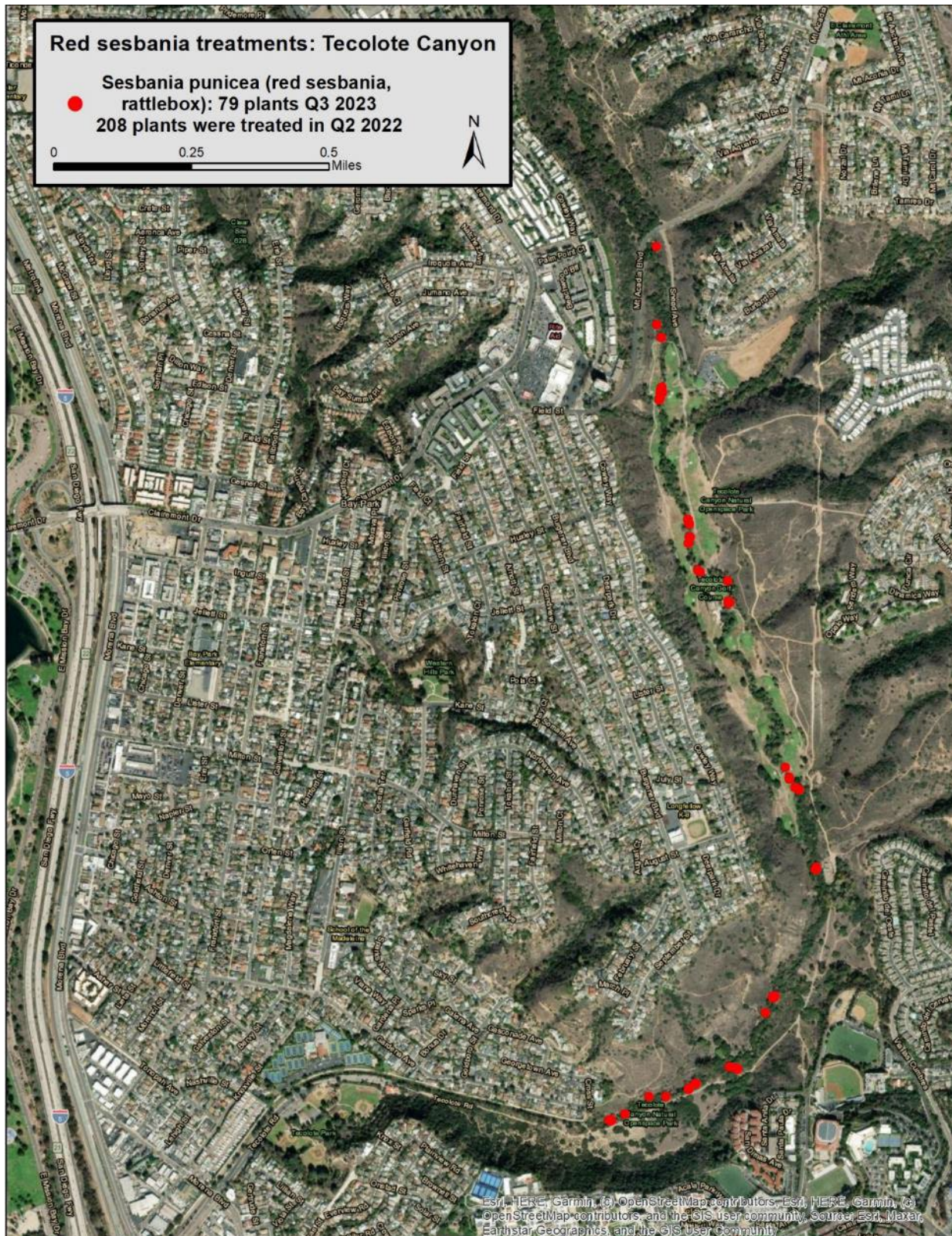




Tall dense stand of Canary Island St John's wort.

Field work:

Sesbania re-treatment in Tecolote Canyon. There were about 79 saplings, these were hand pulled.



Work Anticipated Next Period: Q4 2023

Task 1- Project Management, Admin and Meetings

Work will continue on this task.

Task 2- Oncosiphon Treatment for Priority Species

Pre-emergent will be applied to selected sites.

Task 3- Arundo Re-treatment

Re-treatments will occur on all watersheds.

Task 4- EDRR Level 2 sites

Limited work will occur, crews are focusing on tasks 2 & 3.