

ATTACHMENT 1



SAN DIEGO ASSOCIATION OF GOVERNMENTS

MISSION TRAILS SAN DIEGO
THORN MINT RESTORATION AND
ENHANCEMENT PROJECT

Mission Trails Regional Park Foundation
Quarterly Progress Report
Reporting Period: April 1, 2024-June 30, 2024
Submission Date: July 22, 2024
SANDAG Contract Number: S1125506

**San Diego Association of Governments
MISSION TRAILS SAN DIEGO THORN MINT
RESTORATION AND ENHANCEMENT PROJECT
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EMP Land Management Grants

Quarterly Progress Report: April 1, 2024 through June 30, 2024

Mission Trails San Diego Thornmint Restoration and Enhancement Project (SANDAG Contract Number S1125506)

Work Performed this Period:

1. Task 1- Field Assessment

None

Percent complete 94%

Task 2-Vegetation Monitoring

On June 10, the ESA biologist conducted repeat vegetation monitoring at each of the four restoration sites. This vegetation monitoring data was collected after the non-native maintenance was completed for the Year 1 season. This data will be used to compare the conditions of the vegetation prior to implementation with the vegetation at the end of the first year and subsequent years as well as at the end of the project. The results of the vegetation monitoring will be presented in the Year 1 Annual Report. Percent complete 82%

Task 3-Photo Monitoring

On June 10, the ESA biologist visited each of the four restoration sites to repeat the photo points to be compared throughout the life of the project. Percent complete: 98%

Task 4-Dethatch

None

Percent complete: 77%

Task 5-Fence and Sign Installation

Between May 7, 8 and 9 the maintenance crew installed protective fencing around seedling thornmint plants at Site 1. Approximately 300 feet of hardware cloth fencing was installed around 18 separate patches of thornmint to protect them from herbivory from rabbits. A Mission Trails Regional Park Ranger installed a Park sign that reads "Sensitive Habitat Keep Out" on the fence at Site 3 on May 7, 2024

Percent complete: 48%

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Task 6-Weed Treatment

On April 4, 2024 the maintenance crew visited all four sites to continue weed control efforts. Non-native grasses and herbs were sprayed using Glyphosate. Hand weeding was conducted around native species including San Diego thornmint at site 1. Hand weeding was also performed around purple needlegrass, blue-eyed grass and San Diego goldenstar at Site 3. Hand weeding was also done around small-flowered morning glory plants at Site 4.

On April 25, 2024, the maintenance crew conducted focused hand weeding around the San Diego thornmint at site 1 and the San Diego goldenstar population at Site 3. At Sites 2 and 3 the crew also sprayed non-native grasses such as Purple false brome, and also Tocolote and Prickly sow thistle. These are the invasive species targeted for focused control efforts. On April 26, 2024 non-native species present on Site 3 were also hand pulled or cut using weed whips.

On May 7, 2024 non-native grasses and herbs were sprayed using Glyphosate at Site 4. On May 8, 2024 invasives including Purple false brome, Tocolote and Prickly sow thistle were sprayed at Site 3. On May 9, 2024 focused hand weeding around native species such as purple needlegrass, blue-eyed grass and San Diego goldenstar was also conducted at Site 3.

On June 7, 2024 non-native grasses and herbs were sprayed with Glyphosate at Sites 1, and 4. Hand weeding was conducted at all four sites.

Percent complete: 84%

Task 7- Seed Collection and Redistribution

Native seeds were collected for redistribution into the four restoration sites on the following dates: May 8, 2024, May 20 and 21, 2024, June 17, 2024 and June 24, 2024. Species collected included purple needlegrass, small-flowered morning glory, purple clarkia, field sun cup and blue-eyed grass. The seeds will be redistributed in the fall of 2024.

Percent complete: 58%

Task 8-Focused San Diego Thornmint Survey

On May 20, 2024 ESA biologist conducted thornmint counts in coordination with Sara Allen of the City of San Diego at the same time the City was completing the annual thornmint IMG survey. The ESA biologist mapped the distribution of thornmint at Site 1 and also checked for thornmint plants at the three other

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restoration sites. No thornmint were observed at Sites 2, 3 or 4. At Site 1, a total of 335 thornmint were counted in the previously seeded population (2018-2020) and 886 thornmint were counted in the natural population, for a total of approximately 1,221 thornmint in Year 1.

Percent complete: 96%

Task 9-Reporting

The second quarterly report with project photos was prepared and submitted. Draft figures were prepared by GIS staff and thornmint count data was submitted to Sara Allen at the City of San Diego.

Percent complete: 45%

Task 10- Misc Consultant Expenses

Expenses included herbicide and fencing materials.

Percent complete: 52%

Work Anticipated Next Period

The following activities are anticipated to occur during the next quarter (July 1 through September 30).

Native seed collection will continue as additional seeds become available. We anticipate having the maintenance crew install additional protective fencing prior to future thornmint seeding at Sites 2, 3, and 4. Selective shrub thinning may also be conducted where shrubs are invading potential thornmint habitat. The annual report will be prepared and photos for the report will also be organized and included.

Issues to Note

Herbivory of San Diego thornmint was observed at Site 1 in late April. On May 7-9 protective fencing was installed around the thornmint patches to prevent further impacts from rabbits. Immediately after the fencing was installed, the herbivory ceased. The majority of the remaining thornmint plants protected by the fencing recovered.

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Photographs & Figures

Project photographs are provided and include examples of crew work and native plant species at the sites.

Photographs are in Attachment 1.

Performance Measures

Please see the attached Project Performance Measures Excel spreadsheet.

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Photo 1: Site 1 Crew Hand Weeding and Weed Whipping Date 4.4.24

SOURCE: ESA, 2024

Mission Trails San Diego Thornmint Restoration and Enhancement Project

Appendix 1
Project Photo 1



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Photo 2: Site 2 Crew Spraying Non-natives Date 4.4.24

SOURCE: ESA, 2024

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Appendix 1
Project Photo 2



Photo 3: Site 3 Crew Weed Whipping Non-natives Date 4.4.24



Photo 4: Site 3 Crew Hand Weeding San Diego Goldenstar Date 4.4.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photos 3 and 4



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Photo 5: Site 4 Crew Hand Weeding Area Dominated by Small-flowered Morning Glory Date 4.4.24

SOURCE: ESA, 2024

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Appendix 1
Project Photo 5



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Photo 6: Site 1 Crew Hand Weeding San Diego Thornmint Date 4.25.24

SOURCE: ESA, 2024

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Appendix 1
Project Photo 6



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Photo 7: Site 3 Crew Spraying Non-natives Date 4.25.24

SOURCE: ESA, 2024

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Appendix 1
Project Photo 7



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Photo 8: Site 3 Blue-eyed Grass and San Diego Goldenstar Date 4.26.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photo 8





Photo 9: Site 1 San Diego Thornmint After Herbivory Date 4.25.24



Photo 10: Site 1 Crew Installing Protective Fencing Date 5.7.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photos 9 and 10





Photo 11: Site 1 Crew Installing Protective Fencing Date 5.7.24



Photo 12: Site 1 Installed Protective Fencing Date 5.7.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photos 11 and 12





Photo 13: Site 3 Sign After Installation by Park Ranger Date 5.8.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photo 13



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Photo 14: Site 1 Flowering San Diego Thornmint with Beetle Date 5.18.24

SOURCE: ESA, 2024

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Appendix 1
Project Photo 14



Photo 15: Site 1 Flowering San Diego Thornmint After Fencing Date 6.23.24

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SOURCE: ESA, 2024

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Appendix 1
Project Photo 15

