

## Threat Reduction Stewardship Grant Application: San Diego Habitat Conservancy San Diego Thornmint Enhancement Project

Applicant Name: San Diego Habitat Conservancy (SDHC) \_\_\_\_\_

Address: 2900 Fourth Ave, Suite 200, San Diego, CA 92103 \_\_\_\_\_

Phone: 619-365-4839 \_\_\_\_\_

Email: SDHC@sdhabitat.org \_\_\_\_\_

Name of Property: Carlsbad Raceway Preserve (CARA), Emerald Point Preserve (EPP), and Taylor Preserve (Taylor) \_\_\_\_\_

General Location: CARA: north of Palomar Airport Road and west of Business Park Drive in the City of Carlsbad; EPP: east of Aviara Parkway, north of Cobblestone Drive, and west of Sapphire Drive in the City of Carlsbad; Taylor: eastern Oceanside, about six miles east of Interstate 5 and west of a residential subdivision bordering Melrose Drive \_\_\_\_\_

Jurisdiction: City of Carlsbad and Oceanside \_\_\_\_\_

Total Acres: 86.3(CARA: 46.25 acres; EPP: 10.10 acres; Taylor: 30.5 acres) \_\_\_\_\_

Estimated Acres Requiring Management: Total for all Preserves is 1.8 acres (CARA totals 1.0 acre, Taylor totals 0.3 acres and EPP totals 0.5 acres).

Owner(s) of Property: Carlsbad Raceway Preserve: Fenton Raceway Business Park Property Owners' Association; Emerald Pointe Preserve: SDHC; Taylor Preserve: Montelena HOA

Land manager(s) of property (include name[s]): San Diego Habitat Conservancy \_\_\_\_\_

### Project Summary

The goal of the proposed Environmental Mitigation Program Land Management Project ("San Diego Thornmint Enhancement Project" or "Project") is to expand and enhance three populations of the Federal and State of California Endangered San Diego thornmint (*Acanthomintha ilicifolia*, ACIL). Small populations (<1,000) of ACIL currently occur on the Carlsbad Raceway Preserve (CARA), Taylor Preserve (Taylor), and Emerald Pointe Preserve (EPP) (collectively, Preserves), which are managed by the San Diego Habitat Conservancy (SDHC). This Project includes two main tasks to improve ACIL habitat, and increase the ACIL seed bank to reduce the likelihood of extirpation. Task 1 is to increase ACIL monitoring and management, and Task 2 includes increased invasive species treatment within habitat surrounding the ACIL occurrences.

SDHC has been working in collaboration with the San Diego Management and Monitoring Program (SDMMP) participants including the City of Carlsbad, Center for Natural Lands Management, San Diego State University, Native Seed Bank San Diego Zoo Wildlife Alliance (NSB), and Conservation Biology Institute to prevent extirpation of these populations. In 2020, NSB, through an EMP-funded grant collected seed from 15 plants at the CARA Preserve. Seed from CARA is currently being seed bulked at their facility.

### Expected Project Results

The CARA, EPP, and Taylor Preserve ACIL populations will be enhanced and expanded at the end of the 18-month grant project period using strategies and methods described in the Framework Rare Plant Management Plan prepared for SANDAG in 2021 (F-RPMP). The highest threats identified for the Preserves through the SDMMP Inspect and Manage survey data

(IMG) will be diminished. The CARA Preserve will have an additional three locations of ACIL, (for a total of four locations), which will reduce the likelihood of a stochastic event, such as a homeless encampment extirpating the entire population.

The Conservation Biology Institute’s Enhancing the Resilience of Edaphic Endemic Plants (2018; “EREEP”) grouped the CARA and EPP Preserve into Management Unit 6, North Population Subgroup 1 based on proximity and/or the presence of suitable habitat to potentially allow for gene flow, population expansion, or movement of pollinators between occurrences. Hence, enhancing and expanding these populations will improve connectivity within this subgroup. Taylor was not included in the EREEP assessment due to lack of access to the site.

**Dedicated staff and contractors that would work on the Project.**

SDHC staff dedicated to this Project include Habitat Managers Kathleen Pollett and Vince Rivas. Ms. Pollett, Senior Conservation Habitat Manager, has over 25 years of experience as a biologist and serves as the Habitat Manager for 17 SDHC Preserves. Mr. Rivas, Conservation Habitat Manager, has been working in the environmental planning and management field since 2015, is the HM for 16 Preserves. Mr. Rivas is the primary Habitat Manager (HM) for CARA and Ms. Pollett is the HM for EPP and for Taylor. Kathleen will oversee the field components of the Project, including seeding, invasive clipping and treatment, and watering. Executive Director Don Scoles will provide general oversight and Connie Winterstein, Acquisitions Program Manager, will oversee the administration of the Project. Urban Corps of San Diego is anticipated to conduct line trimming/ herbicide at the 1.0 acre CARA preserve and Lost Sage Restoration Ecology LLC. is anticipated to conduct ACIL monitoring, watering.

**Funding Needs Summary**

Budget Item	Requested Funding Amount	Description
Personnel Expenses Staff	\$26,640.00	Includes staff time for non-administrative work on the project
Personnel Administrative Expenses	\$3,560.00	Includes all staff time to administer the contract
Consultant/Contractor Expenses	\$48,540.00	Includes all costs for consultant/contractor services
Other Direct Expenses	\$1,136.80	Includes all equipment, supplies, mileage, etc.
<b>Totals</b>	<b>\$79,876.80</b>	

**Project Application**

**Project Purpose**

**1. High-priority Management Strategic Plan (MSP) species and their habitats**

The San Diego Management Strategic Plan (MSP) classifies ACIL as one of the highest priority species - a Species at risk of Loss (SL) and is included as a high priority species in the F-RPMP. Two of the preserves, CARA and EPP are specifically identified in the F-RPMP and classified as small populations. Taylor, though not included in the F-RPMP, would fall within the small population framework. Recommendations for small populations include ex-situ seed bulking, in-situ bulking, seed reintroduction, and invasive control.

## 2. Urgent need and actions that will reduce or manage threats

SDHC has served as the long-term habitat manager for Carlsbad Raceway Preserve (CARA) since 2014, Emerald Point Preserve (EPP) since 2008, and Taylor Preserve (Taylor) since 2020. Since SDHC began active management of the Preserves, there have been a maximum of 15, 110, and 5 individual ACIL on CARA, EPP, and Taylor respectively. SDHC has prioritized management of the ACIL areas through hand-weeding, watering and invasive species control but site visits are not frequent enough to accommodate population expansion since in situ seed bulking and control of non-native grasses in habitat near ACIL was not described in the management plan for the Preserve.

The ACIL populations at CARA and EPP are identified in the F-RPMP as part of the north genetic cluster that have very low genetic diversity and differentiation, low inbreeding, and some relatedness. As stated in the F-RPMP small populations are more susceptible to extirpation than large populations. Large populations are generally more resilient to stochastic events and natural catastrophes, and less affected by genetic and demographic stochasticity than small populations. Especially in fragmented landscapes, small population size reduces reproductive success. For these reasons, it is imperative that these small populations are expanded.

The F-RPMP recommends ex situ and in situ seed bulking and reintroducing seed to increase occurrence size, genetic diversity and reduce relatedness. The F-RPMP describes watering as a means to in situ bulk seed but details on timing and amount of water is not certain. Jessie Vinje (personal communication January 10, 2022) with The Conservation Biology Institute recommended weekly site visits from mid-January to July each year to monitor and manage ACIL populations at the Preserves.

According to SDMMP Inspect and Manage survey data (IMG), collected for CARA and EPP from 2017 to 2021 and Taylor for 2021, it identifies nonnative grasses and forbs as the greatest threat. For Taylor and CARA this includes more than 75% of the maximum extent (cumulative area where the plant is mapped over time), while EPP is approximately 25 % of the maximum extent. Therefore, it is imperative that these small populations are enhanced.

The proposed Project area includes a total of 1.0 acre at CARA, 0.3 acre at Taylor, and 0.5 acre at EPP (see Figures 1 and 2).

Task 1. ACIL Monitoring. The site monitor will observe the need for hand weeding and watering to encourage in situ seed bulking from mid-January to July. If invasive species are observed, hand weeding (clipping or trimming) will be conducted within a 3-foot radius of the ACIL during the weekly visits. If the ACIL look stressed or the soil is dry, the site monitor will water the plants with up to 64 ounces per plant.

At CARA, NSB is in the process of seed bulking ACIL. Proposed invasive species removal and watering will be key to the overall success the 2022 seeding. In addition, invasive species treatment and watering at Taylor and EMP will enable in situ seed bulking to increase the size of the seed bank. To date, in addition to regular hand weeding and intermittent watering of the ACIL populations, SDHC identified three additional locations of ACIL on the CARA preserve. These locations are within the same 1.0 acre enhancement area. Each potential transplant location has had 10-foot by 10-foot plots of plastic sheeting to solarize the seed bank in preparation of seeding ACIL.

Task 2. Invasive Species Removal. Invasive plant species treatment will be conducted according to the F-RPMP, which includes dethatching at CARA, winter grass herbicide treatment, and spring herbicide treatment or line trimming the larger surrounding suitable habitat

near ACIL. Three to six larger invasive species treatment events will be conducted within the 18-month grant period in addition to SDHC’s regular invasive treatments. The acreage of invasive treatment will total 1.0 acre at CARA, 0.3 acre at Taylor, and 0.5 acre at EPP. The species targeted will include but not be limited to nonnative grasses and Tocalote (*Centaurea melitensis*).

### 3. Success Criteria

Success criteria for CARA, EPP, and Taylor Preserves are included in Table 1.

**Table 1. Success Criteria**

Preserve	Task	Timeframe /Units	Success Criteria
CARA	Task 1. ACIL Monitoring	Each monitoring event/individuals set seed	>50% of ACIL individuals will set seed
	Task 2. Invasive Removal	Prior to large weeding events/percent cover	<10 percent cover of invasives setting seed
EPP and Taylor	Task 1. ACIL Monitoring	Each monitoring event/individuals set seed	>50% of ACIL individuals will set seed
	Task 2. Invasive Removal	During large weeding events/percent cover	<10 percent cover of invasives setting seed

### 4. Long-term Maintenance and Funding

Activities necessary to maintain the Project after the grant period will be conducted via SDHC’s ongoing management duties. Preserve management is funded through annual distributions of a non-wasting endowment. Monitoring of the ACIL population will be conducted during the regular site visits and invasive control we be conducted during site-wide invasive treatments. The EMP funding will support a more robust effort, required to enhance and expand the existing ACIL populations. It is expected that the ACIL seed banks within the Preserves will be increased due to the activities in this proposal and require less maintenance in successive years than is proposed for the Project.

### 5. Project Locations

All Preserves are located on lands conserved for native habitat within the MSP area. Carlsbad Raceway Preserve was set aside as conserved land for Diegan coastal sage scrub (DCSS) habitat and is within the City of Carlsbad’s Habitat Management Plan (HMP) area as well as the County’s Multiple Habitat Conservation Program (MHCP). Emerald Pointe was also set aside as conserved lands for DCSS and rare plants on site include ACIL, Palmer’s grappling hook and the rare Wiggins’ Cryptantha (*Cryptantha wigginsii*). Note that Wiggins’ Cryptantha was first documented last year, 2021, by the San Diego Museum of Natural History. Taylor includes riparian and CSS habitat and hosts rare plant species, including ACIL, Blochman’s dudleya (*Dudleya blochmaniae*), and thread-leaved Brodiaea (*Brodiaea filifolia*). Taylor is located in the City of Oceanside and is within the City of Oceanside’s Draft Oceanside Subarea Habitat Conservation Plan.

**6. Co-benefit to CBO Network Communities and social equity.** This project will use Urban Corps of San Diego County for a portion of the field work.

## Scope of Work by Task

### Exhibit A – Proposed Project Scope of Work

Task No.	Task Name	Task Description	Quantifiable Results/Deliverables
1.	ACIL Monitoring	<p>ACIL Monitoring will include weekly site visits from January 15 to July 2023 and January 15 to the end of May 2024 or until the grant project period ends.</p> <p>The site monitor will clip or trim invasive plants within a 3 foot buffer of the ACIL and water existing populations of ACIL to in situ seed bulk.</p>	<p>At least 50% of ACIL that express set seed.</p> <p>CARA Preserve: Three additional 10-foot by 10-foot areas seeded with seed bulked by NSB.</p> <p>Invasive species within 3 feet of ACIL treated within a week of germination to prevent competition with the population.</p> <p>Less than 10% cover of invasives setting seed.</p>
2	Invasive plant control outside the ACIL areas and 3-foot buffer	<p>During the 18-month project period SDHC will conduct three to six larger invasive species removal events in addition to the sties regular invasive control. Herbicide and line trimming will be the methods for the areas outside of three-foot buffers around the ACIL.</p>	<p>Up to six larger invasive species removal events completed.</p> <p>Invasive treatment completed on a total of 1.0 acre at CARA, 0.3 acre at Taylor and 0.5 acre at EPP.</p> <p>Less than 10% cover of invasives setting seed.</p>
3.	Quarterly Reporting and Invoicing	<p>Quarterly reports and invoices will be submitted on a quarterly basis within three weeks after each period close, covering January 1 to March 31; April 1 to June 30; July 1 to September 30; and October 1 to December 31.</p> <p>Quarterly reports will provide a description of work performed within the reporting period, work anticipated for the next period, and any issues to note, and project photos.</p> <p>Invoices will summarize charges for reimbursement of grant funds</p>	<p>Six quarterly reports and invoices submitted to SANDAG.</p>
4.	Final Report	<p>The Final report will be prepared in accordance with the final report template provided by SANDAG. The report will include an executive summary, project background, project</p>	<p>One final report submitted to SANDAG for the 18-month project period.</p>

		goals, work performed by task, conclusions, and applicable appendices.	
5.	Administrative	Staff time to administer the project.	Project management, contract oversight, invoicing.

## Budget by Task

### Exhibit B – Proposed Project Budget

Task No.	Task Name	Grant Request
1.	ACIL Monitoring	\$44,682.40
2.	Invasive Control in surrounding ACIL areas	\$26,834.40
3.	Quarterly Reporting	\$2,360.00
4.	Final Report	\$2,440.00
5.	Administrative	\$3,560.00
	<b>Subtotal</b>	<b>\$79,876.80</b>
	<b>Total</b>	<b>\$79,876.80</b>

## Project Schedule

### Exhibit C – Proposed Project Schedule (Assumes fall 2022 NTP)

Task No.	Task Name	Proposed Start Date	Months Needed to Complete Task	Task End Date
1.	ACIL Monitoring	2 Months from NTP	16 Months	05/01/2024
2.	Invasive Control in ACIL areas	2 Month from NTP	16 Months	05/01/2024
3.	Quarterly Reports	3 Months from NTP	15 Months	05/01/2024
4.	Final Report	18 Months from NTP	1 Month	05/01/2024
5.	Administrative	1 Month from NTP	18 Months	05/01/2024

If ACIL does not express, an additional year will be requested to fulfill Task 1. ACIL monitoring.

## Notice Regarding Prevailing Wages

California law requires that public works projects pay prevailing wages for workers.

Applicant acknowledges that any work that qualifies as a "public work" within the meaning of California Labor Code Section 1720 shall cause Applicant and its subcontractors to comply with the provisions of California Labor Code Sections 1775 et seq, which includes the payment of prevailing wages to all workers performing prevailing wage work.

Yes  No

Applicant acknowledges that if Applicant or its subcontractors will engage in the performance of a public work as defined by California Labor Code Sections 1720 et seq. and will utilize persons who are not employees of a public entity, registration and payment of an annual registration fee to the California Department of Industrial Relations (DIR) shall be required of each entity performing the work. This requirement applies to anyone affected by the public works statutes found in the California Labor Code, including but not limited to landscapers, fencers, surveyors, soil testers, dredgers, heavy equipment operators, and inspectors.

Yes  No

Applicant acknowledges that if Applicant will award any subcontracts for the performance of a public work:

- Applicant shall notify SANDAG 30 calendar days prior to the award of each subcontract so SANDAG can create a Project Registration Form (aka PWC-100 form) for each subcontract using the DIR online database. Applicant will provide to SANDAG the name, DIR registration number, and contractor's license numbers of each subcontractor so SANDAG can verify, prior to Applicant's award of the subcontract for a public work, that the selected subcontractor is currently licensed and registered with the DIR. If SANDAG finds that the selected subcontractor is not licensed and registered with the DIR, SANDAG will promptly notify Applicant and Applicant will not be permitted to award the subcontract to the selected subcontractor.

Yes  No

- Applicant shall notify SANDAG ten business days prior to the subcontractor performing the prevailing wage work so SANDAG can prepare for labor compliance monitoring.

Yes  No

- If there are any changes to a subcontractor or lower-tier subcontractor, Applicant will advise SANDAG of these changes as soon as those changes are known to the Applicant.

Yes  No

## Required Statements from Applicant

**Yes No**

- The applicant has read and understands the Sample Grant Agreement (Agreement) and Invoice Template (Attachment 4).
- If the Board of Directors approves the proposed project application, the applicant agrees to sign and return the Agreement to SANDAG, without exceptions or amendments, within 45 days of receipt.
- The applicant agrees to comply with SANDAG’s Board Policy No. 035, Competitive Grant Program Procedures, which outlines “Use-it-or-lose-it” project milestone and completion deadlines. Board Policy No. 035 is included in the Agreement, and also available at: [sandag.org/organization/about/pubs/policy\\_035.pdf](http://sandag.org/organization/about/pubs/policy_035.pdf)
- The applicant understands that 10% of all invoiced amounts will be retained until the completion of the proposed project.
- The applicant understands that all invoices must be accompanied by written, documented support of the charges for requested reimbursement of grant funds and payment will not be made by SANDAG until all documents are satisfactorily submitted.
- The applicant understands that invoices and reports must be submitted on a quarterly basis within three weeks after each period close covering January 1 to March 31; April 1 to June 30; July 1 to September 30; and October 1 to December 31.
- The applicant understands that the EMP quarterly report template (to be sent to the grantee after NTP is issued and can be found at [sandag.org/index.asp?classid=17&projectid=447&fuseaction=projects.detail](http://sandag.org/index.asp?classid=17&projectid=447&fuseaction=projects.detail)) must be used to document quarterly progress and that invoices with errors will be returned to the grantee for correction prior to being processed by SANDAG staff.
- The applicant understands that the final invoice must be accompanied by written, documented support of the charges for requested reimbursement of grant funds; a final report (prepared in accordance with the final report template to be sent to grantee after NTP is issued and can be found at [sandag.org/index.asp?classid=17&projectid=447&fuseaction=projects.detail](http://sandag.org/index.asp?classid=17&projectid=447&fuseaction=projects.detail)); and all outstanding deliverables in order to receive final payment and have retained funds released.
- The applicant understands that to be considered eligible for funding, a resolution complying with the requirements of Board Policy No. 035, Section 4.1, must be submitted to SANDAG at least *two weeks* prior to the recommendation by the Regional Planning Committee of the list of prioritized project applications. SANDAG will provide applicants with advance notice of the Regional Planning Committee’s anticipated meeting date.
- The applicant agrees to submit all project data/information to SANDAG and to upload data and reports to a project page created by the applicant on the SDMMMP web portal in a format consistent with regional management databases.

I have the authorization to submit this application (Grant Application and required supplementary materials) on behalf of my organization.

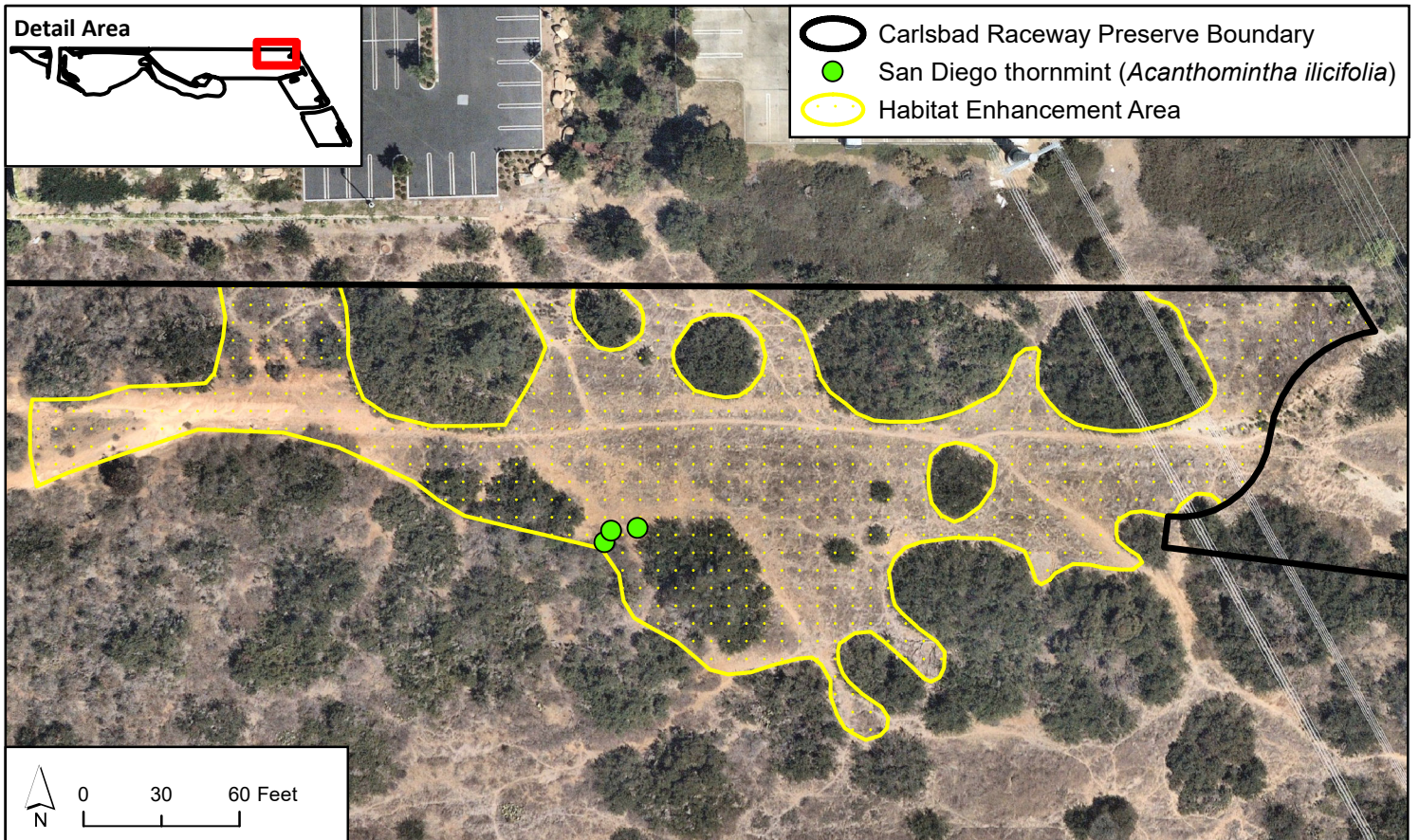
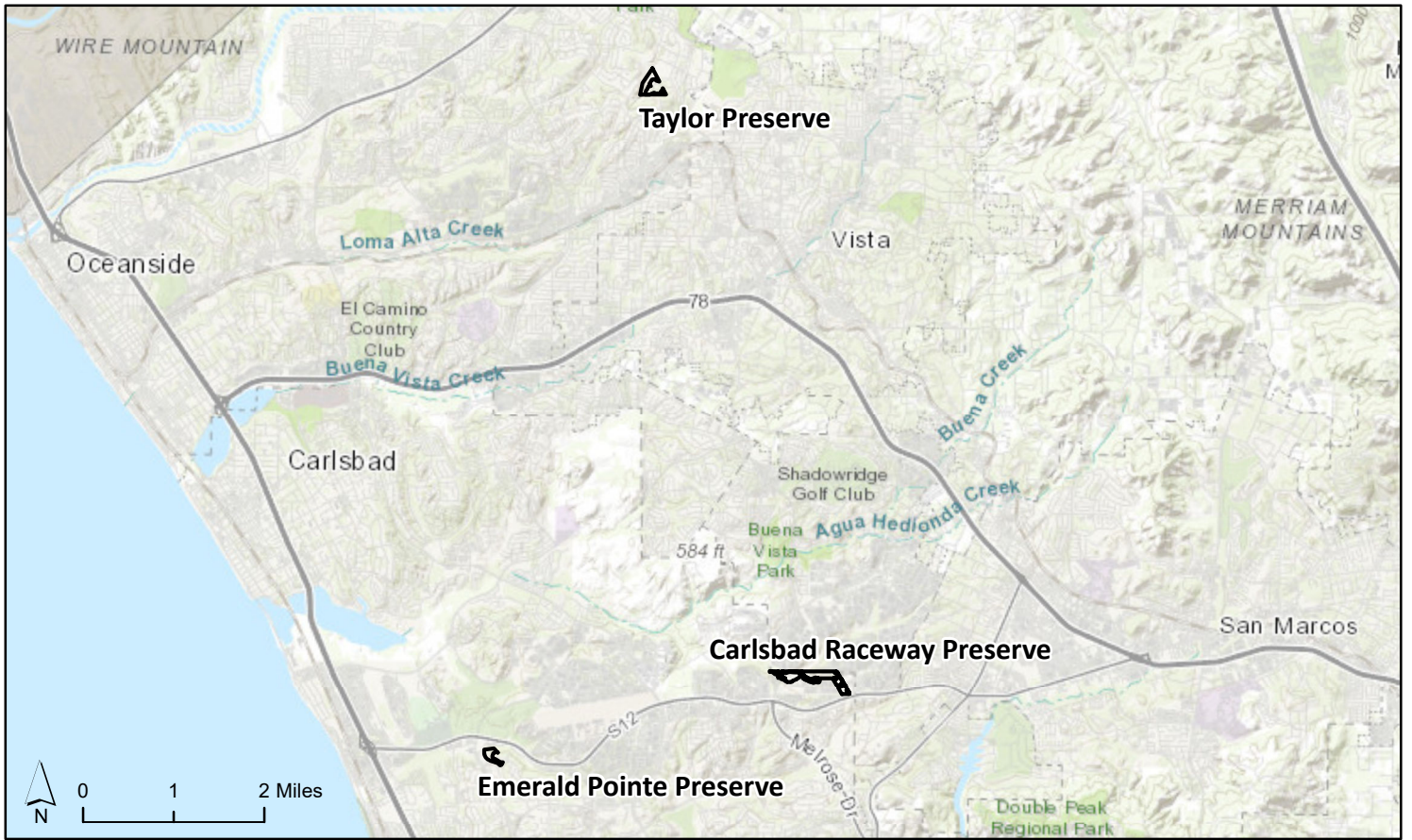
Don Scoles, Executive Director

**Applicant Name and Title (print or type)**

**Applicant Signature**

1/26/22

**Date**

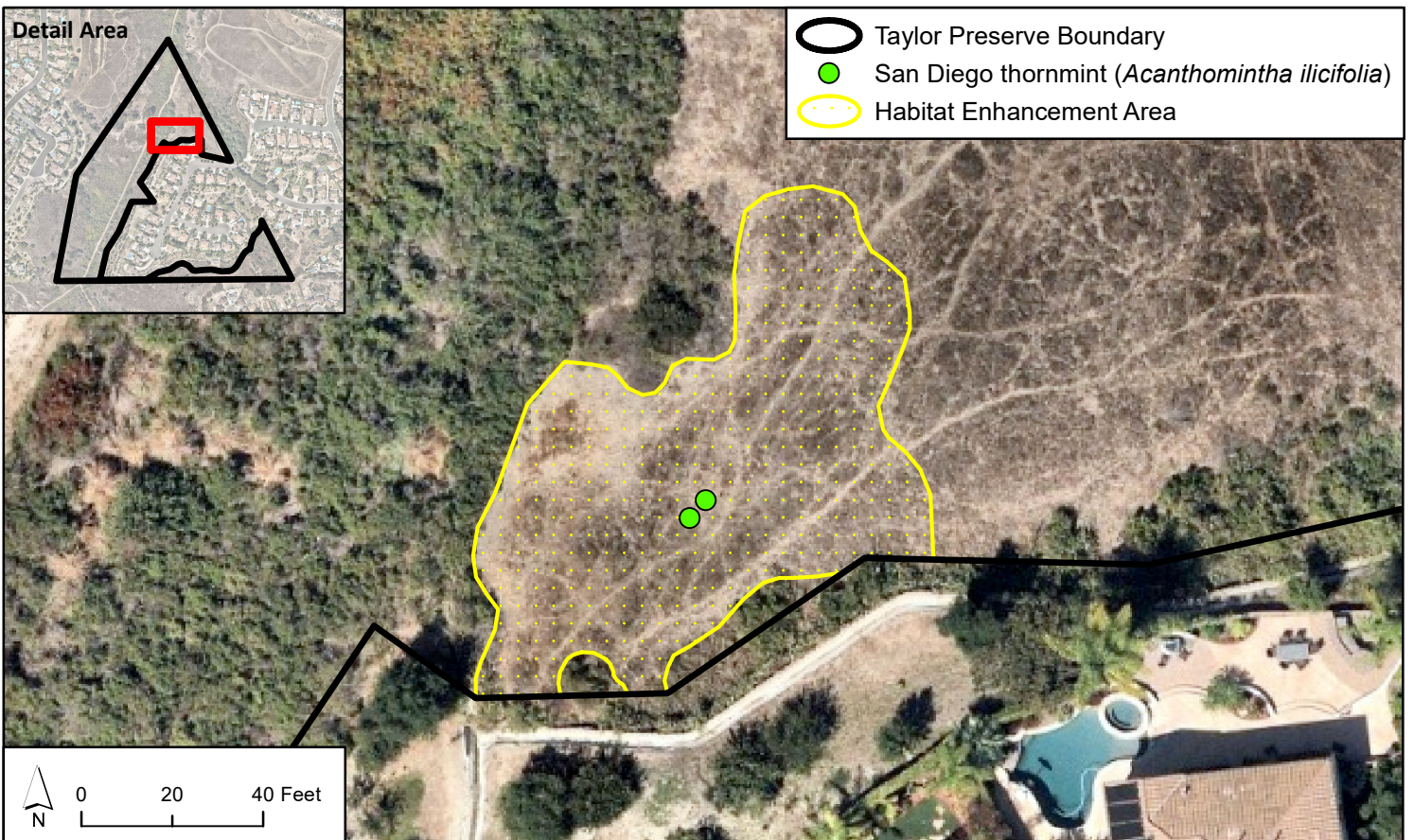
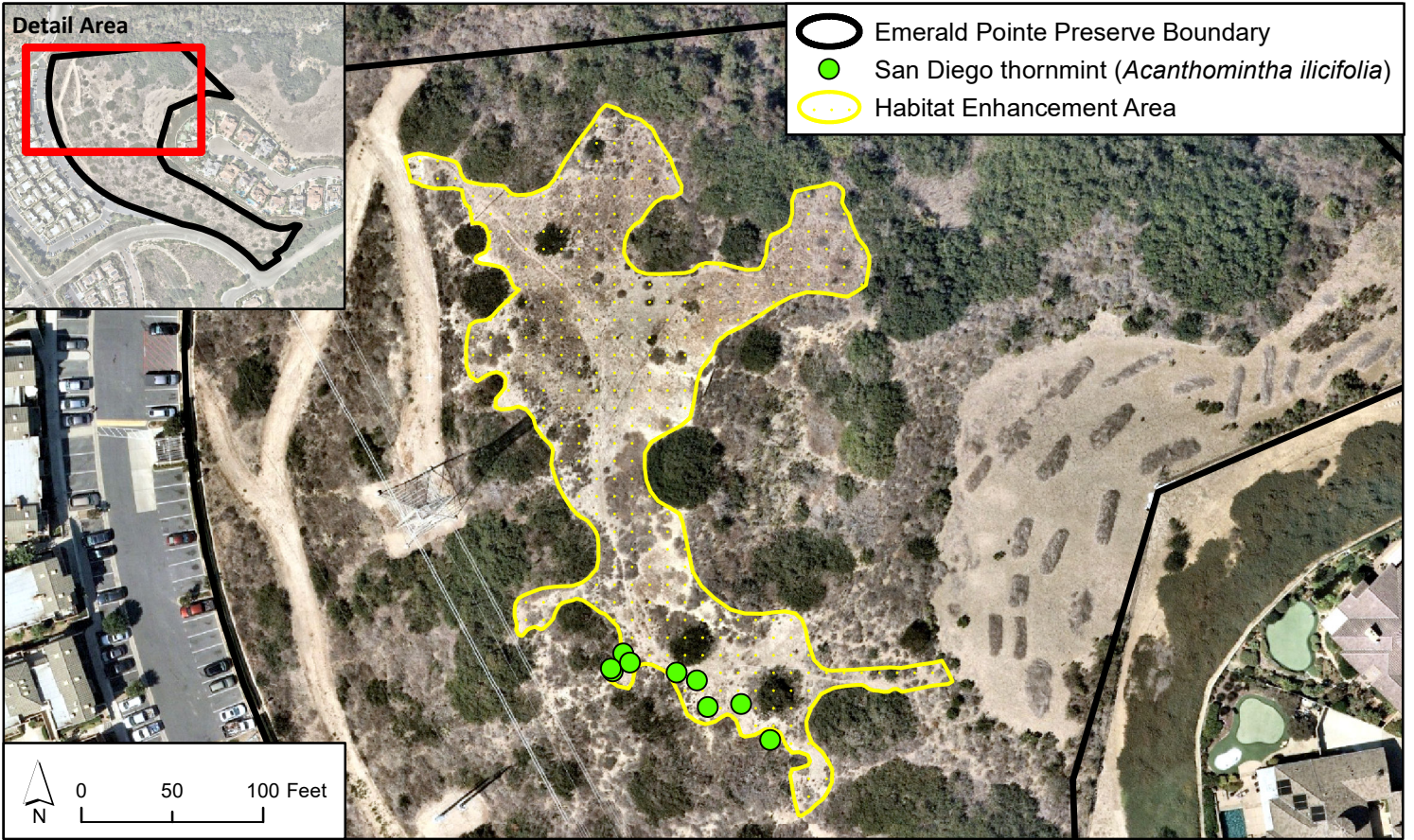


Source: *San Diego HABITAT CONSERVANCY*

**Key Map and Carlsbad Raceway Preserve**

San Diego Thornmint (*Acanthomintha ilicifolia*)

Figure 1



**Emerald Pointe Preserve and Taylor Preserve**

San Diego Thornmint (*Acanthomintha ilicifolia*)