

**Otay Tarplant Restoration**  
**Otay Water District-Habitat Management Area**

TransNet Environmental Mitigation Program (EMP)  
Tenth Cycle – October 2021

**Species & Habitat Recovery Project Grant Application**

Applicant Name<sup>1</sup>: Otay Water District; Ms. Lisa Coburn-Boyd, Environmental Compliance Spec.

Address: 2554 Sweetwater Springs Boulevard, Spring Valley, CA 91978-2004

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Name of Property: San Miguel Habitat Management Area

General Location<sup>2</sup>: City of Chula Vista

Jurisdiction<sup>3</sup>: Otay Water District

Total Acres: 240

Estimated Acres Requiring Management: 4.5 acres

Owner(s) of Property:<sup>4</sup> Otay Water District

Land manager(s) of property (include name[s]): Merkel & Associates, Inc.

**Brief project summary that includes your primary goal and objectives. (200-word maximum)**

The primary project goal would be to restore four suitable areas for Otay tarplant (*Deinandra conjugens*) (MSP High Priority SO species) to increase occurrences of Otay tarplant within the San Miguel Habitat Management Area (HMA). This goal is consistent with the MSP Management Goals for Otay Tarplant and specifically the “DEICON-7” Objective to implement the highest priority management actions identified in the *MSP Rare Plant Management Plan* as well as a 2022-2026 Priority Objective specifically for the HMA. Further, the project goal is consistent with Priority Objective “INVPLA-7” to control MSP High Priority invasive plant species impacting MSP SL or SO species. Specifically, purple false brome (*Brachypodium distachyon*), an MSP High Priority Invasive Species that is known to impact Otay tarplant and occurs throughout the HMA would be treated and controlled. The project proposes to implement the following MSP management actions in the restoration efforts to support four new occurrences of Otay tarplant in the HMA:

- Dethatching and weeding non-native grasses and forbs, including purple false brome;
- Otay tarplant seed collection and broadcast;
- Establishing and maintaining buffers around Otay tarplant occurrences; and
- Seed collection and broadcast of native grassland species and nectar sources for Otay tarplant pollinators.

**Quantify expected results**

- Increase number of Otay tarplant small occurrences within the HMA from two to six occurrences. Small occurrences are defined in the *MSP Rare Plant Management Plan* as less than 1,000 plants. The HMA currently supports two small occurrences of Otay tarplant (DECO13\_3SMHA024, DECO13\_3SMHA025).
- Increase in native grass and forb species including Otay tarplant and nectar sources for Otay tarplant pollinators within Otay tarplant project areas/buffers.
- Reduction of purple false brome in all four of the Otay tarplant project areas and associated buffers. Purple false brome is a MSP Priority Invasive Species that is known to adversely affect Otay tarplant.

**Brief description of dedicated staff and/or consultants/contractors that would work on the Project.  
(200-word maximum)**

**Merkel & Associates, Inc. (M&A)** is the current HMA land manager for the Otay Water District (District). M&A, a state certified WBE and SBE, is a San Diego-based environmental consulting firm specializing in biological resource and regulatory services. The firm has extensive experience working with the District and within the San Miguel HMA, including working with District staff to developed the San Miguel HMA and District’s Capital Improvements Project mitigation-banking program. As the HMA land manager in 2013, M&A applied for and was awarded EMP Land Management Grant funding for the proposed Coastal Cactus Wren Restoration-Species Specific Management project on the HMA. For this project M&A biologist staff will provide Otay tarplant restoration services including dethatching, weeding, seed collection and broadcast of Otay tarplant and other native plant species, maintenance and monitoring for 5 years, as well as quarterly and annual reports for 5 years, and project administration and coordination.

**California Conservation Corps (CCC)** is a CBO organization that fosters social equity. CCC will provide staff to support project implementation by conducting dethatching work within the four project areas.

**Funding Needs Summary**

Budget Item	Requested Funding Amount	Proposed Matching Funds Amount	Description
Personnel Expenses Staff	\$0.00	\$0.00	Includes staff time for non-administrative work on the project
Personnel Administrative Expenses	\$0.00	\$0.00	Includes all staff time to administer the contract
Consultant/Contractor Expenses	\$119,538	\$119,538	Includes all costs for consultant/contractor services
Other Direct Expenses	\$3,679	\$3,679	Includes all equipment, supplies, mileage, etc.
Totals	\$123,217.	\$123,217	
<b>Grand Total</b>		<b>\$246,434</b>	

*\*if applicable*

**Are there matching funds available?**  Yes  No

**If yes, how are the matching funds assured? (100-word maximum)**

In accordance with the HMA Mitigation Bank Establishment and Operating Procedures, the District is responsible for management of the HMA in conformance with the establishment and operating procedures and the annual funding for management and biological surveys. Funds for management of the HMA are committed on an annual basis from the District’s operating budget. The matching funds will be incorporated into each annual HMA budget during the life of the grant. The District’s FY23 budget will be finalized in June 2022 and will include the matching funds necessary for the work between September 2022 until June 30, 2023.

## Project Application

### Project Purpose

1. **Describe the proposed management activity(ies) and how it relates to the Management Strategic Plan (MSP) for Conserved Lands in Western San Diego County. Is there current management occurring or has past management occurred on the property (please describe)? If the proposed management activity is based on the results from past field inspections of the species occurrence, describe the conditions and management needs identified and whether or not the data has been provided to the San Diego Management and Monitoring Program. If implementing fire management actions, describe the management technique being used and whether a fire plan currently exists.**

The project proposes to implement the following MSP management actions for Otay tarplant, an MSP High Priority SO species, within four areas of suitable conditions (clay soils and non-native grassland habitat) to support four new small occurrences of Otay tarplant within the San Miguel HMA (see attached Figure):

- Dethatching and weeding of non-native grasses and forbs including the targeted treatment and control of Purple false brome, an MSP High Priority Invasive Species;
- Otay tarplant seed collection and broadcast;
- Establishing and maintaining buffers around Otay tarplant occurrences; and
- Seed collection and broadcast of native grassland species including those that provide nectar sources for Otay tarplant pollinators (e.g., soft winged beetles).

The project goal is to increase the number of small occurrences of Otay tarplant within the HMA from two to six occurrences through the above management actions and to ultimately contribute toward enhancing regional population structure and long-term resilience of Otay tarplant. The project goal is consistent with the MSP Management Goals for Otay Tarplant and specifically the “DEICON-7” Objective to implement the highest priority management actions identified in the *MSP Rare Plant Management Plan (F-RPMP)*. This Objective is identified as an MSP Management Priority Objective for the 2022-2026 grant cycle specifically for the HMA. The project also proposes to implement 2022-2026 MSP Management Priority Objective “INVPLA-7” that includes control of MSP High Priority invasive plant species that are impacting MSP SL or SO species, as identified in the *MSP Management Priorities for Invasive Non-native Plants, A Strategy for Regional Implementation*. Purple false brome is an MSP High Priority Invasive Species that is known to impact Otay tarplant and occurs throughout the HMA in the grassland habitats. Although the HMA implements an Integrated Non-Native Plant Management Plan, this species is not currently targeted under this plan but under this project would be treated and controlled to reduce the threat to Otay tarplant and support the restoration efforts.

The HMA is a biological reserve and mitigation bank that is managed for habitat and species protection in accordance with the HMA Mitigation Bank Establishment and Operating Procedures (M&A 1996) and is under the direct supervision of the Management Advisory Committee, which is composed of representatives from the District, USFWS, and CDFW. Beyond the scope of this project, the proposed four Otay tarplant project areas would continue to be maintained and managed by the HMA land manager in perpetuity in accordance with the HMA Mitigation Bank Establishment and Operating Procedures.

The proposed management activities within the four proposed project areas are not based on results from past or present Otay tarplant occurrences since none are mapped for these four discrete areas; however, it is likely that all of the native and non-native grasslands with clay soils in the HMA may have historically supported Otay tarplant. The proposed Otay tarplant project areas have been selected based on their site conditions which are comparable to the areas on the HMA that currently support Otay tarplant including the two occurrences onsite. These conditions include the presence of Diablo clay soils, location on gentle south and west facing slopes, and presence of native clay soil associates that are often found co-occurring with Otay tarplant including purple needlegrass (*Stipa pulchra*), soap plant (*Chlorogalum parviflorum*), blue dicks (*Dichelostemma capitatum*), and blue-eyed grass (*Sisyrinchium bellum*).

2. **Which MSP species and their habitats will benefit from the proposed management activity? Which specific MSP objective(s) and action(s) will be implemented? Name the specific MSP species occurrence(s) to benefit from the management activity, if applicable.**

Otay tarplant is a MSP Priority Rare Plant species identified for the 2022-2026 EMP Land Management grant cycle. The proposed management activities would benefit Otay tarplant and densely thatched non-native grassland habitat that would be restored to open native grasslands that support a diverse suite of plant and wildlife species. Specifically, the project would be consistent with the *DEICON-7* Objective to implement the highest priority management actions identified in the *MSP F-RPMP* and also identified as a 2022-2026 Priority Objective specifically for the HMA, a MSPA Opportunity Area. In addition, the project would implement 2022-2026 MSP Management Priority Objective *INVPLA-7* that would control purple false brome, a MSP High Priority invasive plant species that is known to impact Otay tarplant. As provided above, the project proposes to implement the following MSP applicable management actions to increase the number of Otay tarplant occurrences within the HMA from two to six small occurrences: Dethatching and weeding of non-native grasses and forbs (including the targeted treatment and control of purple false brome); Otay tarplant seed collection and broadcast; establishing and maintaining buffers around Otay tarplant occurrences; and seed collection and broadcast of native nectar sources to support Otay tarplant pollinators.

Although no Otay tarplant was observed in the proposed restoration areas, nearby populations have been documented and include successful previously installed Otay tarplant restoration efforts in the Western Grassland and Eastern Grassland area within the HMA. These two occurrences are identified in the F-RPMP as San Miguel HMA West DECO13\_3SMHA024 and DECO13\_3SMHA025. IMG protocol Otay tarplant surveys for these two occurrences were conducted onsite and data results were submitted to SDMMP. The proposed Otay tarplant areas are expected to support four additional small occurrences that would further expand the existing Otay tarplant population on the HMA and further improve connectivity with additional documented Otay tarplant occurrences on adjacent conserved lands in the Management Strategic Planning Area (MSPA) within Management Unit, especially those associated with the adjacent San Diego National Wildlife Refuge (e.g., DECO13\_JABO028, DECO13\_JAH1006, DECO13\_3MMGR010, DECO13\_3SVPC007, DECO13\_3TRIM008).

3. **To be eligible for funding, the proposed project must be within the MSP area. In which ManagementUnit is the project located? (Attach a map)**

The HMA is located within the MSP area in Management Unit 3 as shown in the attached Figure.

4. **Describe the stressors and/or threats to the MSP species and their habitats in the project area that will be addressed through implementation of this project application.**

As specified in the F-RPMP, the primary threat to Otay tarplant plant is invasive plant species. The four project areas are dominated by densely thatched non-native grassland vegetation comprised of invasive grass and forb species including purple false brome, soft chess (*Bromus hordeaceus*), wild oat (*Avena* spp.), ripgut grass (*Bromus diandrus*), and tocalote (*Centaurea melitensis*). These non-native plants, especially the grass species, form a dense thatch that threatens and precludes the germination and growth of Otay tarplant and other clay associates which have difficulty competing with the Eurasian grasses and weeds. The proposed management actions consist of dethatching, weeding, broadcasting Otay tarplant seed, and planting appropriate native plants, as well as maintenance and monitoring for 5 years to address the invasive weeds and thatched conditions that are known threats and stressors to Otay tarplant.

5. **Describe the management techniques proposed, including whether they have been previously used successfully and where. Are there any negative effects to MSP and other sensitive species and their habitats that could result from the proposed management action?**

The following proposed management techniques to dethatch, weed, and collect and broadcast seed are typical restoration methods and have been used successfully throughout San Diego County including within the HMA in the existing restoration and enhancement areas. There are no anticipated negative effects from the proposed actions to other sensitive species or habitats; however, biological surveys within the project

areas will be conducted prior to initiating proposed work to determine if any sensitive species are present and a qualified restoration biologist will supervise the management actions to ensure avoidance of impacting any sensitive biological resources, if present.

#### *Dethatching and Weeding*

All restoration areas will be dethatched and weeded prior to seed application. The proposed project will follow the best management practices flow chart of the F-RPMP (Figure 4.4-11 in F-RPMP) that emphasizes dethatching and invasive plant control. Dethatching includes weed whipping of non-native grasses and forbs followed by removal of the duff in order to expose the underlying soil surface for seed application. Site preparation work would occur in the fall of the first year. Weeds growing in the restoration areas include Eurasian grasses such as purple false brome, soft chess, riggut grass, red brome (*Bromus rubens*), and wild oat. Weeds would either be removed by hand or with the use of herbicide. Both methods require that the maintenance workers are fully capable of identifying non-native seedlings from native seedlings. All weeding and detaching will occur before weeds flower and set seed and timed to avoid basal resprout from annual species. In addition, dethatching and weeding will result in an increase in the amount of bare ground that is suitable for establishment of annual insect pollinator flowering species or open ground that is suitable for ground nesting bees. Invasive plant control is especially important during the first three years when native plants are easily out-competed for soil nutrients and sunlight by quick growing non-native forbs and grasses. Any aggressive non-native perennial species such as sweet fennel (*Foeniculum vulgare*) and tree tobacco (*Nicotiana glauca*) that are not fully removed, will be treated with herbicide. This would be conducted to prevent their reemergence. All debris deemed unsuitable to remain on-site by the Project Biologist shall be removed and disposed of properly at a certified landfill.

#### *Seed Collection and Broadcast and Establishment*

Seed from Otay tarplant will be collected from known populations occurring within the HMA during the summer of the first year. The amount of seed collected will not exceed five percent of the seed present for any one population within the HMA. The seed will be collected when it is mature (i.e., summer) by hand and placed in breathable containers (i.e., burlap bags) and then transferred to an indoor facility for cleaning and storage until ready for sowing during the following planting season. In addition to Otay tarplant, seed collected on-site from various native grassland species including purple needlegrass, blue-eyed grass, blue dicks, common goldenstar (*Bloomeria crocea*), graceful tarplant (*Holocarpha virgata* ssp. *elongata*), and small-flowered bindweed (*Convolvulus simulans*) will also be applied to the areas to enhance the habitat and assist with reducing regrowth of non-native species. Species used in the seed mix are also expected to encourage Otay tarplant pollinator activity. If grassland seed availability is limited within the HMA, purchase of seed from a reputable seed company will be considered, only if it can be demonstrated that it was locally collected from the nearby area (i.e., within 5 miles of the HMA). To the greatest extent possible, the restoration areas will be free of debris and weed growth prior to seed application. All sowing (i.e., seeding) and hand broadcasting shall occur in the late fall or early winter months (i.e., November 1 through December 15) to take advantage of favorable seasonal conditions. Plant establishment will be dependent upon natural precipitation. As such, the sowing will occur during the late fall or early winter months to take advantage of seasonal conditions. If possible, the application will be timed to coincide with a rainstorm event. Further, establishment of Otay tarplant and other native plant species within the restoration areas will require diligent weed control, as proposed.

#### **6. What strategic approach will be used to ensure the successful, long-term outcome of the proposed project (e.g. upstream exotic removal prior to downstream, future on-going maintenance)? Which adjacent conserved lands will not be included and why?**

To ensure the successful, long-term outcome of the proposed project, an aggressive dethatching and weeding effort would be the first task performed for all project areas prior to Otay tarplant and other native species seed broadcast. In addition, after the 5 years of maintenance and monitoring is complete for this project, ongoing maintenance and management would continue for these four Otay tarplant restoration areas in

accordance with the HMA Mitigation Bank Establishment and Operating Procedures that are under the direct supervision of the Management Advisory Committee, which is composed of representatives from the District, USFWS, and CDFW. Adjacent conserved lands to the four Otay tarplant project areas are not included in the proposed project since they do not support suitable soils and/or non-native habitat to meet Otay tarplant restoration criteria.

**7. What are the goals and objectives for the proposed project? What criteria/metrics will be used to measure success? If applicable, what quantitative monitoring data will be collected to evaluate success? Who will be collecting the monitoring data and what are their qualifications?**

The primary goal of the restoration effort will be to establish four additional self-sustaining occurrences of Otay tarplant within the HMA. In addition, the proposed restoration effort within these non-native grassland areas would result in a reduction or removal of non-native species including purple false brome and an increased presence of native grassland species including Otay tarplant. This effort is expected to further benefit the biological value of the restoration areas such as provide native nectar sources for Otay tarplant pollinators.

To measure the success of the proposed project, monitoring will begin with the commencement of planned restoration activities including maintenance activities and continue through the end of a 5-year maintenance and monitoring period. Quantitative annual monitoring will follow the IMG Monitoring Approach as identified in the Management and Monitoring Strategic Plan (MSP Roadmap) 2021 Rare Plant Inspect and Manage Monitoring Protocol for occurrences on Conserve Lands in Western San Diego County. This approach involves: 1) Establishing permanent circular sample plot(s) and estimating or counting the number of plants; 2) Mapping the perimeter of the current extent of the occurrence and estimating or counting the number of plants; 3) Photo-monitoring; 4) Conducting a habitat assessment within the sample plot(s); and 5) Conducting a threats assessment within the cumulative maximum extent of the occurrence over time and including an adjacent 10-m buffer.

A reference site will be established within the HMA from which data will be obtained and compared with identical information obtained from the restoration areas. Given that Otay tarplant is an annual species and populations are expected to naturally fluctuate from year to year depending upon climatic conditions, it is expected that the reference site will provide a baseline from which to compare important variables such as abundance, growth, flower production, pollinator presence, and habitat species composition. The proposed reference site is expected to be the San Miguel HMA West DECO13\_3SMHA024 occurrence location within the onsite western grassland area where data was previously collected during IMG monitoring surveys between 2015 and 2017. Based on the IMG monitoring data, the average number of Otay tarplant plants was 358 plants. Annual monitoring of the reference site location will be conducted in conjunction with the four proposed restoration areas.

The project will be considered successfully accomplished if the project minimum number of plants relative to the reference site is achieved during 3 years of the 5-year monitoring program. The minimum number of plants for the proposed project is estimated to be 300 plants at each of the restoration areas, or a total of 1,200 plants for all 4 sites is obtained within 3 of the 5 years of monitoring; however, these quantities will be based on the established reference site at the HMA. These quantities will be based on the established reference site at the HMA. The following formula would be used to calculate minimum quantities of Otay tarplant for reaching the prescribed goal:

$$R_n / R_1 = X \quad I = 300 \text{ quantity Otay tarplant goal}$$

$R_1$  = Baseline population count at reference site (average of recorded quantities)  
 $R_n$  = Population count at reference site in monitoring year  $n$   
 $X$  = Annual minimum goal for Otay tarplant population count at restoration site

In addition, the project will further be considered successful if the percentage of flowering plants at the restoration sites is equivalent or greater than the percentage of flowering plants at the reference site during 3 of the 5 monitored years. Although the goal may be accomplished early, the full five years of maintenance

and monitoring described above will be conducted. If the restoration site count is less than that year's calculation, then the criteria will be concluded to not have been met for that maintenance and monitoring year and recommendations will be made to assist with meeting the goals the following year.

Merkel and Associates, Inc. (M&A) biologists would conduct the proposed monitoring surveys to collect data and subsequently manage and analyze the collected data to prepare and submit final monitoring reports to the District and forward to SANDAG. Specifically, Kyle Ince (M&A Restoration Division Manager) would lead the proposed restoration project. Mr. Ince has over 30 years of professional habitat restoration and botanical local experience. In particular, he specializes in the preparation of native habitat restoration plans as well as species-specific restoration plans including Otay tarplant. In addition, Mr. Ince has led a multitude of native habitat restoration monitoring and management efforts that include rare plants such as Otay tarplant. In addition, Adam Behle (Senior Restoration Biologist) would also play a key role in data collection, management, analysis, as well as quality control in support of the project. Mr. Behle has over 20 years of professional restoration experience throughout San Diego County.

**8. How will the applicant manage the data collected? What software will be used to house the data? Who will be responsible for compiling and transferring the data to SANDAG? Who will be preparing the required quarterly, final, and all other reports?**

Monitoring data collected would be mapped on 1"=150' scale field maps (or similar as deemed appropriate) and/or mapped using a Trimble® geoexplorer unit with submeter accuracy. The data would then be digitized into current Geographical Information System (GIS) Environmental Systems Research Institute (ESRI) software platforms. Data would be recorded in field notebooks and subsequently transferred to Microsoft Excel for data analysis. Plant identifications would either be resolved in the field or later determined through verification of voucher specimens. Incidental wildlife species including Otay tarplant pollinators would be determined through direct observation (aided by binoculars), or by detection of sign (e.g., burrows, tracks, scat), song or call. Quantitative data would be analyzed in Microsoft Excel and all reports would be generated in Microsoft Word. M&A senior staff would be responsible for compiling all data and preparing the required reports to the District. The District would submit reports and data electronically in PDF format to SANDAG.

**9. Has the proposed project received TransNet Environmental Mitigation Program (EMP) funds previously? If so, what was accomplished with the funds and why are additional funds being requested?**

The proposed Otay Tarplant project has not received TransNet EMP funds previously. The OWD did receive EMP funds under the 2013 EMP Grant Cycle for the Coastal Cactus Wren Restoration-Species Specific Management project within the HMA; however, the proposed project is not related to the previously funded Coastal Cactus Wren project.

**10. Is the proposed activity being done on land that was previously set aside as mitigation? If yes, please elaborate.**

The entire HMA is a designated biological reserve and mitigation bank. It is managed in accordance with the HMA Mitigation Bank Establishment and Operating Procedures. The proposed Otay tarplant project areas are located within the HMA but outside of any existing restoration and enhancement sites that have not yet met their mitigation obligations (see Figure).

**11. Does the proposed project provide a co-benefit to CBO Network Communities and foster social equity? Please describe. Additional Points can be awarded if this is relevant to the project and is appropriately described to meet the qualifications listed in the call for projects.**

The proposed project provides a co-benefit to CBO Network Communities and fosters social equity as defined in this grant through the inclusion of the California Conservation Corps on the project team (for Tasks 1 & 2).

**Scope of Work by Task**

**Exhibit A – Proposed Project Scope of Work**

Task No.	Task Name	Task Description	Quantifiable Results/Deliverables
1	Initial Dethatching	Dethatching of all four restoration areas where applicable. This will be the first restoration action to be implemented in the first year. Dethatching includes weed whipping of non-native grasses and forbs followed by removal of the duff in order to expose the underlying soil surface for seed application.	Removal of thatched condition within all four project areas.  Results and photo documentation will be included in first quarterly report and in first annual report.
2	Initial Weeding	Weed removal within all four restoration areas where applicable. Any aggressive non-native perennial species that are not fully removed, will be treated with herbicide.  This initial effort would be conducted after dethatching and prior to initial seed broadcast.	Removal of weeds including purple false brome where present within all four project areas.  Results and photo documentation will be included in first quarterly report and in first annual report.
3	Initial Seed Collection, Cleaning, Storage & Broadcast	Within the first year, seed from Otay tarplant and other native grassland species would be collected locally, cleaned, stored, and hand broadcast within the four project areas.	Results and photo documentation will be included in first quarterly report and in first annual report.
4	Years 1-5 Maintenance	Maintenance would occur at least quarterly and may include weeding, watering, and supplemental seeding.	Results and photo documentation will be included in all quarterly report and annual reports.
5	Years 1-5 Monitoring & Reporting	Monitoring will follow the IMG Monitoring Approach as identified in the Management and Monitoring Strategic Plan 2021 Rare Plant Inspect and Manage Monitoring Protocol for occurrences on Conserve Lands in Western San Diego County.  15 quarterly and 5 annual reports will be prepared.	Results and photo documentation will be included in annual reports.  15 quarterly and 5 annual reports.
6	Administrative	This task includes coordination between M&A, the District, and SANDAG to implement the project and manage the grant. It includes time for three field meetings (i.e., prior to the start of work, upon completion of seed broadcast, and upon completion of the quantitative monitoring) as well as over the phone and e-mail correspondence.	No deliverable associated with this specific task. Notable correspondence would be included within the quarterly reports.

### Budget by Task

Please include a specific budget for each task described in the Scope of Work (Section B above). This should include both requested SANDAG funds and any matching funds proposed for each project year. *If matching funds are proposed, please distribute the match commitment proportionately.*<sup>1</sup> Applicants are encouraged to identify phasing in their application in case full funding for the project is not available. You may add or subtract rows and columns as needed. *This funding category is intended to fund restoration and enhancement projects taking place over a three- to five-year period and will not cover on-going annual costs within applicant's organization.*

**Exhibit B – Proposed Project Budget**

Task No.	Task Name	Year 1 Grant Request	Year 1 Matching Funds <sup>1</sup>	Year 2 Grant Request	Year 2 Matching Funds <sup>1</sup>	Year 3 Grant Request	Year 3 Matching Funds <sup>1</sup>	Year 4 Grant Request	Year 4 Matching Funds <sup>1</sup>	Year 5 Grant Request	Year 5 Matching Funds <sup>1</sup>	Total Grant Request	Total Matching Funds	Total Projects Cost
1	Dethatching	\$6,500	\$6,500	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,500	\$6,500	\$13,000
2	Weeding	\$2,166	\$2,166	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,166	\$2,166	\$4,332
3	Seed Collection, Storage, Broadcast	\$9,980	\$9,980	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,980	\$9,980	\$19,960
4	Maintenance	\$18,065	\$18,065	\$18,593	\$18,593	\$16,591	\$16,591	\$15,672	\$15,672	\$14,051	\$14,051	\$82,972	\$82,972	\$165,944
5	Monitoring & Reporting	\$4,355	\$4,355	\$3,690	\$3,690	\$3,797	\$3,797	\$3,903	\$3,903	\$4,009	\$4,009	\$19,754	\$19,754	\$39,508
6	Administrative	\$369	\$369	\$369	\$369	\$369	\$369	\$369	\$369	\$369	\$369	\$1,845	\$1,845	\$3,690
<b>Subtotal</b>		\$41,435	\$41,435	\$22,652	\$22,652	\$20,757	\$20,757	\$19,944	\$19,944	\$18,429	\$18,429	\$123,217	\$123,217	\$246,434
<b>Total</b>		\$41,435	\$41,435	\$22,652	\$22,652	\$20,757	\$20,757	\$19,944	\$19,944	\$18,429	\$18,429	\$123,217	\$123,217	\$246,434
<b>Percentage</b>		50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%

<sup>1</sup> Throughout the Project, Matching Funds must be proportionate to Total Project Costs (Grant Request and Matching Funds combined). For example, if a proposed project Year 1 Grant Request is \$80,000 and proposed Year 1 Matching Funds are \$20,000, the Total Year 1 Project Costs are \$100,000. Therefore, the required proportionate matching funds to provide per invoice during Year 1 of the project are 20% (e.g. invoice submitted for \$8,000 grant amount reimbursement and \$2,000 matching funds submitted). However, if the Year 2 Grant Request is \$70,000 and proposed Year 2 Matching Funds are \$30,000, while the Total Year 2 Project Costs also are \$100,000, the required proportionate matching funds increases per invoice during Year 2 of the project to 30% (e.g. invoice submitted for \$7,000 grant amount reimbursement and \$3,000 matching funds submitted). Retention will be withheld beyond the 10% retention for each invoice submittal that does not meet the proportionate matching funds requirement. These additional matching funds retained will not be released until the proportionate matching funds are reached for the project to-date.

## Project Schedule

Please include start and end dates relative to the anticipated Notice to Proceed (assumes fall 2022) for each task described in the Scope of Work (Section B above). Please list tasks for quarterly reporting on the status of the grant project and a final report on the outcome of the grant project. You may add or subtract rows as needed.

### Exhibit C – Proposed Project Schedule (Assumes Early December 2022 Notice to Proceed [NTP])

Task No.	Task Name	Proposed Start Date	Months Needed to Complete Task	Task End Date
1.	Initial Dethatching	1-2 Months from NTP, following winter rains and annual grass growth, prior to seed head formation (January 2023)	< 1 Month	02/01/2023
2.	Initial Weeding	1-2 Months from NTP, following winter rains and annual weed growth, prior to seed head formation (January 2023)	< 1 Month	02/01/2023
3.	Initial Seed Collection, Storage, Broadcast	Seed Collection- First Summer following NTP (June/July 2023), Broadcast Seed- First Fall/Winter (e.g., November/December 2023)	< 1 Month	12/31/2023
4.	Years 1-5 Maintenance	2 Months from NTP Following initial dethatching/weeding (February 2023)	58 Months	12/31/2028
5.	Years 1-5 Monitoring & Reporting	1-2 Months from NTP	58 Months	12/31/2028
6.	Administrative	0 Months from NTP	60 Months	12/31/2028

*Starting and ending dates would be adjusted accordingly depending on issuance of NTP. No significant amount of additional time is expected to complete the project due to unexpected weather/climate conditions, since the project is a long-term monitoring/maintenance program that can be adjusted as needed to accommodate for changes. Further, based on the current rainfall amounts as of January 2022, it is expected that Otay tarplant seed production would be adequate for collection and broadcast next year as proposed and no delay in Year 1 seeding is anticipated. In addition, the proposed plan project includes additional seed collection and broadcast in Year 3 and specifies for 3 of the 5 monitoring years to reach prescribed goals to allow for fluctuation in weather conditions.*

## 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 licensenumbers 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                       |   |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The applicant has read and understands the Sample Grant Agreement (Agreement) and Invoice Template (Attachment 4).  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 is on SANDAG's website at: <a href="http://sandag.org/organization/about/pubs/policy_035.pdf">sandag.org/organization/about/pubs/policy_035.pdf</a>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The applicant understands that 10% of all invoiced amounts will be retained until the completion of the proposed project.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The applicant understands that for proposed projects with matching funds, retention will be withheld beyond the 10% retention for each invoice submittal that does not meet the proportionate matching funds requirement. These additional matching funds will not be released until proportionate matching funds are reached for the project to-date.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The applicant understands that the EMP quarterly report template (to be sent to the grantee after NTP is issued and can be found at <a href="http://sandag.org/index.asp?classid=17&amp;projectid=447&amp;fuseaction=projects.detail">sandag.org/index.asp?classid=17&amp;projectid=447&amp;fuseaction=projects.detail</a> ) 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.   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 <a href="http://sandag.org/index.asp?classid=17&amp;projectid=447&amp;fuseaction=projects.detail">sandag.org/index.asp?classid=17&amp;projectid=447&amp;fuseaction=projects.detail</a> ); and all outstanding deliverables in order to receive final payment and have retained funds released. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 <i>two weeks</i> 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.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 SDMMP web portal in a format consistent with regional management databases.  |

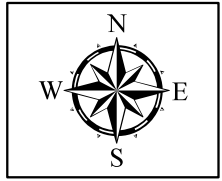
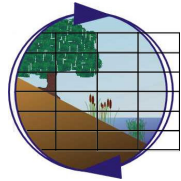
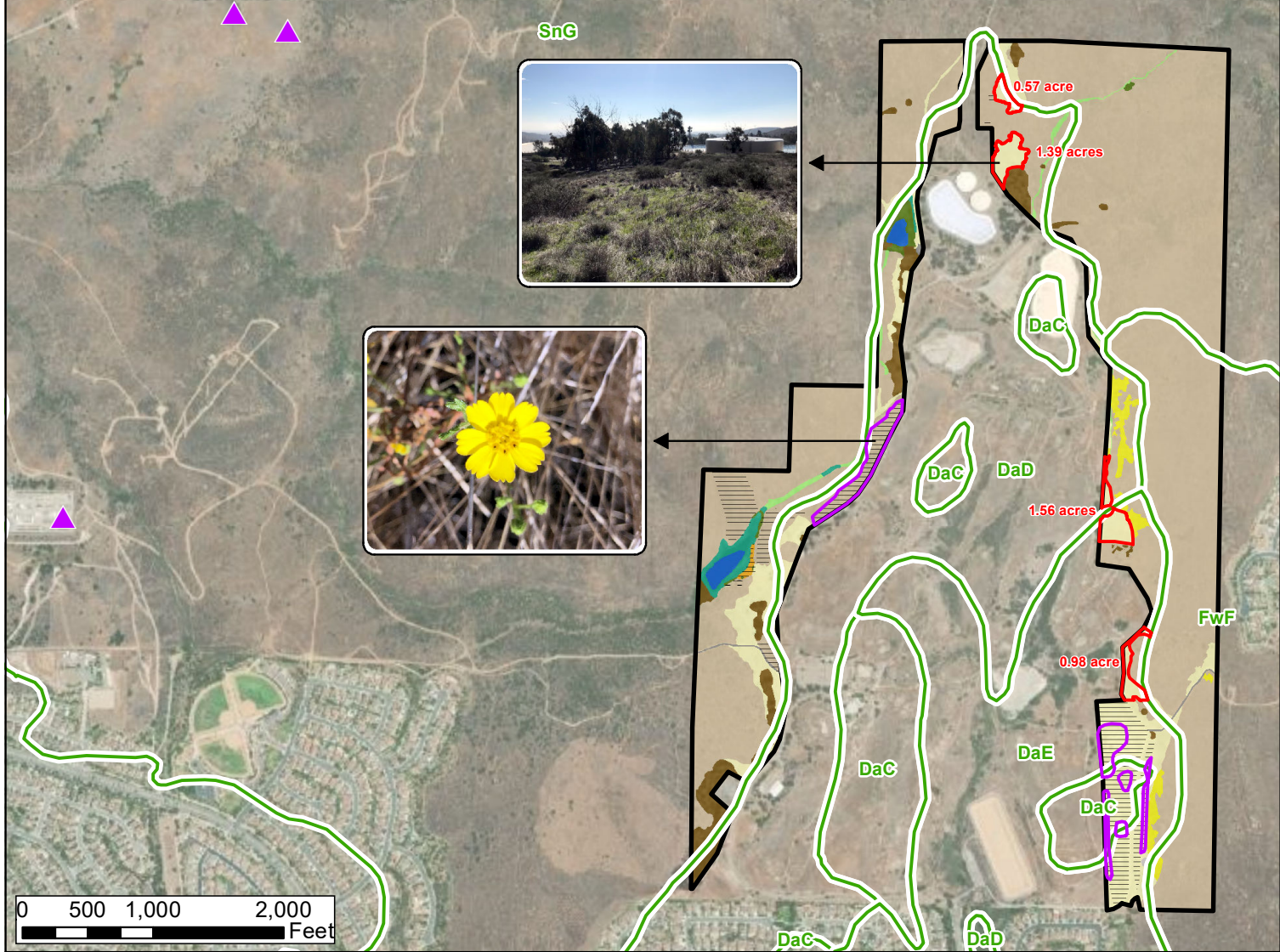
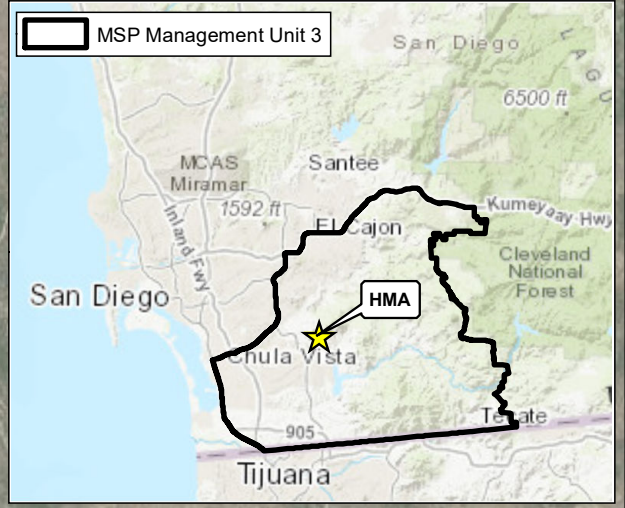
I have the authorization to submit this application (Grant Application and required supplementary materials) on behalf of my organization.

Lisa Coburn-Boyd, Environmental Compliance Specialist

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

Lisa Coburn-Boyd      1/31/22  
Applicant Signature      Date

 Proposed Otay Tarplant Restoration Areas	<b>Vegetation Communities</b>
 Otay Tarplant Occurrences Onsite	 Open Water
 Otay Tarplant Occurrences Offsite (USFWS 2021)	 Alkali Seep
 Existing Restoration and Enhancement Areas	 Coastal and Valley Freshwater Marsh
 HMA Boundary	 Southern Willow Scrub
<b>Soils</b>	 Mule Fat Scrub
 DaC = Diablo clay, 2 to 9 percent slopes	 Diegan Coastal Sage Scrub
 DaD = Diablo clay, 9 to 15 percent slopes	 Non-native Woodland
 DaE = Diablo clay, 15 to 30 percent slopes	 Valley Needlegrass
 FwF = Friant fine sandy loam, 30 to 50 percent slopes	 Non-native Grassland
 SnG = San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes	 Disturbed Habitat
	 Urban/Developed



**Otay Tarplant-Species and Habitat Recovery**  
**TransNet EMP Land Management Grant**  
 Otay Water District San Miguel Habitat Management Area