

Threat Reduction Stewardship Grant Application

Grant application form and required supplementary materials (hereafter referred to as “application”) cannot exceed eight pages.

Applicant Name:¹ San Diego Unified Port District

Address: 3165 Pacific Highway, San Diego, CA 92101

Phone: 619.686.6390

Email: aheim@portofsandiego.org

Name of Property: D Street Fill

General Location²: Chula Vista Bayfront, City of Chula Vista, CA

Jurisdiction³: San Diego Unified Port District and U.S. Fish and Wildlife Service National Wildlife Refuges

Total Acres: 42

Estimated Acres Requiring Management: 42

Owner(s) of Property:⁴ San Diego Unified Port District, San Diego National Wildlife Refuge

Land manager(s) of property (include name[s]): San Diego Unified Port District, San Diego National Wildlife Refuge

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

The project will assist in management and recovery of two federal and state-listed species, the California least tern (*Sternula antillarum browni*) and western snowy plover (*Charadrius nivosus nivosus*), which occur at the D Street Fill during the avian breeding season (April through September). The D Street Fill was created in 1969 through the placement of dredge spoils onto native marshland from nearby development projects. Currently, the site is jointly managed by the Port of San Diego (Port) and the U.S. Fish & Wildlife Service’s (USFWS) San Diego National Wildlife Refuge (NWR) as a least tern nesting colony and snowy plover critical habitat.

The project goal is to prepare the site for the 2023 and 2024 nesting seasons by performing site grading, debris removal, vegetation control, invasive plant management, avian monitoring, and predator management to maintain the site as suitable breeding, nesting, and foraging habitat. The Port will provide matching support in the form of staff time, managing contractors to conduct predator control services, avian monitoring, data collection, and reporting. The Port will also organize at least one volunteer event with The Living Coast Discovery Center, a CBO Community Network partner, to assist in site preparation and provide environmental education opportunities.

¹ While collaboration is encouraged in the development of the grant application, the application must identify one organization as the lead entity that will enter into the grant agreement with SANDAG.

² Physical address, or closest cross streets or property boundary.

³ Name of city where the project is located. County of San Diego can be listed for the unincorporated areas of the region.

⁴ If the applicant is not the landowner, please submit a letter or right-of-entry permit from the landowner granting permission to perform the land management duties as outlined in the application. Failure to provide the letter or right-of-entry permit will lead to disqualification of the application. *Attached letter or right-of-entry permit (if applicable) does not count toward eight-page maximum.*

Quantify expected results (add bullets as necessary)

- **Site Preparation:** Increase the quality and quantity of California least tern and western snowy plover nesting habitat by reducing vegetation density and height over approximately 30 acres of the primary nesting area. This will be done prior to the 2023 breeding season (January through March). The goals of site preparation management activities are to remove invasive species, reduce non-native vegetation, and restore sandy coastal habitat ideal for ground nesting birds. Vegetation is managed by mechanical grading and/or scraping after seasonal rains an prior to the nesting season. Trash and debris removal, invasive plant removal along the shoreline, pruning of taller native vegetation to prevent predator perching, and repairs (e.g., to access roads, signage, and perimeter fencing) will also be performed as needed. The site will be surveyed for breeding/nesting birds prior to any site preparation efforts and sensitive native plant species will be flagged and marked off so they are not impacted by site preparation activities. Remaining grant funds may also support some 2024 site preparation activities.
- **Management and Monitoring:** Collect nesting bird data during the 2023 nesting season to determine management actions that will improve success of the least tern nesting and snowy plover habitat use.
 - 1) Prepare the site for an anticipated 100 to 150 least tern nests by setting up a grid system for monitoring prior to the arrival of least terns. Ceramic tiles will be deployed in grid intersections of 30-meter squares to assist in nest mapping and provide shade and shelter for chicks. Invasive plants will be flagged for removal. To encourage migrating adult least terns to land, engage in courtship behaviors, and begin nesting, decoy birds constructed of ceramic, plastic, and papier-mache will be used as appropriate in areas of the cleared site where a majority of nests have occurred in the past.
 - 2) Perform monitoring of the least tern nesting site a minimum of twice per week (and up multiple times per day) to collect adult, nest, egg, chick, and fledgling data as required by USFWS monitoring permits. Chick health data collection (i.e., weight and wing length) and leg banding/tagging may be performed. Prepare weekly and year-end reports and conduct GIS mapping of nests and evaluate breeding and fledgling success. Observations of presence and activities of snowy plovers and other sensitive species will also be recorded. Remaining grant funds may also support some 2024 monitoring activities.
- **Invasive Plant Control:** Implement appropriate means to reduce or eliminate the presence of new and existing invasive plant species over approximately 42 acres of the D Street Fill site. Bermuda grass (*Cynodon* sp.) and European sea lavender (*Limonium duriusculum*) have been identified on site and are a persistent problem. These invasive species create large, thick stands that push out native species and cover sandy habitat ideal for nesting and foraging. The goal of invasive plant control is to contain the spread of these species and prevent the introduction of new invasive species. During the grant period, mechanical and manual weeding will be conducted as part of site preparation. Herbicide will be applied to Bermuda grass by a licensed applicator. European sea lavender will be solarized and/or hand weeded.
- **Volunteer Events and Environmental Education Outreach:** Organize and supervise at least two volunteer events focused on environmental education with at least one local CBO Network Community. Event activities include removing debris (i.e., shoreline cleanup activities), preparing nesting sites (i.e., invasive plant weeding), and promoting support for the protection of the Bay's natural resources. Volunteer events will include Port environmental staff and USFWS staff to provide education on endangered and invasive species, local watersheds and the San Diego Bay, and environmental career paths.

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

Port staff will administer the project and grant. The Port will provide in-kind match in the form of staff time, supplies, and equipment. To manage vegetation within the 30-acre least tern nesting area, the site will be scraped by Port contractors operating a grader or tractor. For least tern/plover surveys and monitoring, Port staff will sub-contract Robert Patton, a USFWS permit-holder and lead biological monitor for least tern nesting site throughout San Diego Bay. Robert Patton and his biologists will perform all monitoring and management activities, including providing recommendations for future management actions for the 2024 nesting season. The Port will coordinate with Robert Patton and provide guidance on site management. For invasive species control, Port contractors (licensed applicators) will apply herbicide under the direction of Port environmental staff. Port environmental staff will also coordinate with USFWS to apply solarization techniques on persistent invasive European sea lavender. For predator management, Port staff will sub-contract with USDA Animal and Plant Health Inspection Service (APHIS) Wildlife Services (Wildlife Services, USFWS permit-holder) for predator control services. Wildlife Services will perform all predator control activities, including predator monitoring and trapping, discerning immediate and future predator impacts, implementation of control measures, and regulatory reporting. The Port has an ongoing commitment to site management and has retained the services of Robert Patton in past years. If activities under the sub-contract fall under any prevailing wage statutes he will have the responsibility to notify San Diego Unified Port District and SANDAG, and adhere to the Labor Code and SANDAG prevailing wage contract requirements.

Funding Needs Summary

Please indicate how much funding is being requested from SANDAG.

Budget Item	Requested Funding Amount	Description
Personnel Expenses Staff	\$0	Includes staff time for non-administrative work on the project
Personnel Administrative Expenses	\$0	Includes all staff time to administer the contract
Consultant/Contractor Expenses	\$79,500	Includes all costs for consultant/contractor services
Other Direct Expenses	\$500	Includes all equipment, supplies, mileage, etc.
Totals	\$80,000	

**if applicable*

Project Application

The application will include: (a) the purpose of the project; (b) the scope of work by tasks; (c) the proposed budget by task; and (d) a schedule for each task. Applicants must clearly identify their proposed tasks in the scope of work, funding requested for each task (please identify staff hours and cost separately from consultant/contractor costs), start and end dates of the tasks, and deliverables.

Project Purpose

Please describe how the proposed project meets the following criteria:

1. The proposed project specifically addresses relevant high-priority Management Strategic Plan (MSP) species and their habitats. Refer to the [MSP for Conserved Lands in Western San Diego County](#).

The project will support the management and recovery of two federal and state-listed species, the California least tern (Species Management Focus Category SO) and western snowy plover (Species Management Focus Category SL), which utilize the D Street Fill during their breeding and nesting season every year. This project achieves all identified objectives for successful monitoring including, conducting annual predator control and monitoring predator-tern/plover interactions (STEANT-1); monitoring predator control effectiveness to improve fledgling success (STEANT-2); continued surveying during and after nesting season (STEANT-3); annually inspecting the nest sites and identifying necessary management actions (STEANT-4); and performing routine management activities such as invasive removal and limiting or removing occurrences of disturbance through fencing, signage, and enforcement (STEANT-5).

2. The proposed project will address an urgent need and includes actions that will reduce or manage an identified threat.

Factors contributing to least tern Category SO status and snowy plover Category SL status include the loss and degradation of nesting habitat and an increasing concentration of predators, which can cause a significant level of loss to a nesting colony in a matter of days or a single season. Intensive monitoring and management have allowed San Diego County's least tern population to increase since the late 1970s. Due to lack of nesting sites that are in a natural condition, and human-related pressure on all nesting beaches within its limited range, continued management is required to maintain the least tern nesting territories needed for its survival. The snowy plover is among San Diego County's scarcest and most threatened breeding birds and continues to experience a high risk of decline. Actions conducted by this project will help achieve USFWS management goals for both least terns and snowy plovers at the D Street Fill.

Least terns and snowy plovers nest on sandy beaches with little to no vegetation. For successful breeding and nesting, they require low vegetation density and height, and low predator density. Appropriate sites with minimal human disturbance are extremely limited in coastal southern California, making the D Street Fill a critical nesting site that regularly supports the greatest number of least tern nests of any nesting site within San Diego Bay. While these species are primarily present at the D Street Fill during the breeding and nesting seasons, managing the site is a year-round effort. USFWS and the Port jointly manage the site for the breeding and nesting requirements of these two species.

The proposed project involves site preparation, management and monitoring of high priority species, predator control, and invasive species removal at the D Street Fill. These are critical activities for maintaining the site as suitable nesting habitat for the least terns and snowy plovers. If the activities are not performed, the site would quickly become unsuitable nesting habitat overrun with invasive plants and predators, threatening the least tern population that nests at the site each year. Additionally, site management is needed to maintain the snowy plover nest habitat enhancement that previously occurred at the site and to maintain snowy plover foraging habitat.

3. Success criteria have been identified and will be monitored and reported. Success of the proposed project is likely with clear, measurable, proven results that will promote conservation.

Success criteria and reporting for the management strategies listed in question 2 includes the following:

Site Preparation: Shoreline debris and vegetation removal prior to the 2023 nesting season.

Management and Monitoring: Least tern adult, nest, egg, chick, and fledgling data, nest distribution in relation to the restoration area, breeding and productivity chronology, and reporting.

Predator Management: Daily predator management, implementation of predator reduction strategies, success of implemented strategies, and reporting.

Invasive Plant Control: Invasive species identified and implementation of invasive species reduction activities (i.e., herbicide application, solarization, and manual/hand removal).

Volunteer Event(s) and Education Outreach: Number of volunteer events completed and number of participants and work volunteers from CBO Network Communities.

Site preparation and management activities at D Street Fill are tailored to the nesting habitat needs of least terns and snowy plovers. The habitat must be actively managed and maintained to meet nesting requirements for these species. Successful preparation of the site under this project will make 30 acres available for the 2023 least tern nesting season. Invasive plant and predator control will occur over approximately 42 acres for the 2023 and 2024 breeding seasons. Measurable success will be documented as described above. For example, surveys will be conducted to collect least tern adult, nest, egg, chick, and fledgling data, nest distribution within the site management area, breeding and productivity chronology, and predator management.

4. Any activities necessary to maintain the proposed project after the 18-month grant period have been identified and funding for those activities has been secured. Please explain what source of funding (if any) has been used to fund this activity in the past and what kind of funding is available to support this work in the future (if needed).

After the completion of this project, USFWS and the Port will continue to jointly manage the D Street Fill for least terns and snowy plovers by contributing staffing, materials, and resources. SANDAG provided funding to assist in site management activities that were conducted in 2013, 2014, and 2015. The Port was most recently awarded funding from the ninth grant cycle of the Transnet EMP Land Management grant program in 2018 to conduct site preparation, monitoring, and predator management for the 2019 and 2020 nesting seasons. The Port and USFWS will continue to seek grant funding to support management activities, as well as use operational budget funds, non-profit efforts (e.g., San Diego Audubon Society, The Living Coast Discovery Center, South Bay Sustainable Communities, and/or Urban Corps of Engineers), and volunteer events to accomplish species threat reduction and stewardship at the D Street Fill.

5. To be eligible for funding, the proposed project must be on lands conserved for native habitat within the MSP area. Where is the project located and where work will be conducted? (Attach a map)

The activities will take place in Management Unit 1 (San Diego Bay) at the D Street Fill located in Chula Vista, San Diego County, California (Attachment A). The D Street Fill is located on the eastern side of San Diego Bay, to the west of Interstate 5, south of the Sweetwater River flood control channel, and within the Sweetwater Marsh Unit of the San Diego National Wildlife Refuge and Port-designated conservation lands.

Sensitive species management at the site is guided by the San Diego Bay Integrated Natural Resources Management Plan (INRMP), a long-term collaborative strategy between the U.S. Navy and the Port for managing San Diego Bay's natural resources. The Port manages impacts to the least terns and snowy plovers and makes a commitment to provide secure nesting sites that allow for population recovery of these and other declining species under the guidance of the INRMP. Per the Port Master Plan, the Board of Port Commissioners has designated the southwestern half of the D Street Fill area for conservation in order to protect least terns and snowy plovers. The USFWS has also designated portions of D Street Fill site as critical habitat for snowy plovers. The majority of the project site is within the National Wildlife Refuge. The conservation requirement protecting the D Street Fill site is satisfied by California Coastal Commission permitting requirements and legislative mandates governing the National Wildlife Refuge.

6. 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.

SANDAG Community-Based Organizations (CBO) represent the top 50% of communities identified as "most vulnerable" by CalEnviroScreen. The most recent CalEnviroScreen data shows that there are several communities (identified by census tract) near the D Street Fill project site that range from 50th to 90th percentile in overall vulnerability score. The Port seeks to continue its partnership with The Living Coast Discovery Center, a member of the Chula Vista Community Collaborative (CBO network community partner), located within the National Wildlife Refuge and adjacent to the D Street Fill. The Living Coast provides environmental education opportunities through shoreline cleanup and invasive species removal events. The Living Coast also sponsors education programs for Title 1 schools to educate local youth on the issues of climate change, watershed science, endangered and invasive species, sea level rise, and other environmental topics. Restoring the adjacent nesting site at the D Street Fill will help advance education opportunities for disadvantaged youth in the neighboring communities to explore the topics of natural resource and endangered species management.

Restoring the nesting site will also provide improved access for neighboring disadvantaged communities. The D Street Fill is adjacent to Pepper Park, located just north of the Sweetwater Channel, which is a free, public access park managed by the Port. From the park, community members can view the National Wildlife Refuge and the D Street Fill. Least terns are visible from the park during the nesting season. Pepper Park also offers kayaking opportunities to view the shoreline and habitat area from the water. The D Street Fill is not open to the public in order to protect these ground nesting birds from human impacts.

Scope of Work by Task

Please break down the application into discrete tasks and include a task name, description of each task, quantifiable expected results, and discrete deliverables for each task.

Note: make sure to 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 A – Proposed Project Scope of Work

Task No.	Task Name	Task Description	Quantifiable Results/Deliverables
1.	Site Preparation	Mechanical scraping of the site to reduce vegetation and enhance it for use by California least terns and western snowy plovers (2023 nesting season)	Increase quality and quantity of available nesting habitat with low vegetation height and density over approximately 30 acres.
2.	Management and Monitoring	Remove non-native invasive plants; prune back vegetation to reduce predator cover and potential raptor perches; deploy survey grid system; place adult bird decoys and ceramic tiles for chick shelters; monitor nesting; data collection and entry; and reporting for least terns, snowy plovers, and other sensitive species. (2023/2024 nesting seasons).	Successful site prep for 2023/2024 least tern breeding and nesting seasons. Provide a detailed report including least tern adult, nest, egg, chick, and fledgling data; documented incidences of predation; GPS nest distribution; document breeding and productivity chronology; and reporting for other species present.
3.	Predator Management	Management of avian and mammalian predators conducted by USDA APHIS Wildlife Services (2023/2024 nesting seasons).	Perform daily predator control as required during the least tern nesting season. Reduction in predation of least tern and other sensitive species. Reporting of monthly predator management activities and results.
4.	Invasive Plant Control	Apply herbicide to invasive plant species as needed over two growing seasons (2023/2024).	Conduct 1-3 herbicide treatment efforts to reduce or eliminate the presence of new and existing invasive plant species on site.
5.	Volunteer Events and Environmental Education Outreach	Organize and supervise at least two volunteer events within at least one CBO Network Community to assist in site preparation and promote support for the protection of the Bay's natural resources.	Completion of at least two volunteer events.
6.	Administrative	Administration of the project and grant management will be accomplished by Port staff.	Invoicing, quarterly reports, and final report.

Budget by Task

Please include a specific budget for each task described in the Scope of Work (Section B above).

This funding category is intended to fund short-term threat reduction projects in need of one-time funding necessary to fill existing funding gaps for specific tasks and will not cover on-going annual costs within applicant's organization.

Exhibit B – Proposed Project Budget

Task No.	Task Name	Grant Request
1.	Site Preparation (2023)	\$5,000
2.	Management and Monitoring (2023-2024)	\$38,000
3.	Predator Management (2023-2024)	\$31,000
4.	Invasive Plant Control (2023-2024)	\$5,000
5.	Volunteer Events and Environmental Education Outreach (2023-2024)	\$1,000
6.	Administration	\$0.00
	Subtotal	\$80,000
	Total	\$80,000

Project Schedule

Please include start and end dates relative to the anticipated Notice to Proceed (NTP) (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. *All tasks must be completed within 18 months of the NTP.*

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.	Site Preparation	"3" Months from NTP	"1" Months	03/31/2023
2.	Management and Monitoring	"2" Months from NTP	"16" Months	05/31/2024
3.	Predator Management	"3" Months from NTP	"16" Months	05/31/2024
4.	Invasive Plant Species Control	"3" Months from NTP	"16" Months	05/31/2024
5.	Volunteer Events and Environmental Education Outreach	"2" Months from NTP	"16" Months	05/31/2024
6.	Administration	"1" Months from NTP	"18" Months	06/31/2024

Please explain why and how much additional time would be needed in the event of any delays due to NTP being provided beyond fall 2022 and/or unexpected weather conditions such as drought that could occur during the proposed project implementation.

If the NTP is issued by November 2022, then no delays to the proposed work would occur. If the NTP is issued later (in spring 2023), then some level of site preparation activities would be conducted without grant funding for the 2023 nesting season; however, they are likely to be limited by budget constraints and may not achieve maximum benefit to the species. In this case, once grant funding is provided, proposed activities would continue into the subsequent nesting seasons.

Drought conditions would generally decrease the work required for site preparation and weed management activities and increase the overall success of these efforts. Rain and storm events have potential to cause minor delays in project implementation, but no additional time would be needed to perform the tasks outlined in the application.

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
- 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) 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); 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.

Barbarah Torres, Grants Coordinator

Applicant Name and Title (print or type)

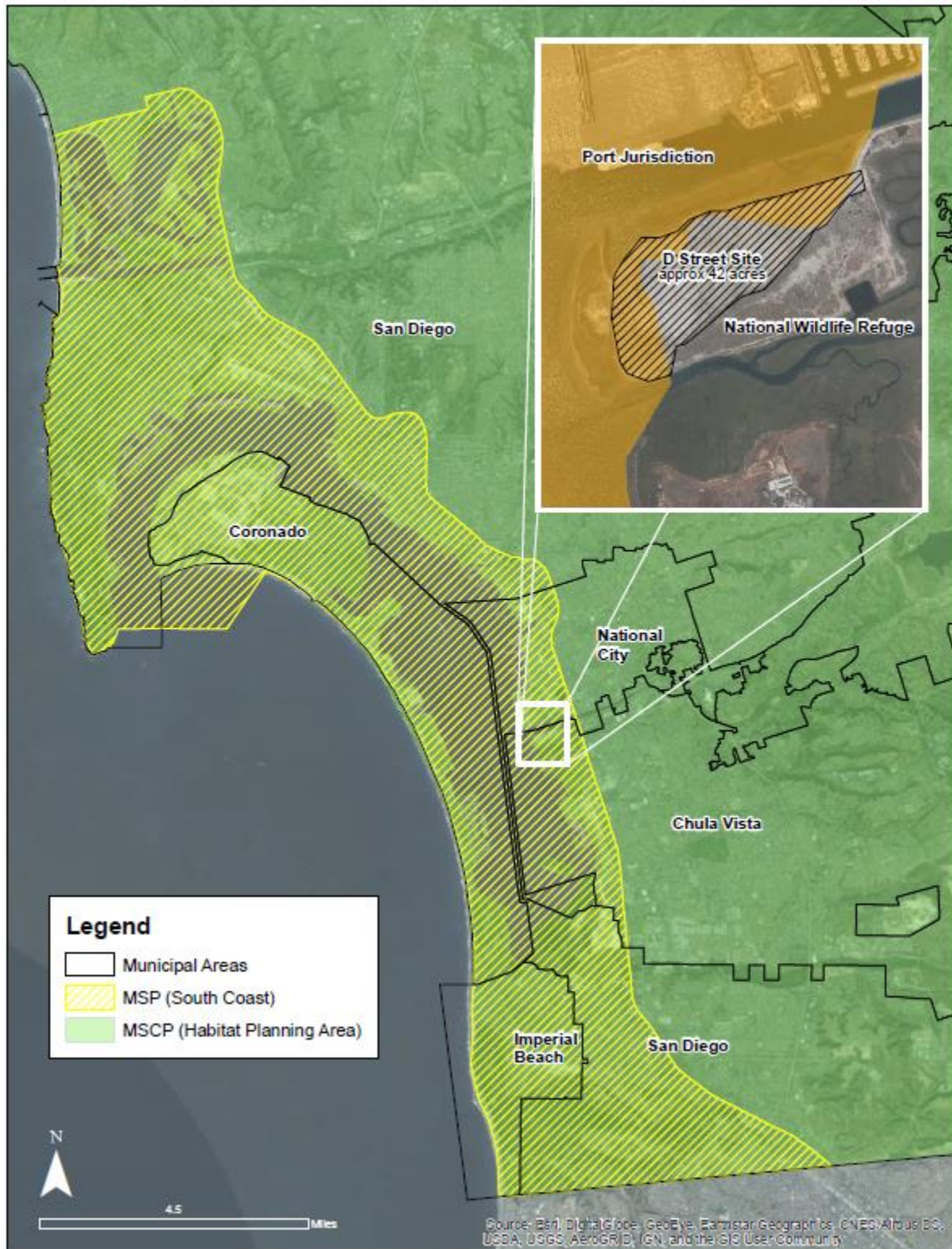
Barbarah Torres

1/26/2022

Applicant Signature

Date

Attachment A



The D Street Fill project site is located along the eastern shore of San Diego Bay, west of Interstate 5, south of the Sweetwater Rover Channel, and within the City of Chula Vista, San Diego County, California. The site is jointly managed by the Port of San Diego and the San Diego National Wildlife Refuge.