



CALL FOR PROJECTS FOR THE NINTH CYCLE OF THE
TransNet ENVIRONMENTAL MITIGATION PROGRAM
LAND MANAGEMENT GRANT PROGRAM
SPECIES AND HABITAT RECOVERY GRANT APPLICATION FORM

Grant Application Form and required supplementary materials (hereafter referred to as "proposal") cannot exceed 12 pages.

Applicant Name¹: Los Peñasquitos Lagoon Foundation (LPLF)

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Name of Property: Los Peñasquitos Lagoon (LPL), Torrey Pines State Natural Reserve (TPSNR)

General Location: San Diego County, North County Coastal

Jurisdiction: City of San Diego (Dist 1), County of San Diego (Dist 3)

Total Acres: 565 acres

Estimated Acres Requiring Management: 3.5 acres

Owner(s) of Property²: CA State Parks (CSP)

Land manager(s) of property (include name[s]): CSP, LPLF

Brief Project Summary that includes your primary goal and objectives (200-word maximum)

Preserving Nuttall's Acmispon at Torrey Pines State Natural Reserve & Los Peñasquitos Lagoon, a State Natural Preserve (Project) presents a multi-tiered approach to strengthen the resiliency of existing populations of Nuttall's acmispon (NULO) located within Los Peñasquitos Lagoon and along coastal bluffs adjacent to Torrey Pines State Beach. The goal of the Project is to protect and enhance NULO populations at existing locations with the opportunity to expand the overall populations in locations determined as suitable habitat for this SO species. Project objectives include: 1) Establish a baseline for all occurrences of NULO within TPSNR and LPL, characterize threats/stressor at each location, and assess opportunities/constraints for expanding populations of NULO and complimentary species; 2) Implement protective barriers (as needed) to reduce the risk of trampling; 3) Develop and implement invasive plant removal and a maintenance plan for all occurrences of NULO and adjacent areas; 4) Restore beach and dune habitat near NULO populations within LPL in conjunction with inlet maintenance; 5) Expand NULO populations and complimentary species using plantings and temporary irrigation; and 6) Promote stewardship of NULO and its habitat through outreach and education, as well as with volunteer opportunities.

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

² If the applicant is not the landowner, please submit a letter or right-of-entry permit from the land owner granting permission to perform the land management duties as outlined in the proposal. Failure to provide the letter or right-of-entry permit will lead to disqualification of the proposal. Attached letter or right-of-entry permit (if applicable) does not count towards 12-page maximum.

Quantify Expected Results *(add bullets as necessary)*

- Enhancement and preservation of > 1-acre of existing NULO populations in TPSNR and LPL.
- Expansion and preservation of up to 2.5 acres of NULO in TPSNR and LPL.
- Restoration/enhancement of dune and beach habitats to protect the large population of NULO located within the Lagoon's inlet area.
- Removal of invasive plant species within the combined project area (3.5 acres) to improve the viability and enhancement of NULO populations in TPSNR and LPL.
- Long-term maintenance of NULO populations through community-based volunteer groups supported by CSP and LPLF.
- Improved protection of dune and salt marsh habitat within LPL from sea level rise through the construction of soft barriers (i.e. beach and dune) that will abate sand loss and loss of vegetated areas from storm surges and wave activity that can undercut channel banks.
- Improved nesting/foraging habitat for western snowy plover and other avian species that use dune and beach habitats.
- Protection of foraging habitat for light-footed clapper rail, osprey, and migratory birds through restored tidal circulation to maintain water quality parameters needed for aquatic species (e.g. invertebrates, fish) that serve as a key food source for these avian species.
- Restoration of tidal circulation to protect nesting habitat Belding's savannah sparrow from inundation that can occur during inlet closures.
- Protection of refuge/resting habitat for elegant terns, California brown pelicans and migratory birds through restoration of beach habitat within the inlet area and maintaining tidal circulation in lagoon channels to avoid inundation caused by floodwaters from the watershed.

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

Mike Hastings (LPLF Executive Director) and Cara Stafford (CSP's Environmental Scientist) will lead the project team and will be directly involved with the management of CSP staff and volunteer groups for invasive removal, revegetation efforts, habitat restoration, and site maintenance. Mr. Hastings has lead inlet excavation work at Los Peñasquitos Lagoon (LPL) since 2003 and will coordinate efforts for dune restoration during annual inlet maintenance and lead trash and debris clean ups adjacent to and within project sites in coordination with CSP staff. Ms. Stafford has participated in the successful recovery NULO populations at Silver Strand State Beach and leads ongoing invasive removal, native revegetation and monitoring programs within the San Diego Coastal District, including LPL and other areas within the TPSNR. Scientists from the Tijuana River National Estuarine Research Reserve (TRNERR) will perform monitoring of aquatic and terrestrial environs of LPL, pursuant to the established annual monitoring program. Dr. Jeff Crooks (TRNERR, Research Coordinator) will QAQC monitoring efforts, including data review and managing TRNERR field and laboratory staff. Planning and implementation efforts will be coordinated with Doug Gibson and staff from the San Elijo Lagoon Conservancy who have shown proven success in recovering NULO populations at San Elijo Lagoon. With over 30 years of experience working in sensitive lagoon environs that include LPL, Roberts Engineering will be hired to perform mechanical excavation of the inlet area to maintain tidal circulation within lagoon channels needed to avoid flooding of NULO populations within LPL that occurs during prolonged inlet closures. During each opening, between 5,000 – 10,000 cubic yards of excavated sand will be used to restore dune habitat to provide a buffer to the existing population of NULO within the inlet area and potential expansion at this location during annual inlet work.

Funding Needs Summary

Please indicate how much funding is being requested from SANDAG and any matching funding proposed.

Budget Item	Requested Funding Amount	Proposed Matching Funds*	Description
Personnel Expenses Staff	\$80,000	\$3,000	Includes staff time for non-administrative work on the project
Personnel Administrative Expenses	\$15,000	\$500	Includes all staff time to administer the contract
Contractor Expenses	\$20,000	\$240,000	Includes all costs for contractor services
Other Direct Expenses	\$40,000	\$1,500	Includes all equipment, supplies, mileage, etc.
Indirect Costs ³	\$0	\$0	All indirect charges (e.g., overhead) on the project, if any.
Totals	\$155,000	\$245,000	

*if applicable

Are there matching funds available? Yes No

If yes, how are the matching funds assured (*100-word maximum*)? In-kind services will be provided through an executed contract with the City of San Diego for inlet restoration using heavy equipment (Task 4). CSP will provide in-kinds services that includes staff time, Right of Entry and other associated support of the project.

Attach a letter from the organization/partner that ONLY provides confirmation that they are committed to providing the matching funds proposed for this project. Letters confirming matching funds will not count toward the 12-page limit. (General letters of support not related to commitment of matching funds will NOT be accepted and will NOT be considered as part of the proposal).

PROJECT PROPOSAL

The proposal will include (A) the purpose of the project, (B) the scope of work by tasks, (C) the proposed budget, including matching funds, 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 costs), start and end dates of the tasks, and deliverables. *Applicants are encouraged to identify phasing and prioritization of tasks in their proposal in case full funding for the project is not available.*

³ Indirect Costs are only allowable if: (1) applicant has an indirect cost allocation plan audit approved by a qualified independent auditor or (2) the applicant's proposed method for allocating indirect costs is submitted with the proposal in accordance with [OMB guidelines](#) and approved by SANDAG. Indirect costs will not be reimbursed until one of the two conditions above are satisfied and indirect cost allocation plans must be renewed annually. **The indirect cost methodology (if applicable) included with the application does not count toward the 12-page maximum.**

A. Project Purpose

Address the following in the proposal:

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)? The proposed project ***Preserving Nuttall's Acmispon at Torrey Pines State Natural Reserve & Los Peñasquitos Lagoon, a State Natural Preserve*** (Project) presents a multi-tiered approach that aims to provide both regional and localized benefits to populations of Nuttall's acmispon (NULO) from stressors identified in the MSP for Conserved Lands in MU7 that include: altered hydrology, edge effects, fragmentation, urban runoff, sea level rise, and human use. These threats greatly affect the native habitats and species within the Torrey Pines State Natural Reserve (TPSNR) and Los Peñasquitos Lagoon (LPL) and have lead to loss of dune and salt marsh habitat due to erosion, habitat conversion, loss of sensitive plant and bird species, threats to both local and migratory bird species, and exposure of local community members and park visitors to vector-borne disease. The Project is aligned with both the MSP's overall management goal and MU7 management goals for for NULO that include: 1) To maintain and enhance large populations of NULO (> 500 individuals) and 2) To protect and expand the small populations of NULO (i.e. < 500 individuals) to enhance chances of long-term viability of this species (See Figure 2 on page 14 for current NULO populations in TPSNR and LPL based on recent surveys by California State Parks). Achieving these goals will require developing and implementing management activities for NULO in conjunction with larger-scale management efforts within TPSNR and LPL that include annual inlet maintenance at the Lagoon and invasive species management programs. Management activities for the Project will include routine monitoring and maintenance of populations of NULO within TPSNR and LPL; restoration of dune and beach habitat to protect the existing populations of NULO near LPL's inlet area; plantings of NULO and complimentary plant species to enhance restored dune habitat at the Lagoon inlet and facilitate expansion of other NULO populations within TPSNR and LPL at existing and potentially new locations (See Figure 2); and facilitating the development and future implementation of the MSP's management plan for populations of NULO within TPSNR and LPL, as well as regionally.

Currently, there are no management activities specifically for NULO in TPSNR or LPL and the Project will be the first step in setting up a management program for NULO. Such an effort is consistent with the goals and objectives of the updated Los Peñasquitos Lagoon Enhancement Plan (Plan) that identifies protection of the Lagoon's sensitives species as a priority. The Plan has served as the key management document for LPL since 1985 and has been successful in addressing many of the urban stressors highlighted in the MSP for Conserved Lands in MU7 through adaptive management. In 1987 the Plan facilitated the establishment of the Lagoon's long-term, continuous monitoring program that has documented shifts in plant assemblages and habitat types along established transects due, primarily, to urban stressors and transportation infrastructure. The monitoring program also was designed to measures water quality parameters within lagoon channels to assess the health of aquatic habitats and help guide efforts to restore tidal circulation within lagoon channels through the use of heavy equipment. The Plan was recently being updated to better reflect current lagoon and watershed conditions; altered trends in urban stressors and other driving forces that affect Lagoon health; and potential impacts and/or opportunities related to climate change. Current efforts have included vegetation association mapping using 2014 aerial imagery and field surveys to ground-truth habitat types, associations, and individual plant species within LPL. This map includes delineation of plant association polygons throughout the Lagoon and its immediate uplands; qualification of habitat type; occurrences and locations of invasive plants; and locations of sensitive plant species that include NULO.

2. 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. Protecting and enhancing current occurences of NULO in LPL require the removal of invasive plants that have become established within

the both remnant dune areas with *Carpobrotus edulis* and *Acacia latifolia* being the primary invasive species. Removal of these invasives in areas that do not currently have NULO present additional opportunities to expand the occurrences of this SO species in LPL and TPSNR, which includes a small population located along the coastal bluffs that border Torrey Pines State Beach. While the most current data has not been provided to the San Diego Management and Monitoring Program, CSP and LPLF will ensure that this data is shared and updated as needed to allow a more effective approach for local and regional management and monitoring needs. No fire management actions are needed nor anticipated.

3. 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. The Project will implement several management activities that will provide direct benefits to NULO, a “Category SO” species identified in the MSP as “a species whose persistence of one or more significant occurrences in the MSPA is at high risk of loss without immediate management action above and beyond that of daily maintenance activities.” Specific objectives and actions that will be implemented for improved management of NULO populations within TPSNR through the Project are in alignment with those identified in Vol. 3, P. 3A-8 and 3A-9 of the MSP. Management activities for large populations of NULO located just east of North Torrey Pines Road near the south parking lot at TPSNR and within the LPL inlet area (See Figure 2) will work toward achieving the MSP’s First Priority MU7 Management Objective F1 through the development and implementation of a site specific management directive that incorporates criteria that include: maintenance of existing and possible creation of additional sandy substrate openings to provide for NULO expansion; reduction of nonnative plant species to $\leq 10\%$ absolute cover; and enhancement/establishment of native plant species that naturally co-occur with NULO. Management activities for the small populations of NULO adjacent to the south parking lot of TPSNR and within LPL (See Figure 2) will follow the MSP’s Second Priority MU7 Management Objective for sites that support < 500 individuals through the reduction of nonnative plant cover to $< 20\%$ of the site’s total cover in an effort to increase the population to > 500 individuals. Actions to achieve Second Priority MU7 Management Objectives will include: evaluation of the small populations of NULO to determine management actions required to maintain the populations at existing levels and achieve MU7 management objectives; and evaluation of these sites to determine if increased management could provide habitat (e.g. spatial area and appropriate conditions) for > 500 individuals. Initial reconnaissance of areas occupied by NULO and potential sites within the Lagoon and south parking lot of TPSNR indicate that these populations could be increased (See Figure 2). This would be achieved through habitat restoration and enhancement efforts that would follow site specific management directives listed in the MSP for First Priority MU7 Management Objectives that include expansion of existing sandy substrate through dune/beach restoration adjacent to the current populations; additional reduction of non-native plant species to $\leq 10\%$ absolute cover; and enhancement by planting native plant species in the restored dune area within the Lagoon inlet that naturally co-occur with NULO. Results from monitoring the success of efforts at both TPSNR and LPL will be used to inform subsequent management actions for NULO at these locations and within other areas of MU7 using an adaptive approach.
4. To be eligible for funding, the proposed project must be within the MSP area. In which Management Unit is the project located? (Attach a map) The proposed project is within the MSP’s MU7 - North County Coastal Lagoons. Please see Figure 1 on attached map.
5. 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 proposal. Stressors/threats to populations of NULO at TPSNR and LPL include invasive plants (native and non-native), trampling, and sand loss. These stressors/threats will be addressed by the Project through as needed hand removal of invasive plant species and implementing appropriate barriers and signage to prevent trampling and inform the public about the value of NULO and its habitat. Sand loss would be addressed through annual sand replenishment efforts and dune restoration performed in conjunction with annual inlet maintenance, since sand excavated from the inlet can be placed adjacent to populations of NULO during disposal efforts. Sand replenishment will provide both a buffer for existing NULO populations from erosion and provide opportunities to expand these populations to adjacent areas. In addition, the populations of NULO located within LPL are also under threat from prolonged inundation of

brackish/fresh water impounded in lagoon channels during inlet closures that facilitate the establishment of invasive plant species and sand loss when impounded waters are released. Complimentary to the proposed project, inlet maintenance will be performed to ensure that tidal circulation is maintained within lagoon channels and to reduce the inlet's vulnerability to prolonged closures. Inlet maintenance will be funded separately from the Project through an existing contract with the City of San Diego and CSP. Long-term funding for inlet maintenance at LPL would be provided through an endowment developed by SANDAG as mitigation for impacts generated by future improvements to transportation infrastructure in coastal North County San Diego.

6. 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 Project proposes management techniques that include: continued surveys of existing populations of NULO; hand removal of invasive plants; implementing appropriate barriers and signage to prevent trampling and inform the public about the value of NULO and its habitat; restoration of a dune and beach area near the lagoon inlet adjacent to a large population of NULO; and sand replenishment efforts conducted in conjunction with inlet maintenance to provide both a buffer for existing NULO populations from erosion and opportunities to expand populations within TPSNR and LPL. Projects aimed at removing invasive plants and revegetation with preferred native species have been successfully implemented at TPSNR and LPL through a cooperative effort between CSP, LPLF and volunteers from neighboring communities. In addition, CSP currently conducts an ongoing program to reduce and eradicate invasive plant species within TPSNR and LPL. Building upon these efforts, a monitoring and maintenance program will be developed and implemented under the Project for all sites with NULO population and areas where NULO can be introduced. This program is supported by the updated Lagoon Enhancement Plan that lists managing sensitive species in LPL as a key priority. Initial efforts for invasive removal would be undertaken primarily by staff from CSP and LPLF and augmented by volunteer support. Volunteers will be trained in the identification of sensitive plant species, preferred native plant species, and invasive plant species, as well as the appropriate timing and methods needed to remove and dispose of invasive plants. Repopulation of preferred native species including NULO would follow a similar structure with CSP and LPLF staff leading the way with support from volunteers. Eventually, trained volunteers would conduct ongoing maintenance of NULO sites with regard to invasive removal with as needed oversight by CSP staff to assess the success of invasive plant removal viability of newly planted NULO and complimentary species. This approach has been successfully implemented through a recent project along Carmel Valley Road that removed large areas of invasive plant species, replanting of preferred native species, and ongoing maintenance performed by a volunteer group comprised of local community members and interested individuals from outside the community. Protecting NULO and other sensitive species to potential impacts (e.g. trampling) will be addressed through fencing to be placed, as needed, along populations of NULO. In addition, informative signs and/or panels will be installed in areas of pedestrian traffic to provide outreach and education about NULO, its habitat and the need to protect Conserved Lands. This approach has already been implemented at LPL to protect areas used by western snowy plover, inform the public about the some of the Lagoon's other valuable avian species, and the need/value of inlet maintenance to restore tidal circulation within lagoon channels. Sand replenishment and restoration of a remnant dune near the large NULO population within LPL will be performed in conjunction with annual inlet maintenance that has been conducted successfully by LPLF and CSP since 1985. Since 2007, heavy equipment has been used to place sand and cobbles adjacent to the NULO population located near the inlet at LPL to provide a buffer against erosion caused by storm surges and lagoon outflows after large flooding events. This effort has been successful in preventing loss of NULO in this area by protecting the back dune area where this population exists. Restoration of the dune and beach area near LPL's large NULO population is covered under existing permits for inlet maintenance and efforts to restore this area will have already been initiated prior to the Project to minimize costs and expedite restoration efforts. Impacts to sensitive species during dune restoration will be minimal and indirect, pertaining to noise from heavy equipment. As in the past, monitors from LPLF and CSP would be present during dune restoration efforts to assure that nesting birds are not impacted, heavy equipment does not enter vegetated areas, sand used to restore the dune is not placed on top of lagoon plants or potential nesting areas, and take of sensitive species is avoided.

7. 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? The long-term success of the proposed project will be supported through the recently updated Los Peñasquitos Lagoon Enhancement Plan (Plan) and complimentary watershed plans. Using a watershed-based approach supported by the public and other key stakeholder groups, LPLF recently updated the Plan to develop restoration alternatives and to identify the strategies needed to support long-term protection of LPL. The updated plan includes management actions needed to ensure the resiliency of its critical habitats and sensitive species (e.g. NULO) in light of urban stressors and predicted climate change. Components of the Plan were used to guide watershed-planning efforts developed by the City of San Diego and other responsible parties identified through the new Regional Storm Water Permit (Permit) and the recently adopted Los Peñasquitos Lagoon Sediment Total Maximum Daily Load (TMDL). Both the Permit and TMDL place heavy emphasis on reversing impairment of the Lagoon's processes caused by the urban stressors in order to restore LPL's function as a healthy salt marsh. Key components of the Plan and complimentary watershed plans include restoration of lagoon hydrology to support native salt marsh species and their habitats; invasive species management; reducing dry weather inputs of freshwater from the watershed that displace native salt marsh species; reducing sediment loads that impair lagoon hydrology; and funding long-term maintenance needed to sustain improvements. The Plan also explores improvements to public access around LPL and along the area of the NULO occurrences in TPSNR. Following CSP policy for managing Reserves and Preserves, emphasis will be placed on protecting sensitive species, such as NULO, while exploring opportunities to allow access to the public and facilitate outreach and education through the installation of informative signs and/or panels that highlight the importance of sensitive species and the management efforts needed to protect them. Inlet maintenance will be funded separate from the Project through an existing contract with the County of San Diego. Long-term funding for inlet maintenance at LPL would be provided through an endowment developed by SANDAG as mitigation for impacts generated by future improvements to transportation infrastructure in coastal North County San Diego. This endowment provides up to \$150,000/year for inlet work in perpetuity. Adjacent areas of Conserved Lands within TPSNR and LPL that have potential for providing additional NULO habitat will be considered to expand the population of this species to new locations. Please see Figure 2 for the locations of these adjacent areas that may provide suitable habitat for NULO.
8. 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 Project's goal is: To maintain, enhance, and expand populations of NULO located within TPSNR and LPL to enhance chances of long-term viability. Project objectives include: 1) Establish a baseline for all occurrences of NULO within TPSNR and LPL, characterize threats/stressor at each location, and assess opportunities/constraints for expanding populations of NULO and complimentary species; 2) Implement protective barriers (as needed) to reduce the risk of trampling; 3) Develop and implement invasive plant removal and a maintenance plan for all occurrences of NULO and adjacent areas; 4) Restore beach and dune habitat near NULO populations within LPL in conjunction with inlet maintenance; 5) Expand NULO populations and complimentary species using plantings and temporary irrigation; and 6) Promote stewardship of NULO and its habitat through outreach and education, as well as with volunteer opportunities. Measures of success will be assessed through comparing baseline data with follow up surveys to quantify NULO populations; presence/absence of invasive plants and related stressors; extent of expanded habitat for NULO; and the size of volunteer groups assisting the Project. CSP staff experienced with re-vegetation projects that include NULO (e.g. Silver Strand) will collect monitoring data with support from LPLF and biologists from TRNERR. TRNERR staff will also monitor lagoon health as part of the ongoing, long-term monitoring plan at LPL.
9. 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? Data and related mapping for dune restoration and NULO populations will be maintained by staff from CSP in .xls and ArcGIS formats. Data from biological and sediment monitoring will be kept by staff from LPLF and TRNERR and will be available upon request in various formats that include .xls and .csv. LPLF will prepare and submit all of the required reports for the project and facilitate data transfer.

10. 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? A version of the Project was partially funded by *TransNet* EMP funds in FY13. However, this project focused more on indirect benefits to NULO and other sensitive plant and bird species in LPL through excavating the lagoon inlet to restore and maintain tidal circulation in lagoon channels. Initial efforts to restore the dune and beach area adjacent to the NULO population within LPL did occur under the previous project. However, efforts aimed at protecting existing dune and salt marsh vegetation from sand loss, rather than to expand existing NULO populations. Additional funds for the Project are being requested to build upon this previous effort under the FY13 grant and to implement goals and objectives expressed in the MSP for NULO and other priority species.

11. Is the proposed activity being done on land that was previously set aside as mitigation? If yes, please elaborate.
No.

B. Scope of Work by Task

Please break down the proposal 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	Project Management & Contract Administration	Includes management and coordination of project activities and schedules, as well as invoicing and contract management.	Invoices; Updated scheduling.
2	Conduct Baseline Surveys and Site Assessments of NULO populations at TPSNR and LPL	Establish baseline for both NULO populations, characterize threats/stressor at each location, and assess opportunities/constraints for expanding both occurrences. In addition, NULO populations within LPL will be surveyed, delineated and digitized for inclusion in the MSP.	Estimated populations of NULO at both sites. Site Assessment & Evaluation Report. Updated map of current populations of NULO within TPSNR and LPL in GIS format.
3	Protect existing NULO populations and habitat enhancement areas.	Install temporary protective barriers around project areas as needed to protect NULO and its habitat from trampling. Design and install informative signs and/or panels to promote public education and awareness of project activities and importance of protecting NULO and its habitat in compliance with CSP policy for design and installation. Purchase plant protectors to be used in Task 5.	Photos of protective barriers and informational signs and/or panels installed near project sites.
4	Inlet Excavation & Dune Restoration	Removal of marine sediments from the inlet area through mechanical excavation to restore tidal circulation and flushing of water within LPL's channels. Excavated sand will be used to restore and enhance the remnant dune and beach areas to protect existing populations of NULO	Quantified loads of sand removed from LPL inlet; Delineation of remnant dune area before and after restoration; Photo documentation.
5	Enhancement of NULO Populations in TPSNR and LPL	Initiate invasive plant removal within delineated project areas followed by plantings of NULO and other complimentary species. Temporary irrigation will be installed to facilitate plant growth	Plant palette and diagram for revegetated areas including the restored dune; Map of enhanced and/or expanded populations of NULO within TPSNR and LPL in GIS format.
6	Monitoring & Maintenance	Tracking success of revegetation efforts conducted under Task 5 through surveys of NULO populations and assessment of restored/enhanced habitat. In addition, biological, physical and sediment monitoring data will be compiled and reviewed to assess Lagoon health. Project areas will be maintained (e.g. removal of trash and weeds) to facilitate success of existing and expanded populations of NULO.	Results from NULO surveys and site inspections; Estimated volume of invasive plants removed from the project site and predominant species; Photo-documentation; and # of volunteers. LPL Specific - Water quality data; Vegetation assemblages; Fish surveys; and Inlet elevation profiles.
7	Reporting	Reporting will be prepared and submitted to SANDAG staff.	Quarterly Reports & Final Report

C. 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 proportionately².* Applicants are encouraged to identify phasing in their proposal 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 ¹	Year 2 Grant Request	Year 2 Matching Funds ¹	Year 3 Grant Request	Year 3 Matching Funds ¹	Total Grant Request	Total Matching Funds	Total Project Cost
1	Project Management & Contract Administration	\$15,000	\$500	\$5,000	\$500	\$5,000	\$0	\$25,000	\$1,000	\$26,000
2	Conduct Baseline Surveys and Site Assessments of NULO populations at TPSNR and LPL	\$10,000	\$500	\$0	\$500	\$0	\$0	\$10,000	\$1,000	\$11,000
3	Protect existing NULO populations and habitat enhancement areas.	\$20,000	\$500	\$10,000	\$500	\$0	\$0	\$30,000	\$1,000	\$31,000
4	Inlet Excavation & Dune Restoration	\$0	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$240,000	\$240,000
5	Enhancement of NULO Populations in TPSNR and LPL	\$25,000	\$500	\$15,000	\$500	\$0	\$0	\$40,000	\$1,000	\$41,000
6	Monitoring & Maintenance	\$10,000	\$500	\$15,000	\$500	\$0	\$0	\$25,000	\$1,000	\$26,000
7	Reporting	\$10,000	\$0	\$15,000	\$0	\$0	\$0	\$25,000	\$0	\$25,000
Sub Total		\$90,000	\$122,500	\$60,000	\$122,500	\$5,000	\$0	\$155,000	\$245,000	\$400,000
Indirect Cost (__%)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL		\$90,000	\$122,500	\$60,000	\$122,500	\$5,000	\$0	\$155,000	\$245,000	\$400,000

D. Project Schedule

Please include start and end dates relative to the anticipated Notice to Proceed (assumes Fall 2018) 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 Fall 2018 Notice to Proceed [NTP])

Task No.	Task Name	Proposed Start Date	Months Needed to Complete Task	Task End Date
1	Project Management & Contract Administration	NTP	"27" Months	1/08/2021
2	Conduct Baseline Surveys and Site Assessments of NULO populations at TPSNR and LPL	"6" Months from NTP	"3" Months	6/28/2019
3	Protect existing NULO populations and habitat enhancement areas.	"9" Months from NTP	"16" Months	10/9/2020
4	Inlet Excavation & Dune Restoration	"4" Months from NTP	"17" Months	6/30/2020
5	Enhancement of NULO Populations in TPSNR and LPL	"10" Months from NTP	"15" Months	11/30/2020
6	Monitoring & Maintenance	"9" Months from NTP	"18" Months	12/04/2020
7	Reporting	"1" Month from NTP	"26" Months	1/08/2021

Please explain why and how much additional time would be needed in the event of any delays due to NTP being provided beyond Fall 2018 and/or unexpected weather conditions such as drought that could occur during the proposed project implementation. LPLF does not expect any additional time would be needed under these circumstances.

NOTICE REGARDING PREVAILING WAGES

SANDAG’s EMP Land Management Grant Program projects are funded with *TransNet* revenues consistent with the *TransNet* Extension Ordinance adopted by the voters in November 2004 (SANDAG Ordinance 04-01). Although SANDAG Ordinance 04-01 does not require payment of prevailing wages, California law may require that public works projects pay prevailing wages for workers.

Applicant acknowledges that SANDAG has strongly encouraged Applicant to seek legal counsel regarding whether the Proposed Project will require applicant to pay prevailing wages and agrees that SANDAG will have no liability for conducting this analysis. Yes No

Applicant acknowledges that if awarded an EMP Land Management Grant, the grant agreement between SANDAG and the grantee requires grantee’s compliance with all federal, state and local laws and ordinances applicable to the Agreement. Yes No

REQUIRED STATEMENTS FROM APPLICANT

- Yes No The applicant has read and understands the Sample Grant Agreement (Agreement) and Invoice Template (Attachment 4).
- Yes No If the SANDAG Board of Directors approves the proposed project proposal, the proposed applicant agrees to sign and return the Agreement to SANDAG, without exceptions or amendments, within 45 days of receipt.
- Yes No 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 the following link: sandag.org/organization/about/pubs/policy_035.pdf
- Yes No The applicant understands that 10 percent of all invoices will be retained until the completion of the proposed project.
- Yes No The applicant understands that for proposed projects with matching funds, retention will be withheld beyond the 10 percent 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.
- Yes No 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.
- Yes No The applicant understands that invoices and reports must be submitted on a quarterly basis within three weeks after the period covering January 1 to March 31; within three weeks after the period covering April 1 to June 30; within three weeks after the period covering July 1 to September 30; and within three weeks after the period covering October 1 to December 31.
- Yes No The applicant understands that the EMP quarterly report template (to be sent to the grantee after NTP is issued) 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.
- Yes No 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 all outstanding deliverables in order to receive final payment and have retained funds released.
- Yes No 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 proposals. SANDAG will provide applicants with advance notice of the Regional Planning Committee's anticipated meeting date.
- Yes No The applicant agrees to submit all project data/information to SANDAG in a format compatible with the regional management database.

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

Mike Hastings, LPLF Executive Director

Applicant Name/Title (print or type)


Applicant Signature

1/12/18

Date

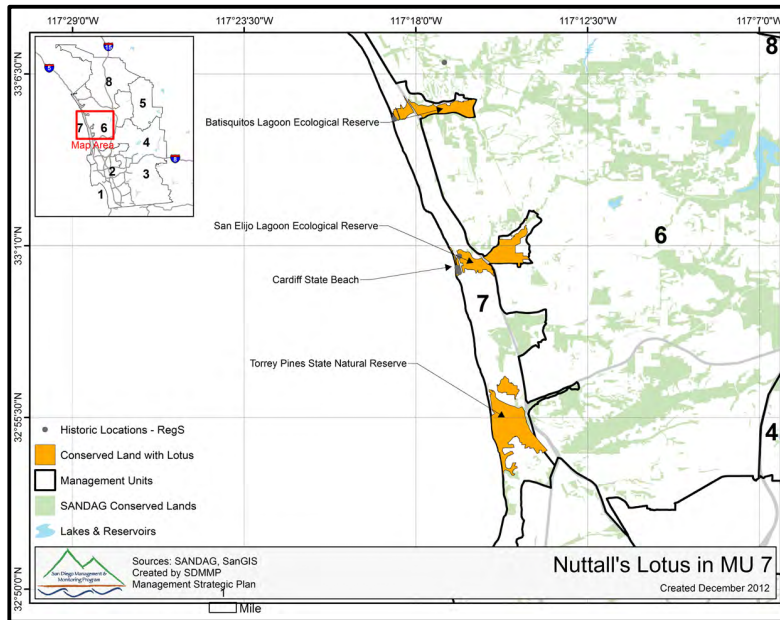


Figure 1. NULO and Torrey Pines State Natural Reserve in MU 7. Graphic from MSP, Vol. 3.



Figure 2. Populations of NULO in Torrey Pines State Natural Reserve and Los Peñasquitos Lagoon from field surveys conducted by California State Parks (CSP) between 2014-2016. Graphic includes areas of suitable habitat for NULO and potential restoration areas for native transitional species to reduce presence of invasive species adjacent to areas suitable for NULO expansion east of N. Torrey Pines Road. Graphic by CSP.