Applicant:	Conservation Biology Institute, on behalf of the South County Land Managers			
Address:	136 SW Washington Ave., Suite 202, Corvallis, OR 97333			
Name of Property:	San Diego National Wildlife Refuge, Sweetwater Authority, Rancho			
	Jamul and Otay Mountain Ecological Reserves, Proctor Valley			
General Location:	Otay-Sweetwater Landscape Management Unit			
Jurisdiction:	County of San Diego			
Total Acres:	3,000 acres			
Estimated Acres Requiring Management 3,000 acres, with active management on 30 acres				
Property Owners:	SDNWR, BLM, CDFG, Sweetwater Authority, City of San Diego			

Brief Project Summary

This is the second year in a collaborative process for coordinating management actions across the Otay-Sweetwater landscape management unit, with the objective of replicating this process in other management units. The project uses detailed habitat assessments and conceptual models to design cost-effective ways of controlling exotic grasses to benefit target grassland species (Otay tarplant, Quino checkerspot butterfly, burrowing owl), testing different mechanical and chemical methods informed by past management practices. The project also includes restoration of native grassland/forbs following exotics treatment in priority locations found through the assessment to be suitable for Otay tarplant and Quino checkerspot. The land managers of local, state, and federal agencies will work with the Institute for Ecological Management and Monitoring to develop adaptive management actions informed by strategic monitoring across a broad range of different habitat conditions and different levels of threat. Coordination among land managers will allow us to conserve costs through economies of scale in contracting and implementing multi-year management actions with the objective of expanding the coverage of management actions based on the results of this project. CBI and TNC understand that leadership and coordination of this project could be assumed by the SDMMP to conserve costs and enhance regional collaboration.

Quantify Expected Results

- Detailed habitat assessments of 3,000 acres of grasslands at Rancho Jamul, SDNWR and Sweetwater Authority lands south of Sweetwater Reservoir, Proctor Valley, Little Cedar Canyon, which can be used to prioritize and inform future management actions.
- Standardized protocols for grassland habitat assessments and decision-making tools for prioritizing management actions. These protocols will minimize management costs by (1) identifying and prioritizing invasive species for control based on extent and threats;
 (2) establishing realistic management objectives for invasive species, and (3) providing a baseline against which to measure the effectiveness of management actions.

- Polygons within the 4 grassland areas prioritized for each of the 3 targets species.
- Establishment of approximately 30 acres of restored habitat for identified grassland targets in priority locations.
- Costs per acre of alternative invasives control and restoration techniques.
- Success rates of alternative invasives control and restoration techniques.
- Grasslands Management Concept Plan for South County

Funding Needs Summary

Budget Item	Requested Funding Amount	Proposed Matching Funds	Description	
Year 1				
Non-personnel expenses	\$ 21,500		travel, aerials, computer time	
Personnel expenses staff	\$ 45,360	\$75,000	CBI/TNC labor	
Consultant expenses	\$ 83,500	\$40,000	field techs, subcontractors for design & assessments, conceptual models	
Administrative expenses *	\$ 6,300		CBI admin. *	
Overhead (17%)	\$ 26,632			
Total Year 1	\$183,292	\$115,000		
Years 2 & 3**				
Non-personnel expenses	\$ 10,000		travel, computer time	
Personnel expenses staff	\$ 51,120		CBI labor	
Consultant expenses	\$357,600		field techs, subcontractors for treatment/restoration	
Administrative expenses *	\$ 22,056		CBI admin. *	
Overhead (17%)	\$ 74,932			
Total Years 2 & 3	\$515,708			
*6% on non-personnel expenses and consultant expenses **Budgets for Years 2 & 3 are estimates only, pending development of goals and experimental design				

Matching Funds

Provider of Matching Funds	Component of Project	Amount (\$)
TNC	Conceptual models	\$40,000
South County Land Managers	In-kind staff coordination and advice	\$0
The San Diego Foundation grant to CBI	2009-2010 planning, community outreach and volunteer coordinator	\$50,000
TNC grant	2009-2010 planning	\$25,000

PROJECT PROPOSAL

A. Project Purpose

1. What management activities will be done on the properties and why?

This project continues the 2nd year of a landscape-scale approach to improve habitat conditions for Otay tarplant, Quino checkerspot butterfly (QCB), and burrowing owl, and other grassland species, across the Otay-Sweetwater landscape management unit of the MSCP. Using information to be gathered on the existing condition of grasslands and grassland targets at four grassland management planning areas, ranging from 300 to 900 acres (Figure 1), land managers will work together to first identify, and then implement and test, various exotic grass control methods (i.e., herbicide treatment, mowing, grazing) on a total of approximately 30 acres across priority appropriate for these species. This project also includes a restoration component to establish native grassland/forb plant species following exotics treatment in locations found through the assessment to be suitable for Otay tarplant and QCB. In the absence of subsequent active restoration and seeding, treatments of exotic grasses will be ineffective in benefitting target grassland species. These actions are being implemented across this large landscape unit to help prioritize locations most suitable for different grasslands species. The habitat assessments will characterize a total of 3,000 acres, so that future management actions can be implemented, as informed by this proposal. Because the land managers have limited staff and resources, this proposal is to support management actions on their lands, and in coordination with land managers, but without requiring extra effort for the managers themselves.

2. What is the biological significance of the property for covered species, sensitive habitats, core habitat areas, linkages, and regional conservation planning?

The Otay-Sweetwater region is the largest and most diverse expanse of undeveloped land in the MSCP planning area and is fundamental to the integrity and functioning of the MSCP preserve system. This core habitat area supports a diversity of natural habitats, including coastal sage scrub and grassland, and some of the last remaining coastal habitats of Southern California, each supporting many rare and endangered species, including San Diego thornmint, San Diego ambrosia, Otay tarplant, burrowing owl, coastal cactus wren, California gnatcatcher, and QCB. This area is anchored by large public ownerships, including the U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuge, California Department of Fish and Game (CDFG), Bureau of Land Management (BLM), County of San Diego, City of San Diego, City of Chula Vista, and Sweetwater Authority, representing hundreds of millions of dollars of public conservation investments. The conserved properties also represent the link between coastal and montane ecosystems. It is reasonable to define this area as a landscape management unit of the MSCP.

3. Does the site suffer from natural, human, or domestic animal disturbance?

The protected lands of the Otay-Sweetwater region suffer from a multitude of threats, namely altered fire regimes, invasive plant species, and off-road vehicle trespass. Although fire-adapted, these communities have experienced overly frequent fires, with some areas burning on average of every 10 years or less. Repeated burning has resulted in degradation and type-conversion of coastal sage scrub to grasslands occupied by exotic annual species. These exotic annuals eventually dominate, resulting in loss of habitat for sensitive species such as the QCB. Illegal off-road vehicle use further threatens and degrades habitat for the target species and further complicates management actions.

Historic agriculture and grazing activities have resulted in the establishment of large areas of grasslands dominated by exotic annual grasses and forbs. In the absence of regular disturbance such as grazing or mowing, these exotic grasslands accumulate excessive thatch, crowding out any remnant native species, including sensitive species such as Otay tarplant and host plants for the QCB. Excessive thatch also makes these grasslands unsuitable for species such as the burrowing owl, which requires sparse grasslands for feeding and predator avoidance. Active management is necessary to make these grasslands suitable for target grassland species.

4. Is immediate action needed to prevent the site from degrading further? Would the further degradation potentially affect covered species?

Immediate action is needed to (1) prevent further degradation for the three target grassland species following fire events of the last ten years, (2) identify successful methods that can be replicated at multiple sites to reduce exotic grasses and enhance habitat values and long-term persistence of the three target species, and (3) identify regional priorities and strategies for grassland target species enhancement to ensure that future management funding is targeted to areas with the highest need.

5. Does the proposal use efficient and proven methods and/or strategies to address the land management needs that would result in a high likelihood of success and reduce future land management costs?

In 2008, the USFWS initiated quarterly meetings of the South County Land Managers to foster greater outreach and coordination of management and monitoring activities across the Otay-Sweetwater unit. As part of this effort, land managers engaged collaboratively to identify threats for high priority plant and wildlife species, as well as management actions to abate key threats. While land managers have been actively engaged in grassland management for high risk species, the group realized that greater benefit could be achieved by designing and implementing a landscape-scale strategy for grasslands management. Thus, this proposal takes advantage of consolidated locational data for the three targets and consolidated *best management practices* for grasslands management. Land managers will share data collected between the study sites for

managing grasslands, and we will use the same contractors for conducting the habitat assessments, implementing the invasives control, and restoration.

6. Does the proposal implement a strategic approach which covers large geographic areas involving multiple partners and providing multiple benefits?

The project will be phased such that each step informs the next one. It will be conducted in conjunction with the San Diego Management and Monitoring Program (SDMMP) and the newly formed Institute for Ecological Management and Monitoring (IEMM) at SDSU and will involve all land managers in the Otay-Sweetwater management unit, with the projects implemented in different grasslands across the unit. It will continue to be coordinated through regular meetings of the South County Land Managers group, which has spent a year of planning and discussions to frame this proposal. The partners for this pilot project include the USFWS, CDFG, BLM, Sweetwater Authority, and City of San Diego. Future phases will also include the County of San Diego and City of Chula Vista and others, as appropriate.

7. How would the project result in measurable biological success to implement the NCCP regional preserve system? What measurable results would be used to determine success of the project?

The project will result in:

- Detailed habitat assessments of 3,000 acres of grasslands at Rancho Jamul, SDNWR and Sweetwater Authority lands south of Sweetwater Reservoir, Proctor Valley, Little Cedar Canyon, which can be used to inform future management actions.
- Standardized protocols for grassland habitat assessments and decision-making tools for prioritizing management actions. These protocols will minimize management costs by (1) identifying and prioritizing invasive species for control based on extent and threats;
 (2) establishing realistic management objectives for invasive species, and (3) providing a baseline against which to measure the effectiveness of management actions.
- Polygons within the 4 grassland areas prioritized for each of the 3 targets species.
- Establishment of approximately 30 acres of restored habitat for identified grassland targets in priority locations.
- An estimate of costs per acre of alternative invasives control and restoration techniques.
- Success rates of alternative invasives control and restoration techniques.
- Grasslands Management Concept Plan for South County

- 8. How would the project involve public outreach/ participation to identify the management activities being funded and promote awareness of the project?
 - a. <u>Number of individuals in public to benefit from the project</u>—everyone in San Diego County (and elsewhere) that uses these lands for passive recreation
 - b. <u>Number of proposed volunteer hours on project</u>—the South County Land Managers have a ½-time community outreach and volunteer coordinator that will focus volunteers on appropriate tasks where there is a public education component. This newly initiated position has already drawn 20 volunteers to the first event and generated a list of 100 volunteers interested in the program
 - c. Use of signage and interpretation features to be used to educate public on purpose of <u>project</u>—we will establish signs informing the public of the projects, and information on the projects will be included in regular outreach flyers to the community.
 - d. <u>Outreach efforts on public access</u>—the project will become part of the South County Land Managers community outreach and education efforts currently being led by the community outreach and volunteer coordinator. These efforts are educating people as to what recreational activities are most compatible at different reserves.

B. Scope of Work by Task

Phase 1

1. Consolidate GIS data (January-May 2010)

It is assumed that this task, which will include inputting all species data not yet input to the regional database, will be conducted by SDMMP. This task is considered a project match.

2. Assemble Best Management Practices database (January-May 2010)

Best Practices for grasslands management and restoration will be assembled from land manager interviews and available literature. It is assumed that this task will be conducted by the SDMMP and will inform experimental design of this project. This task is considered a project match.

3. Develop conceptual models (January-July 2010)

Conceptual models will be developed for each of the three target grassland species (Burrowing Owl, Otay Tarplant, and Quino Checkerspot). It is assumed that this task will be conducted by the SDMMP and/or by the IEMM. This task is considered a project match.

4. Form Science Advisory Group (May-November 2010)

The Nature Conservancy (TNC) and Conservation Biology Institute (CBI) will work with Science Advisors from IEMM and SDMMP to review conceptual models, test habitat assessment

methods, and develop experimental design for grasslands management. The Science Advisors will also provide expert review and analysis of field methods for the habitat assessments.

Expected results/deliverables: habitat assessment methods developed and tested

5. Conduct 3 land manager/science advisor workshops (July 2010-October 2011)

TNC and CBI will develop and administer three workshops for land managers in the region. The first workshop will present/discuss conceptual models for the three target species developed by the IEMM and SDMMP. The second workshop will be a symposium encompassing the broader southern California region, and will be a forum for land managers and researchers to exchange information and techniques on grassland management and restoration. A third workshop will be held with the South County Land Managers to present/discuss grasslands adaptive management and monitoring design.

Expected results/deliverables: 3 workshops; Grassland Management Symposium

6. Hire and train field personnel (November 2010-October 2011)

TNC and CBI will work with the IEMM and SDMMP to hire and train field personnel in grassland assessment techniques and protocols. We assume training will occur over a 5-day period for 4 field technicians. Budget is included for the field technicians as subcontractors to CBI or some other entity to be determined.

Expected results/deliverables: completed hiring and training of 4 field personnel

7. Conduct grassland habitat assessments (March 2011-July 2011)

Detailed habitat assessments will be conducted by trained field personnel, supervised by TNC and CBI, within each designated grassland management planning area to assess existing conditions and habitat suitability for the three target species, as well as threats, results of past management actions, and potential management and restoration actions. This information will drive the identification and prioritization of management actions within each species-specific polygon in each of the four planning areas. Prior to conducting fieldwork, TNC and CBI will review soil maps, aerial photographs, and results of previous vegetation mapping, plant and wildlife surveys in the project areas and vicinity.

Project field personnel will systematically walk each grassland management planning area to characterize and map grassland condition. The minimum mapping unit (polygon) for this effort will be 1 acre. Mapping will be conducted using existing access roads, trails, lookouts, and vantage points and by walking through the vegetation where possible. All of the four grassland areas will be surveyed and mapped on 1:300-scale aerial photographs. Field surveys will be conducted at the height of spring flowering, between the months of March and June. Each grassland polygon will be assigned a unique three-part number as follows:

- the first 2 digits refer to the survey year (11 for 2011)
- the second digit classifies the polygon as to site (Rancho Jamul=1, Little Cedar Canyon=2, Sweetwater=3, Proctor Valley=4)
- the third 2 digits represent the unique location number

For example 10-1-25 is grassland polygon number 25, documented on Rancho Jamul in 2010. Each polygon and all recorded data will be entered in the field into an Excel database.

Expected results/deliverables: maps and data from habitat assessments; polygons identified for management actions for target species

8. Develop First Phase Restoration Plans (totaling 30 acres) and Experimental Design(s) for Grassland Targets (June 2011-October 2011)

We will develop site-specific restoration specifications for priority site(s) within each of the 4 grassland management areas identified during the habitat assessment. A portion of each restoration site will be devoted to small-scale experimental plots to evaluate efficacy of various treatments.

Science Advisors and restoration specialists will meet with land managers to prioritize restoration sites and restoration methods, and identify questions related to grasslands enhancement/management based on the results of the habitat assessment, Best Management Practices database, and literature reviews.

Restoration ecologists (subcontractors), in conjunction with TNC and CBI, will review habitat assessment results and conduct site visits to identify 2-15 acre site(s) for implementing priority invasive plant control and active restoration actions for appropriate grassland targets at the four grassland management areas. Restoration plans and specifications will outline (1) existing conditions at each of the sites and goals for habitats to be restored, (2) site preparation methods (weed control treatments, soil preparation methods, native species protection methods, timing), (3) restoration specifications, including development of site-specific seeding/planting based on a nearby intact habitat, (4) short (1 year) and long-term maintenance schedule and methods, and (5) layout plans for proposed small-scale experimental plots to be integrated into each site. Restoration specifications will include sufficient detail to provide a basis for bidding the project to qualified contractors. Initial site preparation (mowing/clearing) may be initiated following initial site assessment but prior to the completion of final restoration specifications.

Science Advisors will develop the small-scale experimental designs to be integrated within some or all of the proposed restoration sites to help answer questions related to efficacy of invasive plant control or restoration actions for grassland targets. The design will (1) identify the goals and questions to be answered, (2) provide an overview and evaluation of the methods to be tested, (3) outline the layout of the experimental design, including sufficient replication within and across sites to allow statistical analysis, and (4) specify methods for monitoring and analysis of the experimental design. Experimental sub-plot treatments will be small plots (i.e., $4m^2$) within the larger 2-15-acre restoration sites implemented as part of Task 9.

<u>Expected results/deliverables</u>: restoration specifications with goals, evaluation methods, experimental design, and methods for monitoring and analysis; quarterly reports, with input from TNC and the land managers, to document specifications, results, recommendations, and issues.

9. Implement experimental design and 1st phase restoration activities (implementation, maintenance, and monitoring) at 4 grassland management areas, totaling 30 acres (December 2011-December 2013)

Restoration subcontractors will install/implement both the experimental design and invasive plant control/restoration specifications (including 1 year of post-implementation maintenance) at the four grassland management areas, with restoration totaling approximately 30 acres. CBI and TNC will supervise and direct implementation and maintenance of the grassland restoration actions, although the subcontractors may be hired by a different entity, to be determined. Field personnel will conduct baseline surveys to document baseline vegetation condition at the restoration experiment sites the spring prior to implementation, and once again during the spring following planting to document results.

<u>Expected results/deliverables</u>: 30 acres of restored forbland/grassland; quarterly reports, with input from TNC and the land managers, to document specific actions, results, recommendations, and issues.

10. Develop grasslands management plan for Otay-Sweetwater MSCP lands (July 2011-December 2012)

The Grassland Management Plan will summarize results of Tasks 1 though 9. This plan will first briefly summarize the status of knowledge on grassland management in Southern California, based on conceptual models, Best Management Practices database, literature reviews, and workshop results. The plan will then detail the methods for and results of the grasslands assessment. Grassland assessment results will be presented for each of the four planning areas. The plan will identify and prioritize locations and methods for restoration/enhancement for the three target grassland species in the four landscape planning areas. Specific methods for enhancing grasslands at the various locations will be detailed, focused on methods for each of the three target grassland species and for native grassland restoration, if any. The plan will also outline specific monitoring actions that may be conducted to track the success or failure of management actions that will inform long-term adaptive management of grasslands and grassland targets. We anticipate that future implementation of the plan, in whole or in part, will improve habitat quality for the target species on a larger spatial scale, and will significantly increase their likelihood of persistence within the MSCP area.

Expected results/deliverables: conceptual grassland management plan for 3,000 acres

C. Budget by Task

Task # and Name	Total Cost	Grant Request	Total Match	Year 1 Request	Year 1 Match
Pre-project Planning and Public Outreach Coordinator	\$ 75,000	\$-	\$ 75,000	\$-	\$ 75,000
PHASE 1 (Jan. 2010 - Nov. 2011)					
1. Consolidate GIS data.	SDMMP	\$-	\$-	\$-	\$-
2. Assemble BMP database.	SDMMP	\$-	\$-	\$-	\$-
3. Develop conceptual models.	\$ 40,000	\$-	\$ 40,000	\$-	\$ 40,000
4. Form Science Advisory Group.	\$ 5,288	\$ 5,288	\$-	\$ 5,288	\$-
5. Conduct 3 workshops.	\$ 12,893	\$ 12,893	\$-	\$ 12,893	\$-
6. Hire/train field staff.*	\$ 15,982	\$ 15,982	\$-	\$ 15,982	\$-
7. Conduct habitat assessments on 3,000 acres.*	\$106,248	\$106,248	\$-	\$106,248	\$-
8. Develop experimental design and restoration specifications	\$ 42,881	\$ 42,881	\$-	\$ 42,881	\$-
TOTAL PHASE 1	\$298,292	\$183,292	\$115,000	\$183,292	\$115,000
PHASE 2 (Dec. 2011 - Dec. 2013)**					
9. Implement Restoration actions and Experiments on 30 Acres.	\$474,407	\$474,407	\$-	\$-	\$-
10. Develop management plan.	\$ 41,301	\$ 41,301	\$-	\$-	\$-
TOTAL PHASE 2	\$515,708	\$515,708	\$-	\$-	\$-
TOTAL	\$814,000	\$699,000	\$115,000	\$183,292	\$115,000
*Budget includes field staff and field staff contractor, but staff and contractor TBD through discussions with SDSU IEMM and SDMMP					
**Budgets for Phase 2 are estimates only, pending development of goals and experimental design.					

Project Schedule D.

Task # and Name		Proposed Start Date	Proposed End Date	
PHASE 1		01/01/10	12/01/11	
1.	Consolidate GIS data.	01/01/10	05/01/10	
2.	Assemble BMP database.	01/01/10	05/01/10	
3.	Develop conceptual models.	01/01/10	07/01/10	
4.	Form Science Advisory Group.	05/01/10	11/01/11	
5.	Conduct 3 workshops.	07/01/10	10/01/11	
6.	Hire/train field staff.	11/01/10	2/29/11	
7.	Conduct habitat assessments.	03/01/11	07/01/11	
8.	Develop experimental and restoration plans.	06/01/11	10/01/11	
PHA	ISE 2	12/01/11	12/01/13	
9.	Implement invasives control/restoration on 30 ac.	12/01/11	12/01/13	
10. Develop management plan.		07/01/11	12/01/12	

REQUIRED STATEMENTS FROM GRANTEE

- Yes No The proposed grantee has read the standardized agreement.
- Yes No The proposed grantee is willing to use the standardized agreement if the SANDAG Board of Directors approves the grant.
- The proposed grantee understands that the project must be started within one year of receiving and executed Yes No agreement from SANDAG, or risk losing the grant funding.
- 🗌 Yes 🕅 No Does the submission of the proposed grant require approval by a governing body (such as Board of Directors, City Council, or similar governance body).
- Yes No The proposed grantee understands that if a resolution or similar approval is required, it must be submitted at least two weeks prior to the recommendation by the Regional Planning Committee of the list of grant projects to be considered eligible.

I have the authorization to submit this grant on behalf of my organization.

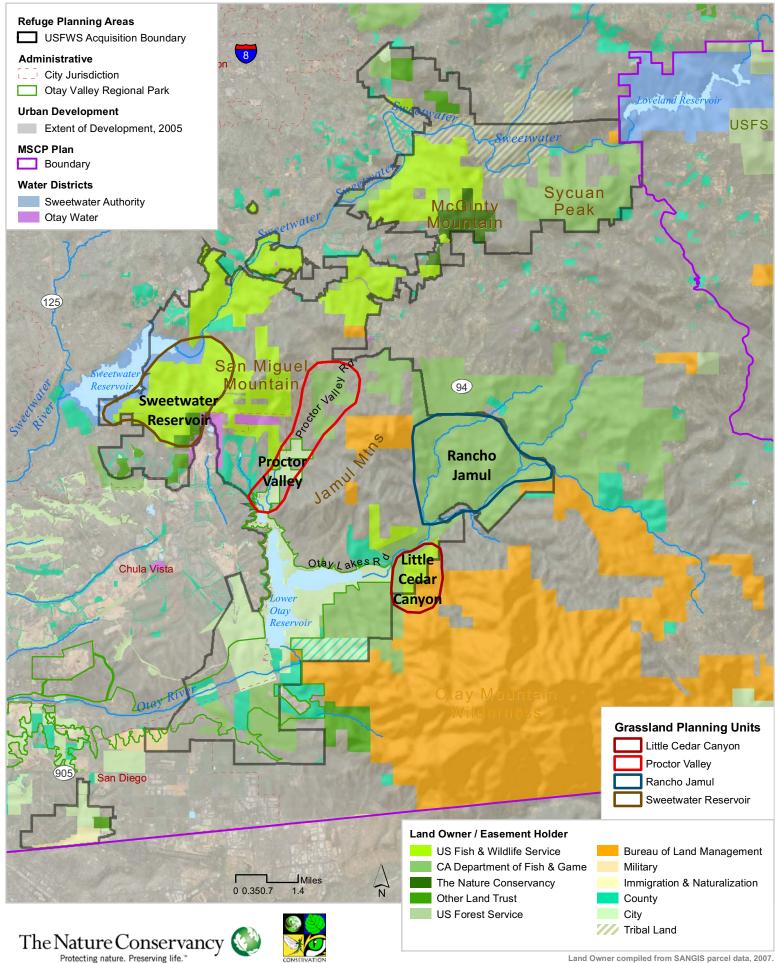
R. Stritthold / President

Grantee Name/Title (print or type)

mm/dd/yy 01/22/16 Date é Signature

South County Land Managers

GRASSLAND PLANNING UNITS



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Land Owner compiled from SANGIS parcel data, 2007. N:\South_Coast\Projects\SDO\Mxds\Refuge\2009Planning\Otay-Sweetwater_Unit.mxd



California Natural Resources Agency DEPARTMENT OF FISH AND GAME South Coast Region 4949 Viewridge Avenue San Diego, CA 92123 (858) 467-4201 http://www.dfg.ca.gov



January 25, 2010

Keith Greer SANDAG EMP Senior Regional Planner 402 B Street, Suite 800 San Diego, CA 92101

Dear Mr. Greer,

The California Department of Fish and Game holds fee title for the Rancho Jamul and Otay Mountain Ecological Reserves. The Department supports the application submitted for the South County Land Managers' proposal to the TransNet Environmental Mitigation Program (EMP). The proposed project will study the most cost-effective ways to control exotic grasses and replace them with native grasses and forbs.

This letter provides permission for the proposed management actions to be conducted on the Rancho Jamul and Otay Mountain Ecological Reserves. While the management actions will be performed on only two of our Ecological Reserves, the proposed project will benefit the Department's management of all our Ecological Reserves and Wildlife Management Area in South County and the MSCP species they support.

The land managers in South County have been discussing the concepts for this project for the past year, and we believe that the coordination with other land managers will allow all of us to conserve costs through economies-of-scale in contracting and implementation. We are also excited about the proposal to work directly with the Institute for Ecological Management and Monitoring and the San Diego Management and Monitoring Program on this multi-year effort, and we hope it can serve as a pilot for future landscape-scale management.

If you have any further questions, please contact me at the letterhead address, or by telephone at (858) 627-3939 or by fax at (858) 467-4299. Mr. Tim Dillingham is the Reserve Manger for the Rancho Jamul and Otay Mountain Ecological Reserves, and can be reached at the letterhead address, email at <u>tdilling@dfg.ca.gov</u>, by telephone at (858) 467-4204.

Sincerely,

Karen L. Miner
 Senior Environmental Scientist
 Lands Program Supervisor
 South Coast Region

CC: Department of Fish and Game Mr. Tim Dillingham Lands Chron

Conserving California's Wildlife Since 1870



United States Department of the Interior

U.S. Fish and Wildlife Service San Diego National Wildlife Refuge P.O. Box 746 - 14715 Highway 94 Jamul, California 91935 Phone (619) 468-9245, Fax (619) 468-9249



January 25, 2010

Mr. Keith Greer SANDAG 401 B Street San Diego, California 92121

Subject: Support for Environmental Mitigation Program Grant Application

Dear Keith:

The San Diego National Wildlife Refuge wishes to express support for the South County Land Managers' proposal to the Transnet Environmental Mitigation Program (EMP). The proposed project will benefit management of the Refuge and on preserved lands managed by several land-management agencies throughout coastal southern San Diego County for listed and MSCP species, including burrowing owls, Quino checkerspot butterfly, Otay tarplant, among other plant and animal species. This letter provides our permission for the proposed project's actions to be conducted on Refuge lands; a special use permit will also be issued when the specific research and restoration polygons are determined.

The proposed project will inform the most cost-effective ways to control exotic grasses and replace them with native grasses and forbs. While the areas being treated are relatively small, they will represent a range of different conditions and different levels of infestation. The land managers in South County have been discussing the concepts for this project for the past year, and we believe that the coordination with other land managers will allow all of us to conserve costs through economies-of-scale in contracting and implementation. We are also excited about the proposal to work directly with the Institute for Ecological Management and Monitoring and the San Diego Management and Monitoring Program on this multi-year effort, and we hope it can serve as a pilot for future landscape-scale management.

We hope you will support the South County Land Managers' proposed EMP project.

Sincerely,

Jill Terp

Refuge Manager – San Diego National Wildlife Refuge

January 25, 2010

Mr. Keith Greer SANDAG 401 B Street San Diego, CA 92121

RE: EMP grants

Dear Keith:

The Bureau of Land Management (BLM) wishes to express our support for the South County Land Managers' proposal to the Transnet Environmental Mitigation Program (EMP). The proposed project would benefit the BLM's management of conserved lands in South San Diego County and the Multiple Species Conservation Program species they support, including burrowing owls, the Quino checkerspot butterfly and rare and sensitive plant species. This letter provides permission for the proposed management actions to be conducted on BLM lands within the Otay-Sweetwater Management Unit.

The proposed project would inform the most cost-effective ways to control exotic grasses and replace them with native grasses and forbs. While the areas being treated are relatively small, they would represent a range of different conditions and different levels of infestation. The land managers in South County have been discussing the concepts for this project for the past year and, we believe that the coordination with other land managers would allow all of us to conserve costs through economies-of-scale in contracting and implementation. The BLM is also enthused about the proposal to work directly with the Institute for Ecological Management and Monitoring at San Diego State University and the San Diego Management and Monitoring Program on this multi-year effort. We hope it can serve as a pilot for future landscape-scale management.

The BLM hopes you will support the South County Land Managers' proposed EMP project.

Sincerely,

John Kalish Field Manager Palm Springs-South Coast Field Office