Grant Submission Form

For Consideration for *TransNet* Environmental Mitigation Program (EMP) Fiscal Year 2010 Funding for Land Management

(Applications cannot exceed twelve (12) pages, including all attachments.)

Applicant Name: River Partners and the County of San Diego Department of Parks & Recreation

Address: 9150 Chesapeake Drive, Suite 200, San Diego, CA 92123

Name of Property: Lawrence and Barbara Daley Preserve

General Location: Dulzura Creek north of SR 94, east of Honey Springs Road and west of the community of Dulzura

Jurisdiction: County of San Diego

Total Acres: 603.68 acres

Estimated Acres Requiring Management: 55 acres

Owner(s) of Property: County of San Diego

Land manager(s) of property (include name(s)), years of experience managing habitat lands, existing land management responsibilities, and references): David Martinez, District Park Manager, County of San Diego Department of Parks & Recreation. The County Department of Parks & Recreation currently manages approximately 34,500 acres of parks and open space preserves.

* 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 application. Failure to provide the letter or right-of-entry permit will lead to disqualification of the application. N/A

Brief Project Summary (200-word maximum)

The project proposes the post-fire removal of emerging and existing invasive, non-native plants and the restoration of riparian habitat along Dulzura Creek within the Otay River Watershed. The project will be implemented in two phases. This proposal covers the first phase ONLY and involves three primary tasks: 1) removal of invasive species, 2) development of a planting/site management plan, and 3) permitting. Phase I is expected to take twelve months, beginning January 2011. Phase I of the project will be implemented by River Partners, a California 501(c)(3) non-profit organization, in cooperation with the County of San Diego Department of Parks and Recreation. Requested funding for Phase I is $169,180 (with matching funds totaling $15,000 to be provided by the County).

The project is located within the upper reach of Dulzura Creek and is designed to complement the larger habitat restoration activities planned by River Partners, in cooperation with the San Diego City Water Department and California Department of Fish and Game, along 30,500 linear feet of Dulzura Creek downstream of the project site. In order to ensure the successful restoration of the watershed, it is important to remove invasives from the upstream reaches of Dulzura Creek to prevent subsequent re-infestation and/or spread downstream.

Quantify Expected Results (add bullets as necessary)

- Removal of invasive, non-native plant species along approximately 9,000 linear feet of Dulzura Creek
- Development of a site-specific restoration planting plan and implementation document
- Acquisition of necessary local, state, and federal permits

Funding Needs Summary

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

Budget Item	Requested Funding Amount	Proposed Matching Funds*	Description
Non-personnel Expenses	$41,522	$	Includes all equipment and supplies.
Personnel Expenses Staff	$81,125	$15,000	Includes all staff time for work on the project
Consultant Expenses	$	$	Includes all costs for consultant services
Administrative Expenses	$17,171	$	All costs to administer the contract
Overhead Costs	$29,362	$	All indirect charges for overhead on the project, if any.
TOTAL	$169,180	$15,000	

*if applicable

2. Are there matching funds available? If yes, how are the matching funds assured (100-word maximum)?

☒ Yes ☐ No

Explain how matching funds are assured.

Matching funds will be provided by County DPR in-kind services (including CEQA environmental review, permitting fees, and associated staff time).

PROJECT PROPOSAL

(Maps and/or graphics can be referenced and pasted at the end of this Word document or attached as a separate digital file.)

The proposal will include the purpose of the project, the scope of work by tasks, proposed budget by task, and 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 in their proposal in case full funding for the project is not available.

A. Project Purpose

Address the following in the proposal.

1. What management activities will be done on the property and why? River Partners, in partnership with the County, will conduct invasive removal of emerging and existing giant reed (*Arundo donax*), tamarisk (*Tamarix parviflora*), castor bean (*Ricinus communis*) and other invasive non-native plant species onsite utilizing manual methods and herbicide treatment. Following invasive removal, in Phase II of this project the riparian habitat restoration plan will be implemented along Dulzura Creek to enhance this vital wildlife corridor and enhance conditions for riparian dependent avian species, such as least Bell's vireo, and other neotropical birds.

   The California Invasive Plant Council has rated both giant reed and tamarisk as having severe ecological impacts on ecosystems, plant and animal communities, and vegetational structure. Giant reed is a vigorous, invasive perennial plant that displaces native plants and associated wildlife due to the immense stands it forms, competing with native plant species by monopolizing soil moisture and shading. Giant reed is estimated to use three times the volume of water used by native vegetation; thus, its presence in a stream or river deters both growth of native vegetation as well as water conservation efforts. The result is a reduction in habitat and food supply to wildlife, which adversely affects

special status aquatic and riparian species. Giant reed is also suspected of altering hydrological regimes, reducing groundwater availability, altering channel morphology, and increasing fire hazards.

Tamarisk is associated with dramatic changes in geomorphology, groundwater availability, soil chemistry, fire frequency, and plant community composition. This species can result in the lowering of groundwater tables and an increase in soil salinities which inhibits the growth and germination of native riparian plant species. High amounts of leaf litter can increase the frequency of fire where tamarisk is dominant in cover; moreover, this species resprouts vigorously following fires. These effects on the ecosystem from the presence of tamarisk can result in this species dominating riparian communities.

The property burned twice in recent years (2003 Otay/Mine Fire and the 2007 Harris Fire) and without the proposed land management activities the site will continue to degrade and become increasingly infested with invasives. The site will benefit from treating the invasive species now rather than waiting until the project will no longer be feasible as a result of the unchecked proliferation of invasives. As additional funding sources become available, Phase II implementation of the riparian habitat restoration plan will further restore and enhance conditions along this vital wildlife movement corridor. These tasks implement two high priority strategies of the Otay River Watershed Management Plan[1] (ORWMP; C.9.1.1 and C.9.1.2).

2. What is the biological significance of the property for endangered or covered species, sensitive habitats, core habitat areas, wildlife linkages, and/or regional habitat conservation planning? The property is within the South County MSCP and was acquired as part of the County's responsibility for building the regional preserve system. The project area occurs within the Dulzura Creek floodway and per the MSCP Habitat Evaluation Model, the habitat onsite is considered high and very high in value. The project area is mapped as primarily consisting of southern coast live oak riparian forest (MSCP Tier I habitat) and Diegan coastal sage scrub (MSCP Tier II habitat); however, much of this habitat has type converted to non-native grassland. The project area is directly adjacent to the MSCP Otay Mountain/Jamul Mountains to Sequan Peak habitat linkage connecting biological core resource areas. Wildlife movement surveys of the corridors leading to and from the project site have shown that Dulzura Creek, including the tributary along Hollenbeck Canyon, is an important wildlife movement corridor for a variety of medium- and large-sized mammals[2]. Multiple breeding pairs of coastal California gnatcatchers, a federally threatened and MSCP covered species, have been detected in the immediate area. Least Bell's vireo, a federally and state endangered, and MSCP covered species, and arroyo toad, a federally endangered and MSPC covered species, are both known to occur in areas downstream of the project site and have a high potential to occur on site. In addition, the federally endangered Quino checkerspot butterfly, which is currently proposed for MSCP coverage, has been detected on site[3] and is expected to occur in all suitable habitat.

3. Does the site suffer from natural, human, or domestic animal disturbance (e.g., off-road vehicle use, uncontrolled access, unauthorized grazing, fire, flooding, erosion, exotic species invasion, and/or feral cats)? YES – the property burned in both the 2003 Otay/Mine Fire and the 2007 Harris Fire, which devastated the few remaining oaks and sycamores in the valley. Currently, there are burned unvegetated slopes adjacent to Dulzura Creek and erosion is likely, leading to increased turbidity and sedimentation of Dulzura Creek, if no restoration were to occur. Additionally, the site has experienced rapid post-fire establishment of invasive, non-native species in the Dulzura Creek floodway including giant reed, tamarisk, and castor bean.

4. Is immediate action needed to address a problem to prevent the site from degrading further? Would the further degradation potentially affect covered species? YES - Dulzura Creek upstream of the Lower Otay Reservoir is an ideal illustration of successional patterns without restoration. Repeated fires in recent years have burnt through seasonally dry riparian areas killing off much of the native vegetation. Historically, these areas could have recovered naturally, but due to

[1] Aspen Environmental Group. 2006. Otay River Watershed Management Plan. Prepared for the Otay River Watershed Management Plan Joint Exercise of Powers Agreement Public Agencies.

[2] U.S. Geological Survey (USGS). 2002. Baseline Biodiversity Survey for the Rancho Jamul Ecological Reserve. Final Report prepared for the California Department of Fish and Game by the USGS Western Ecological Research Center.

[3] U.S. Fish and Wildlife Service (USFWS). 2005. USFWS Sensitive Species Observation Dataset. January.

repetitious burning on a short time scale, the pressure of non-native invasive species is too great. Giant reed and other species have expanded greatly since the 2007 fires and the creek is at a critical point in its evolution.

As identified in the ORWMP, the most detrimental of the non-native plant species in the region and this watershed are giant reed and tamarisk. As such, high priority strategy C.9.1.1 of the plan calls for the eradication of non-native flora and prevention of reinfestation. These species directly impair habitat-support functions and values and indirectly affect hydrological and biogeochemical functions of aquatic ecosystems. The California Invasive Plant Council has rated both giant reed and tamarisk as having severe ecological impacts on ecosystems, plant and animal communities, and vegetational structure. Without restoration, long-term degradation due to post-fire conversion of diverse habitat communities to monocultures of these species, which are already prominent threats in the Otay River Watershed, will likely decimate the ecological character of the watershed, and the wildlife associated with it.

Additionally, there are burned unvegetated slopes adjacent to Dulzura Creek and erosion is likely, leading to increased turbidity and sedimentation of Dulzura Creek. This could affect the breeding potential of downstream arroyo toads as the species prefer shallow, sandy pools without silt for breeding.

By acting now, it is possible to cost-effectively control invasive species such as giant reed, tamarisk and castor bean. Phase II implementation of the Planting/Site Management Plan (developed in Phase I) will further assist the return of riparian areas and adjacent upland slopes back to high quality habitat. If we wait, the cost to restore this area will increase significantly and will most likely become so expensive that this watershed will be lost as native habitat forever. This will create additional pressure on threatened and/or endangered wildlife such as the least Bell's vireo, California gnatcatcher, arroyo toad, and Quino checkerspot butterfly, as well as a number of neotropical migratory birds.

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 (e.g., control of small outbreak of aggressive exotic species, fencing to prevent damage to rare plant populations)? YES - River Partners will use adaptive management protocols and technologies that it has developed on over 6,400 acres of habitat restoration. The methodology will include initial control of invasive species, and creation of a planting plan that optimizes physical site conditions to restoration species selection and location. The planting portion of the project (Phase II) will utilize drip irrigation. This will allow the stand to establish and ensure long-term sustainability by allowing plants to tap into the water table before the drip irrigation system is removed at the end of the three-year Phase II project.

   River Partners uses an adaptive management protocol that allows them to monitor and adjust implementation methods for each restoration site. This flexibility allows River Partners to maximize plant survivorship and maximize benefits to wildlife. At the Dulzura Creek site, River Partners recommends the following strategies:

   <u>Phase I</u>

   - Employ accepted non-native removal techniques. The proposed mechanical and chemical methods for invasive removal are generally accepted and proven methods that have been successfully used for invasive removal within other watersheds in California. By utilizing a combination of cutting and herbicide treatment while these species still occur in small enough numbers, the project will increase the likelihood of success in removing these species and also preventing their reinfestation on site.

   <u>Phase II</u>

   - Employ active restoration techniques to establish riparian vegetation. Active restoration employs modern farming techniques to efficiently and rapidly establish riparian vegetation. Tasks include site preparation, native plant species propagation and planting, weed control, and supplemental irrigation.

   - Recognize current site conditions. Based on site conditions, River Partners will estimate the acreage of the site that is well suited for the rapid establishment of native riparian woody species and herbaceous understory species through active restoration.

- Develop a plant design based on multiple management objectives. Planting associations and layout are intended to provide a diversity of high quality habitat for targeted wildlife and reduce competition from invasive non-native species.

- Consider multiple time frames. The restoration planting can have long- and short-term successional endpoints. For example, in the long run (greater than 30-80 years) some areas planted with Fremont cottonwood or western sycamore will convert to oak woodland or be supplanted by meander dynamics of the stream channel. In the meantime, the fast growing, but relatively short-lived plants (e.g., willows, coyote brush) will provide important habitat to threatened and endangered species (i.e., structure, large woody debris, etc.), as the more shade-tolerant oaks replace them.

- Use an adaptive management approach to the project. River Partners recommends the use of an adaptive management approach to provide a framework to evaluate project progress and respond to new information.

River Partners has used the above strategies and achieved high plant survival rates, accelerated natural recruitment of native species, and documented wildlife benefits in short periods of time (three years).

In addition to the strategies described above ensuring the short term success of this non-native and restoration project, DPR is currently preparing a Resource Management Plan for the Lawrence and Barbara Daley Preserve that will include adaptive management techniques, ensuring success of the proposed project in the long term.

6. Does the proposal implement a strategic approach which covers large geographic areas (e.g., watershed or subwatershed extent) involving multiple partners and providing multiple benefits (e.g., part of a larger coordinated effort that is high economy-of-scale)? YES - River Partners is planning a total of three projects on Dulzura Creek in cooperation with various state and local agencies (i.e., CDFG, City of San Diego, and County of San Diego). In aggregate, these projects will restore 39,500 linear feet of stream on 341 acres, which is nearly 7.5 miles of habitat corridor on Dulzura Creek. The other River Partners projects along Dulzura Creek are scheduled to begin in 2011 and simultaneous implementation of these projects is needed to ensure a high economy-of-scale.

   Additionally, CDFG is in its fourth year of vegetation management at Honey Springs Ranch to the north along a tributary that also feeds into Dulzura Creek. All of these projects support the Otay River Watershed and the Otay Valley Regional Park (OVRP) by enhancing habitat immediately upstream of the OVRP. These restoration projects also meet the priorities and goals outlined in the South County MSCP, as well as the Otay River Watershed Management Plan, specifically high priority strategies C.9.1.1 *Eradicate Non-Native Flora and Fauna and Prevent Reinfestation and New Introductions* and C.9.1.2 *Protect, Enhance, and Restore Habitat Linkages and Wildlife Movement* which address Goals 1 and 5 of the plan. Furthermore, the project is supported by the San Diego National Wildlife Refuge located downstream of the project site (see attached letter of support).

7. How would the project result in measurable biological success to implement the Natural Communities Conservation Program regional preserve system? What measurable results would be used to determine success of the project? To assess the effectiveness of restoration projects, River Partners uses a comprehensive, rigorous, and scientifically validated monitoring program. Annual plant survival is monitored after the first growing season using a complete plant census, and this data is used to determine which species, if any, need supplemental re-plantings. In subsequent years, permanent plots are monitored to determine annual survival, growth and foliage volume. Photo-points are established at the beginning of every project and monitored on an annual basis to provide descriptive analysis of vegetative changes over the course of a project. Herbaceous plants and native grasses are monitored using line transects measuring percent cover and species composition in 1m² plots. And finally, biologists are on site weekly strategizing with field staff on irrigation needs, non-native control, and other day-to-day operational procedures.

   Avian point-count surveys are conducted during the breeding season within the project area and within nearby reference (control) habitat. River Partners will report on all monitoring activities of non-native removal success and

restoration establishment in quarterly and year-end reports, as well as provide a detailed analysis and discussion, and adaptive management recommendations in the end-of-project report.

In addition, DPR is currently conducting baseline surveys on the Lawrence and Barbara Daley Preserve. These surveys will be completed in 2010, thus there will be an inventory of species and habitats prior to the commencement of non-native removal work. Subsequent DPR monitoring surveys are anticipated to begin in 2016 and will provide a measure of the long-term success of the non-native removal and restoration work for species and wildlife movement.

8. How would the project involve public outreach/public participation to identify the land management activities being funded and promote awareness of grant funded project? In your proposal please estimate the following, if any:
   a. number of individuals in public to benefit from the project,
   b. number of proposed volunteer hours on project,
   c. use of signage and interpretation features to be used to educate public on purpose of project, and
   d. outreach efforts on public access, if proposed.

DPR would post information on the County website acknowledging the grant. In addition, OVRP is a regional park utilized by South Bay residents and visitors that will benefit from upstream restoration projects. Although it is not anticipated volunteers hours will be used on this specific project, Friends of OVRP, a volunteer group downstream, will benefit from this work. The County recently took over management of the Lawrence and Barbara Daley Preserve property from CDFG. At present, the property is not open to the public; however, the County is currently in the process of conducting baseline surveys and preparing a Resource Management Plan that will identify land management activities and provide recommendations for potential public access. Signage and interpretation features may be included in public access recommendations.

B. Scope of Work by Task

Please break down the proposal into discrete tasks with a task name, description of each task, quantify expected results, and discrete deliverables for each task. Note: make sure to include quarterly reporting on the status of the grant project.

The proposed project will be implemented over a four-year period and has been broken down into separate phases as follows:

PHASE I - YEAR 1

Once funding is received, River Partners and the County will be able to start work on planning, permitting, and invasive species removal. Phase I will be carried out over a 12-month implementation period.

Task 1: Management – Ongoing management of the project includes quarterly reporting, quality assurance/quality control, and accounting.

Task 2: Planning – Phase I will include a project site assessment that will involve evaluating soils, topography, weed communities, and other site factors that will determine the species composition of the riparian re-vegetation. Once this is complete, River Partners will develop a restoration planting plan that involves the production of an implementation document for the entire project. The methodology will include creation of a planting plan that optimizes physical site conditions to restoration species selection and location.

The restoration design of this project will be tailored to benefit protected species such as least Bell's vireo, California gnatcatcher, arroyo toad, and Quino checkerspot butterfly. For example, least Bell's vireo requires dense, low canopy vegetation for breeding and foraging, and generally (preferentially) selects mule fat (*Baccharis salicifolia*), sandbar willow (*Salix exigua*) and mugwort (*Artemisia douglasiana*).

Deliverables: A final restoration planting plan and implementation document for the project will be provided upon completion.

Task 3: Permitting/CEQA – After the site assessment and restoration plan have been completed, the County of San Diego Department of Parks & Recreation will apply for all necessary local, state and federal permits. Permitting is expected to be fairly straightforward on the project site. It is anticipated that the project will require a CDFG 1600 permit, and ACOE/RWQCB notification pursuant to RGP 41. Depending on the restoration plan, the County of San Diego Department of Parks and Recreation will either file a CEQA Categorical Exemption for the project under category 15304, Minor Alterations to Land or prepare a (Mitigated) Negative Declaration.

Deliverables: Copies of all required permit documentation will be provided upon receipt. In addition, if a (M)ND is required, notification of the public review of the (M)ND and any board hearing to approve the project will be provided.

Task 4: Invasive Removal – Initial weed control will include preplant herbicide applications and/or mechanical weed control. River Partners will use a combination of hand labor, chemical and mechanical maintenance technology on the site. Hand crews will be employed in areas where topography does not allow the safe operation of small tractors or other equipment to mow weeds or remove roots of invasive species. Selected herbicides will be used against invasive species. The herbicides will be applied by hand crews as well as by mechanical systems (spray rigs mounted on ORV-mules or tractors). In areas with flatter topography, River Partners will use tractors with mowers to control weeds in the three-year maintenance period.

Deliverables: Documentation as to the amount of invasive removal conducted, along with before and after photos, will be provided quarterly with a final summary report provided upon completion of work.

PHASE II – YEARS 2 THROUGH 4 (FUTURE FUNDING SOURCES)

The second phase of the project will prepare the project site and implement the planting plan completed as part of Phase I. Phase II will be carried out over a 36-month implementation period.

Task 5: Ground Preparation & Irrigation Installation - Ground Preparation may include discing, ripping, rolling, floating and pulling beds. River Partners does not anticipate any significant earthworks activity on the site. Discs and other light cultivation equipment will be used on selected areas that work the top five inches of soil.

The habitat restoration plan for the project site will call for the installation of a drip irrigation system. This system is required for the successful establishment of woody species on the site. This will allow the stand to establish during the three-year project period and ensure long-term sustainability by allowing plants to tap into the water table before the drip irrigation system is removed at the end of the three-year project.

In conjunction with the larger CDFG/River Partners restoration project, we expect the proposed project will share one of the two wells/pumps planned to be installed on the Hollenbeck Canyon Wildlife Area (HCWA) site to provide water to the drip irrigation system. Irrigation will require installation of pipeline from the HCWA well onto the project site. Irrigation installation will pipe water through a sand filter into a distribution manifold then into mainlines, sub-mains, and drip tubes.

Additionally, the San Diego City Water Department periodically uses Dulzura Creek as a conduit to transfer water from Barrett Lake to Lower Otay Lake. Typically, the water transfers take place in the spring and early summer of the year. These water transfers help recharge groundwater supplies and provide additional water to the riparian ecosystem within the restoration area.

Deliverables: A notice of completion for all ground preparation and irrigation installation work will be provided.

Task 6: Plantings – In order to fulfill the planting plan, plant propagation will be required. Plant propagation will involve service contracts with plant nurseries to grow container stock for re-vegetation. The planting lay out will require installation of all plant labels in the field. Subsequent field planting will be implemented by planting shoots & cuttings in the winter and spring of 2012 and

potted stock in the fall of 2012.

Monitoring and maintenance during this time period will assess the irrigation system operation and the need for replants and weed control. This will take place monthly as implementation practices are monitored.

Deliverables: Monthly monitoring reports will be provided as plantings are implemented.

Task 7: Monitoring & Maintenance - To assess the effectiveness of restoration projects, River Partners uses a comprehensive, rigorous, and scientifically validated monitoring program. End of season monitoring will show areas of low or high survival for each plant species.

Annual plant survival is monitored after the first growing season using a complete plant census, and this data is used to determine which species, if any, need supplemental re-plantings. In subsequent years, permanent plots are monitored to determine annual survival, growth and foliage volume. Photo-points are established at the beginning of every project and monitored on an annual basis to provide descriptive analysis of vegetative changes over the course of a project. Herbaceous plants and native grasses are monitored using line transects measuring percent cover and species composition in 1m² plots. And finally, biologists are on site weekly strategizing with field staff on irrigation needs, weed control, and other day-to-day operational procedures.

Avian point-count surveys will be conducted during the breeding season within the project area and within nearby reference (control) habitat. River Partners will report on all monitoring activities in year-end reports, as well as a detailed analysis and discussion in the end-of-project report.

Once the restored habitat is established (after year three), there will be a minimal amount of maintenance required at the site. The existing riparian oak habitat currently located on Dulzura Creek shows that with good canopy development, giant reed and other invasives can be controlled by shading. However, DPR will continue to monitor and control giant reed, castor bean, or other invasives that may appear on the site in accordance with management directives included in the Resource Management Plan for the Preserve (currently under preparation). With a continued effort to control giant reed in Dulzura Creek, and development of a full riparian canopy along the waterway, giant reed and other invasive weeds should not be a significant issue beyond project year three.

River Partners will manage all habitat establishment and maintenance activities for the duration of the project. Upon completion of the project, ongoing long-term management/monitoring activities will be conducted by DPR.

Deliverables: Plant census data, descriptive analysis of vegetation changes, avian point count results, and reporting of all monitoring activities will be provided in an end-of-project report.

C. Budget by Task

Please include a specific budget for each task in section B above. This should include both requested SANDAG funds and any matching funds proposed. For projects requesting funding for more than one year, please indicate the requested funding and match for each year. 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 (or insert an Excel spreadsheet).

Task # and Name	Total Project Cost	Phase 1 Grant Request	Phase 1 Total Match
Task 1 - Management	$20,776	$20,776	$
Task 2 - Planning	$23,438	$23,438	$
Task 3 – Permitting/CEQA	$15,000	$	$15,000
Task 4 - Invasive species removal	$124,966	$124,966	$

River Partners, Upper Dulzura Creek - Phase I Budget	Units	Rate	21% Indirect Costs	Total
Task 1 - Management				
Project Manager	105	$ 84.74	$ 17.79	$ 10,766
Accounting	6	43.98	$ 9.24	319
Travel	2	3,500	$ 735.00	8,470
Supplies	1	1,010	$ 212.10	1,222
Total Management				**$ 20,777**
Task 2- Planning				
Senior Ecologist	40	$ 53.77	$ 11.29	$ 2,602
Restoration Ecologist	120	38.86	$ 8.16	5,642
Biologist	250	25.62	$ 5.38	7,751
Travel	1	3,500	$ 735.00	4,235
Printing/Maps/Photography	1	1,200	$ 252.00	1,452
Supplies	1	1,450	$ 304.50	1,755
Total Unit Plan				**$ 23,437**
Task 4 - Invasive Removal				
Field Manager	100	$ 43.82	$ 9.20	$ 5,302
Field Technician *	400	47.67	$ 10.01	$ 23,072
Contract Labor *	800	55.57	$ 11.67	$ 53,792
Herbicide	1	10,000	$ 2,100.00	$ 12,100
Equipment usage & rental	1	15,500	$ 3,255.00	$ 18,755
Travel	1	3,500	$ 735.00	$ 4,235
Supplies	1	6,372	$ 1,338.12	$ 7,710
Total Site preparation & Invasive removal				**$ 124,966**
Total Phase I Cost				**$ 169,180**

D. Project Schedule

Please include a specific start and end date for each task in section B above. This should include both tasks by number and the month and year of the start and end dates. You may add or subtract row and columns as needed (or insert an Excel spreadsheet).

Invasive Removal/Restoration Project Implementation Timetable

(1st Qtr of project implementation is expected to begin January 2011)

Task	Phase I – Year 1				Phase II – Year 2-4											
	Qt 1	Qt 2	Qt 3	Qt 4	Qt 1	Qt 2	Qt 3	Qt 4	Qt 1	Qt 2	Qt 3	Qt 4	Qt 1	Qt 2	Qt 3	Qt 4
1. Management																
2. Planning																
3. Permitting																
4. Invasive Species Removal																
5. Ground Prep & Irrigation Installation																
6. Planting																
7. Maintenance & Monitoring																

Task # and Name	Proposed Start Date	Proposed End Date
PHASE I – current proposal seeking TransNet funding for this phase ONLY		
1. Management	01/01/11	12/31/11
2. Planning	01/01/11	06/30/11
3. Permitting	01/01/11	06/30/11
4. Invasive Species Removal	01/01/11*	12/31/11
PHASE II – to be funded separately through additional sources		
5. Ground Prep and Irrigation Installation	01/01/12	03/31/12
6a. Planting – Shoots & Cuttings	01/01/12	03/31/12
6b. Planting – Potted Stock	10/01/12	12/31/12
7. Maintenance and Monitoring	01/01/12	12/31/14

* Work will not begin until permits have been obtained.

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.

☒ Yes ☐ No The proposed grantee understands that the project must be started within one year of receiving and executed 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.

Megan Hamilton, Group Program Manager

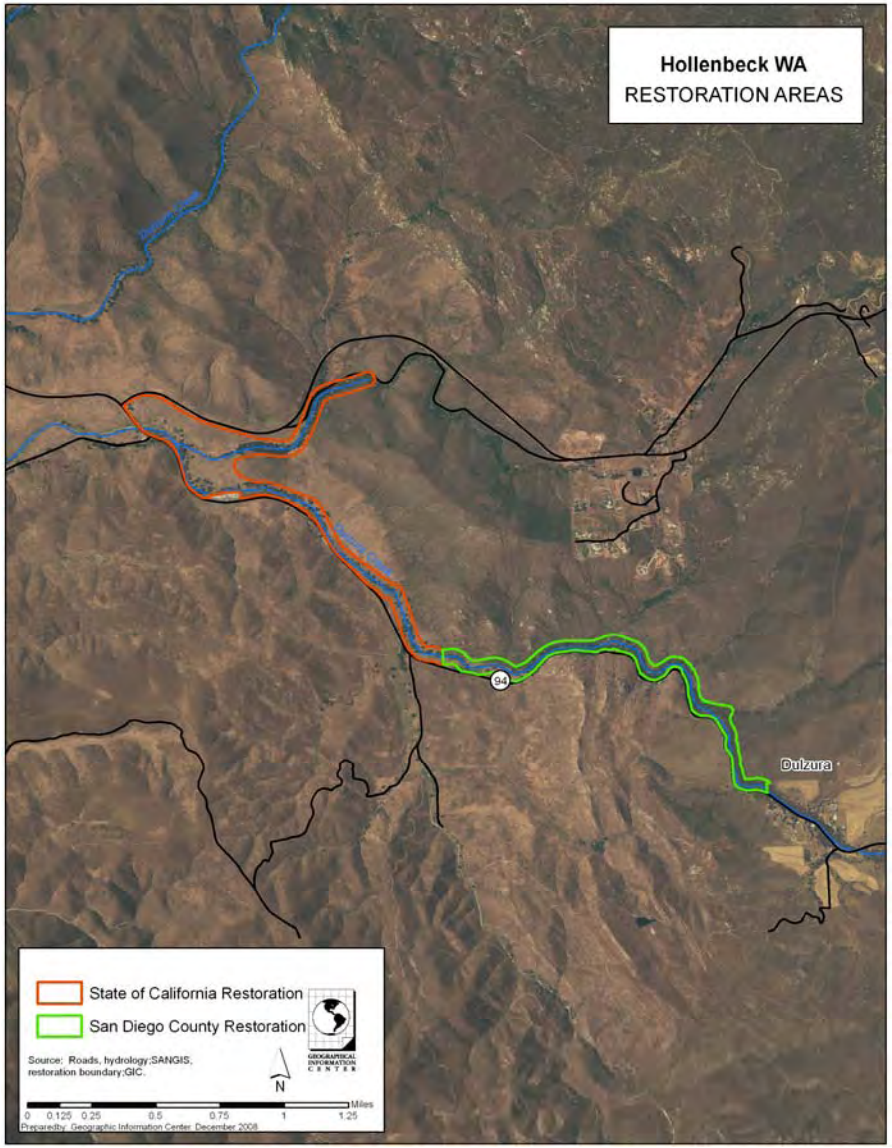
Grantee Name/Title (print or type)

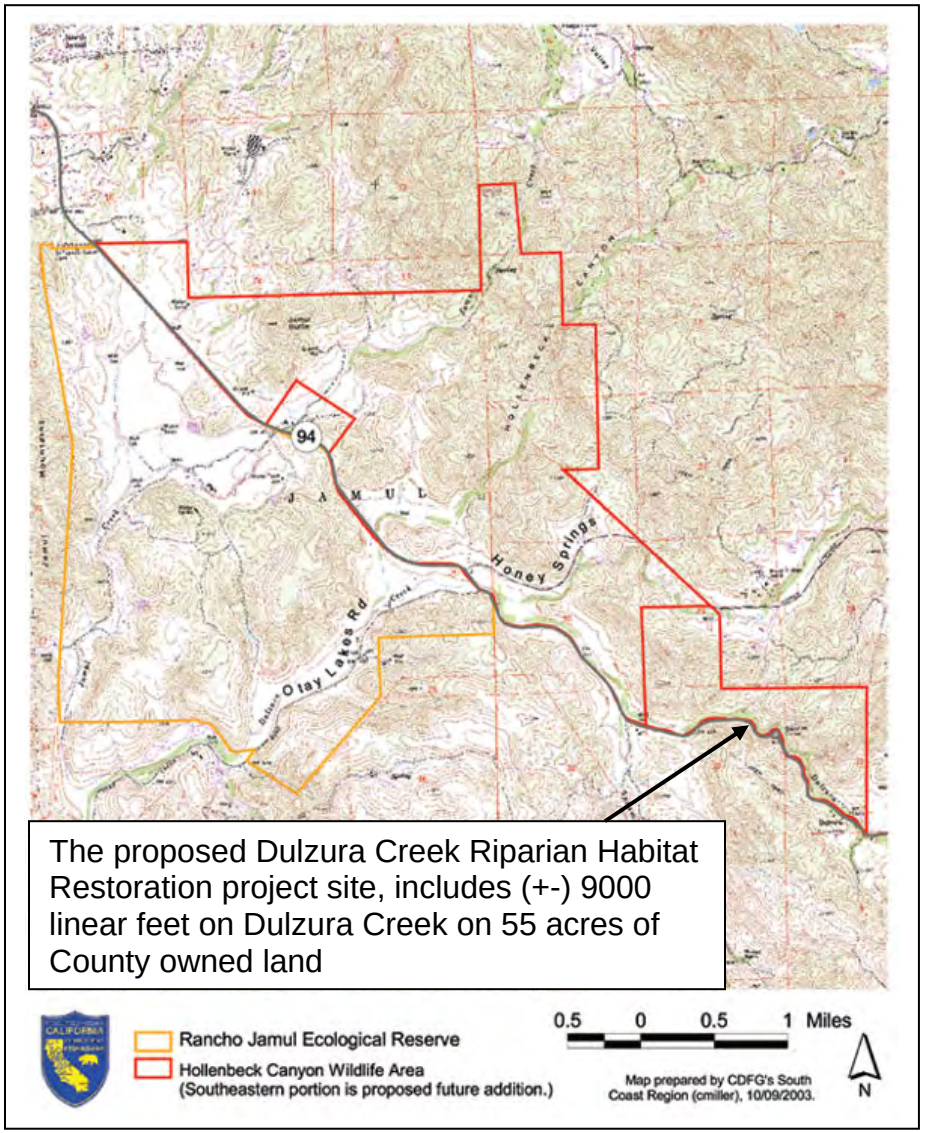
Megan Hamilton

01/26/10

Grantee Signature Date

Dulzura Creek Invasive Species Removal and Restoration Project Location Maps





Lawrence and Barbara Daley Preserve – Upper Dulzura Creek Site Photos

Photo 1. Unvegetated slopes and emerging stands of arundo along the creek.

Photo 2. More stands of arundo emerging within the creek bed

Photo 3. View from creek facing the northern slopes of the Preserve.

Photo 4. Stands of arundo within non-native grassland.

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 by County of San Diego and River Partners for Dulzura Creek

Dear Keith:

The San Diego National Wildlife Refuge wishes to express support for the County of San Diego and River Partners proposal to the Transnet Environmental Mitigation Program (EMP). While the proposed project is not on the Refuge, it will benefit lands conserved for listed and MSCP species by removing exotic, invasive plants along Dulzura Creek in the Otay River watershed.

The proposed project will control invasive plant species and replace them with native riparian plants. The area of the proposed project has been greatly affected by wildfires and past land uses. Riparian habitat restoration carried out by the project proponents, along with work of other agencies in the area, will improve habitat conditions for resident and migratory wildlife along Dulzura Creek.

We hope you will support the Dulzura Creek proposed EMP project.

Sincerely,

Jill Terp

Jill Terp
Refuge Manager – San Diego National Wildlife Refuge