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MEETING NOTICE AND AGENDA

ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

The Environmental Mitigation Program Working Group may take action on any item appearing on this agenda.

Tuesday, September 28, 2010

1 to 2:50 p.m.

SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101-4231

Staff Contact: Keith Greer
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AGENDA HIGHLIGHTS

- **QUALITY OF LIFE STAKEHOLDER MEETING ON HABITAT**
- **AD HOC COMMITTEE'S RECOMMENDATION ON FISCAL YEAR 2011 LAND MANAGEMENT GRANT PROGRAM**
- **2009 CALIFORNIA GNATCATCHER MONITORING RESULTS**

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ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

Tuesday, September 28, 2010
FIVE-YEAR ANNIVERSARY MEETING

ITEM #		RECOMMENDATION
1.	WELCOME AND INTRODUCTIONS (Chair, SANDAG Board Member, Hon. Carrie Downey, City of Coronado Council Member)	
+2.	SUMMARY OF JULY 13, 2010, MEETING	APPROVE
	The Environmental Mitigation Program Working Group (EMPWG) is asked to review and approve the meeting summary of the July 13, 2010, meeting.	Estimated Start Time: 1 to 1:10 p.m.
3.	PUBLIC COMMENTS AND COMMUNICATIONS	COMMENT
	Members of the public will have the opportunity to address the EMPWG on any issue within the jurisdiction of the working group. Speakers are limited to three minutes each.	Estimated Start Time: 1:10 to 1:15 p.m.
+4.	QUALITY OF LIFE STAKEHOLDER MEETING ON HABITAT (James Whalen, Alliance for Habitat Conservation; Alfredo Gonzalez, Nature Conservancy; and/or Michael Beck, Endangered Habitat League)	INFORMATION
	On September 15, 2010, the Stakeholder Committee on the Quality of Life funding strategy met to discuss the funding needs for habitat conservation. The SANDAG staff report to the Stakeholder Committee is provided as Item 4. The EMPWG representatives on this committee will provide any insight and information to the working group.	Estimated Start Time: 1:15 to 1:30 p.m.
+5.	AD HOC COMMITTEE'S RECOMMENDATION ON FISCAL YEAR (FY) 2011 LAND MANAGEMENT GRANT PROGRAM (Bruce April, Caltrans)	DISCUSSION/ RECOMMENDATION
	During the July EMPWG meeting, an ad hoc committee was formed to review the land management grant process and eligible activities. Bruce April chaired the ad hoc committee meeting and will present its recommendations.	Estimated Start Time: 1:30 to 2 p.m.

ITEM #		RECOMMENDATION
+6.	REVIEW OF REVISED FY 2011 AND FIVE-YEAR FUNDING STRATEGY (Keith Greer, SANDAG) The EMPWG recommended funding allotments for FY 2011 and updated the Five-Year Funding Strategy at its July meeting. Staff has revised the corresponding text of the Five-Year Funding Strategy to be consistent with the EMPWG discussion. Prior to sending the item on to the Regional Planning Committee, the EMPWG will have the opportunity to revise the text changes and provide input to staff.	INFORMATION/ DISCUSSION Estimated Start Time: 2:10 to 2:15 p.m.
7.	2009 CALIFORNIA GNATCATCHER MONITORING RESULTS (Clark Winchell, United States (U.S.) Fish and Wildlife Service) Clark Winchell of the U.S. Fish and Wildlife Service lead the effort to monitor the status of the California gnatcatcher in 2009 with funding from the *TransNet* Environmental Mitigation Program (EMP). Mr. Winchell will provide an informational report that will compare the 2009 and 2007 monitoring results.	INFORMATION Estimated Start Time: 2:15 to 2:40 p.m.
8.	NEXT MEETING DATE AND ADJOURNMENT The next meeting of the EMPWG is scheduled for November 16, 2010. Tentative Topics: TBD	INFORMATION Estimated Start Time: 2:40 to 2:45 p.m.

+ next to an item indicates an attachment

San Diego Association of Governments

ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

September 28, 2010

AGENDA ITEM NO.: **2**

Action Requested: APPROVE

SUMMARY OF JULY 13, 2010, MEETING

File Number 3002700

Members in Attendance:

Tom Oberbauer (Vice Chair), County of San Diego
Bruce April, Caltrans
Michael Beck, Endangered Habitats League
Carlton Rochester, U.S. Geological Survey
Mike Grim, City of Carlsbad
Ann Harvey, San Diego Conservation Network
Josie McNeeley, City of Chula Vista
David Mayer, California Department of Fish and Game
Barbara Redlitz, City of Escondido
Jim Whalen, Alliance for Habitat Conservation
Susan Wynn, U.S. Fish and Wildlife Service
Emily Young, The San Diego Foundation

Others in Attendance:

Dan Conaty, Parsons
Julia Dyer, California Department of Fish and Game
Scott Fleury, ICF
Lucy Galvin, Helix Water District
Craig Hooker, City of San Diego
Jerry Jakubauskas, City of San Diego
Barbara Kus, U.S. Geological Survey
Jeff Lincer, WRI
Mary Lindquist
Libby Lucas, California Department of Fish and Game
Niki McGinnis, City of San Diego
Yvonne Moore, SDMMP
Ken Quigley, Camp Pendleton
Ron Remple, SDMMP
Kim Smith, Caltrans
Trish Smith, The Nature Conservancy
Jared Underwood, County of San Diego
Michael Wall, San Diego Natural History Museum
Clark Winchell, U.S. Fish and Wildlife Service

SANDAG Staff in Attendance:
Grace Chung
Keith Greer
Kim Roeland
Rob Rundle
Alex Samarin

1. Welcome and Introductions

Vice Chair Tom Oberbauer, County of San Diego, called the meeting to order at 1:04 p.m. and welcomed the group. He invited members and guests to introduce themselves.

2. May 11, 2010, Meeting Summary

After one correction was made concerning the spelling of Carlton Rochester, Jim Whalen, Alliance for Habitat Conservation, motioned to approve the meeting summary from May 11, 2010; Carlton Rochester, U.S. Geological Survey, seconded the motion. The motion carried without opposition.

3. Public Comments and Communications

No comments were received from members of the EMPWG or from the public.

4. Update on Regional Biological Databases and Web Sites Efforts

Keith Greer, SANDAG, provided a status report on databases and Web sites that several agencies have been working on, including SANDAG, the U.S. Fish and Wildlife Service, the San Diego Management and Monitoring Program (SDMMP), and the U.S. Geological Survey. Mr. Greer announced that hard copies of one of the databases, the Conserved Lands Database, have been printed so that members and the public can provide input and assist SANDAG staff to address any missing information. He also described three primary goals for Elise Watson, U.S. Fish and Wildlife Service, in her new role working on the Regional Biological Database:

1. A status report of all databases that exist and to provide a recommendation for using one of the existing databases for all management and monitoring data or the creation of a new database.
2. Working with the SDMMP to determine which data fields the database needs to have.
3. Prepare for collection of data starting next spring.

Mr. Greer updated the EMPWG on the development of a web-based archive of reports related to land management and monitoring activities led by the SDMMP, and the status of the web-based *TransNet* EMP Dashboard to track acquisition, expenditures, management, and monitoring efforts as funded by the *TransNet* EMP.

Kim Roeland, SANDAG, presented a geographic information system (GIS) database compiling information on Multiple Species Conservation Program (MSCP) and Habitat Conservation Program (MHCP) covered species, organizing them into risk groups based on classifications from Regan et al. (2008) and including a digitized layer depicting critical populations. Several questions were voiced concerning the critical populations layer, including where the information originated and how it was incorporated into the database. The critical populations layer (also including "major" and "core" populations) were based off of descriptive accounts from the MSCP and MHCP in varying degrees of detail. Polygons were drawn around point data in accordance with the information that was provided in the MSCP and MHCP planning documents. The GIS file for this database is available online through the SANDAG Web site.

5. Ad Hoc Committee's Recommendation on FY 2011 Annual Funding and Updated Five-Year Funding Strategy

During the May 11, 2010, EMPWG meeting, an ad hoc subcommittee was formed to review and propose recommendations on the FY 2011 EMP *TransNet* EMP Regional Conservation Funds for regional management and monitoring. Susan Wynn, U.S. Fish and Wildlife Service, chaired the meeting, which met on June 30, 2010. In her review, Ms. Wynn described the status of funds in the five-year budget, including what has been expended and what remains, changes, and cost savings. Ms. Wynn noted that the biggest change was a recommendation to include "Invasive Animal Species Removal" as a new line item in the budget.

Michael Beck, Endangered Habitats League, asked for more information regarding the remaining money for Wildlife Corridor and Linkages Monitoring; Mr. Greer answered that the SDMMP is developing corridor and species priorities based on the Linkages Workshop that was held on April 14, 2010.

David Mayer, Department of Fish and Game, asked about the Post-Fire Monitoring/Recovery Planning. Ms. Wynn responded that the funding would allow the U.S. Geological Survey to continue their studies and begin to draw conclusions that are important for management decisions both during and after a fire.

Emily Young, The San Diego Foundation, spoke about ways to direct federal funding into the San Diego region; she listed the National Oceanic and Atmospheric Association's Regional Integrated Sciences and Assessments program as an example.

A motion was made to take the funding recommendations of the ad hoc subcommittee to the Regional Planning Committee for approval. Mr. Greer indicated he would revise the text that is associated with the funding allotments and bring back to the next EMPWG meeting. Mr. Rochester motioned to approve, and Mr. Whalen seconded; the motion carried with all in favor.

6. Request for Ad Hoc Committee to Review the Land Management Grant Process for FY 2011

Mr. Greer requested the EMPWG to consider forming an ad hoc committee to review the current land management implementation grant process and make recommendations to improve the process for FY 2011. He noted that in the last four years, eligible activities (access control, fire

recovery, invasive control, and habitat restoration) have not changed. Bruce April, Caltrans, was selected to chair the committee; and Mr. Whalen, Mr. Mayer, Mr. Beck, Mr. Rochester, Mr. Oberbauer, and Mike Grim, City of Carlsbad, volunteered to sit on the subcommittee.

7. Thorne's Hairstreak Butterfly Monitoring

Amy Lucas, University of Nevada, Reno, presented some information related to her graduate studies on the Thorne's hairstreak butterfly (Callophrys thornei) utilizing funding from the *TransNet* EMP. She began with a brief description of butterfly taxa, a history of legal protection status, and natural history. Her project questions include:

1. What is location and quantity of the host plant, Tecate cypress (Cupressus forbesii), available for Thorne's hairstreak on Otay Mountain?
2. How much of the host plant is occupied by the butterfly, and at what stage/age does the Tecate cypress become habitat for the Thorne's hairstreak?
3. What are the key characteristics of Thorne's hairstreak habitat?
4. How does tree age affect larval performance and adult behavior?
5. What are Thorne's hairstreak extinction and colonization rates among patches of Tecate cypress?

Ms. Lucas presented a map with Tecate cypress stand data from 2009 and Thorne's hairstreak survey results from 2010.

Mr. Whalen asked how the research might in the future help to understand long-term trends and to inform management. While there was general consensus that this is important, Mr. Greer and Ms. Lucas stated that the current effort is focusing primarily on gathering baseline information.

Mr. Beck asked about the status of both species after the 2003 fire. Mr. Oberbauer noted that, overall, the Tecate cypress is doing well, though the extent of the stands might have contracted slightly since the fire. Other questions emerged about the age of the Tecate cypress trees (e.g., if age affected Thorne's hairstreak reproductive cycle). It was pointed out that size was not a good indicator of age; some small trees can be surprisingly old.

8. Next Meeting and Adjournment

Mr. Greer announced that there is a conflict with the next meeting scheduled for September 14, 2010, and suggested changing the date of the meeting. An e-mail to the members will be used to determine the best date for the September meeting. Committee members and the public were invited to stay and examine the Conserved Lands Database maps and provide input and assist staff to address missing information. The meeting was adjourned at 2:18 p.m.

Key Staff Contact: Keith Greer, (619) 699-7390, kgr@sandag.org

San Diego Association of Governments

QUALITY OF LIFE STAKEHOLDER WORKING GROUP

September 15, 2010

AGENDA ITEM NO.: **3**

Action Requested: INFORMATION/DISCUSSION

HABITAT CONSERVATION FUNDING NEEDS, PROJECTED COSTS, AND POTENTIAL BENEFITS

File Number 3200000

Introduction

All of San Diego County is included in one of four habitat conservation planning areas that have been approved or are in process of approval: the Multiple Species Conservation Program (MSCP) South (approved in 1997), the Multiple Habitat Conservation program (approved in 2002), the North County MSCP (currently being developed), and the East County MSCP (to be initiated after adoption of the North County MSCP).

These plans fall under the umbrella of the State of California Natural Communities Conservation Planning Program, enacted as law in 1991, which provides a method to proactively identify areas necessary for species conservation and those areas more suitable for development, breaking the cycle of piecemeal habitat conservation planning that was occurring. The goal of the Program was to develop regional habitat conservation plans (HCPs) that identified a sustainable habitat conservation pattern, which would accommodate the habitat needs of the region and avoid the need to list species under the Federal and State Endangered Species Act. In return, the jurisdictions, stakeholders, and infrastructure provider gained greater certainty on where development could occur.

A detailed economic analysis prepared by SourcePoint (the SANDAG Service Bureau) for the MSCP South, the first adopted regional HCP, determined that the San Diego region's economy would fare much better under the development of regional HCPs, resulting in more property and sales tax, higher personal income, and higher retail sales due to increases in land use certainty and development permit streamlining.[1] Habitat preservation may be viewed as an investment and a way to avoid economic impacts associated with the uncertainty of endangered species regulations on future growth. In practice, these plans are the most efficient and effective means for expediting appropriate development, as well as preserving the necessary habitat to protect the region's native species. The certainty provided by these plans assist in the timely and cost-effective development of critical regional infrastructure, local public infrastructure, and private development.

[1] SourcePoint. 1995 Economic Impact Analysis. Multiple Species Conservation Program Resource Document, Volume I, Section 9. pp. 9-1 to 9-28.

Recognizing that no one jurisdiction could financially support these regional conservation plans, all of the implementing agreement contracts contained the commitment to work as a region toward a long-term funding approach – a regional funding source. Until a regional funding source is established, jurisdictions must rely upon other funding sources, such as their General Funds, grants, and contributions through the development entitlement process.

In November 2004, San Diego County voters adopted the *TransNet* Extension Ordinance, which included an Environmental Mitigation Program (EMP) to mitigate impacts of future transportation projects identified in the Regional Transportation Plan. The EMP was a significant first step towards successful long-term implementation of regional habitat conservation plans, but it was always recognized that additional funding would be required for the region to successfully complete the plans. To this end, the *TransNet* Extension Ordinance includes a provision that states, "*SANDAG agrees to act on additional regional funding measures (a ballot measure and/or other secure funding commitments) to meet the long-term requirements for implementing habitat conservation plans in the San Diego region, within the timeframe necessary to allow a ballot measure to be considered by the voters no later than four years after passage of the TransNet Extension* (*TransNet Environmental Mitigation Program Principle 10)*.[2]"

SANDAG staff and the 20 member Environmental Mitigation Program Working Group (EMPWG) have been analyzing and discussing the costs to implement the regional habitat conservation plans throughout the region. The EMPWG identified five key program components to be discussed as part of any future regional funding source: habitat acquisition, land management, biological monitoring, creation of an endowment or similar perpetual fund mechanism, and contingency funding.

The first three program components have been grouped together for this discussion due to their interdependence. Arguably, the last two program components can be viewed as separate policy discussions.

Funding Needs

1. Acquisition, Management, and Monitoring

All four regional habitat conservation plans require the acquisition of a targeted number of acres in a configuration providing minimum size and connectivity to allow wildlife agencies a reasonable level of assurance that the species in the conservation planning areas will not go extinct. This interconnected system of habitat represents the region's "green infrastructure," key areas necessary for the protection of endangered species and those species that could become endangered without protection. Just like other regional infrastructure, habitat conservation requires a multi-jurisdictional collaborative approach, capital cost for the conservation of lands, the long-term management to maintain the biological resources, and periodic monitoring to assure the infrastructure investment is performing as expected.

The conservation plans are based upon the premise that there will be less habitat in the future, but that habitat will be better managed and therefore able to continue to support San Diego's sensitive species. Each regional habitat conservation plan is required to develop management plans and

[2] The SANDAG Board subsequently approved an extension to 2012.

directives, as well as a monitoring program to assess the effectiveness of the plans in conserving the sensitive species and their habitat. Biologically, the need for monitoring and management of the habitat preserve areas is elevated due to the close proximity of existing and future development. Catastrophic wildfires, droughts, invasion by exotic species, impacts by increased recreation, disease, long-term changes in rainfall are some affects that could impact the persistence and viability of the sensitive species included in these plans. While these plans are designed to capture the natural ecosystem process, they require monitoring to assess the effectiveness of the habitat conservation plans for protecting sensitive species and management actions to respond to unforeseen events.

Since the adoption of the MSCP South (1998) and the MHCP (2002), 80 percent of the target acreage has been conserved. Overall, acquisitions in the region have occurred faster than anticipated in the first ten years of plan implementation. This has been a result of close collaboration with the federal and state wildlife agencies to successfully compete for state bond funding and federal grant funds. For example, the San Diego region has received $125 million in federal Endangered Species Act Section 6 funds for land acquisition to help implement the HCPs. The *TransNet* EMP also has been a key strategy to assist in land acquisition, but its primary purpose is for mitigation of regional transportation projects and local streets and roads and as such the acquired property may only partially assist in building out the preserve (e.g., approximately 1/3– 1/2 of the estimated mitigation costs will be for the restoration of wetlands on lands already that may be already conserved as open space).

Local jurisdictions continue to acquire and manage land through state and federal grants and general fund contributions. While this has been successful for some jurisdictions, more habitat conservation planning is occurring throughout the state, decreasing the amount of potential grants and thereby increasing the burden on those jurisdictions' general funds. In addition, as a jurisdiction continues to acquire more land, long-term management and monitoring costs also increase. This has resulted in the reluctance of some jurisdictions to adopt their portions of the regional HCPs due to concerns about long-term financial obligations for management and monitoring conserved lands. As such, in order to implement the existing and proposed HCPs, a long-term regional funding source for land acquisition, management, and monitoring would be required.

	Local Acquisition Needs	Management	Monitoring
Acres[3]	24,879	341,336	345,336
Cost per Acre[4]	$12,000 - $70,000	$150 ac/yr[5]	$15 ac/yr

[3] Includes estimated local acquisition needs from East County MSCP as estimated from County of San Diego.

[4] Cost are in 2010 dollars based upon the regional HCPs and discussions at the EMPWG.

[5] This included $100 ac/yr for basic land stewardship and $50 ac/yr for biological management based upon discussions at the EMPWG and included in the North County MSCP.

2. Endowment

The permits associated with the regional habitat conservation plans run for 50 years. After this time, all land acquisition is expected to have been completed and a re-assessment of the HCPs would occur. A policy issue has arisen of whether to attempt to create an endowment to perpetually fund the long-term management and monitoring of the lands included in the HCPs. This would allow a secure source of funding beyond the 50 year timeline associated with the HCPs. An endowment account could be created similar to a 401(k) program, whereby annual payments could be made over a fixed time, which would generate sufficient annual interest to perpetually fund on-going management and monitoring.

An endowment could establish a comprehensive solution that avoids deferring the long-term management and monitoring costs for a future effort. Conversely, an endowment would require a large percentage of dedicated funding and would tie up significant capital for 40 years. Other infrastructure programs (transportation, water, sewer, electric) do not use endowments; however, these programs often have other sources of revenue, including use fees. If no endowment is established, the region will be required to generate $43.2 million per year to continue with management and monitoring in perpetuity (2010 dollars).

The issue of whether or not to include an endowment or similar perpetual funding mechanism is a key policy issue. For the purpose of this exercise an endowment fund sufficient to cover the annual ongoing cost at the end of 40 years was used.[6]

3. Contingency Fund

Green infrastructure is no different than other infrastructure in that all costs cannot always be anticipated. Circumstances change and unforeseen events occur. Recent examples have included significant cost associated with the wildfires of 2003 and 2007, out break of pests and disease, such as the gold-spotted oak borer threatening the region's oaks, and the uncertainty associated with climate change. This has given rise to another key policy issue - whether to include a contingency fund. A contingency fund would allow access to the necessary capital to promptly address these unforeseen events. However, if it were not used, it also could be perceived as a waste of funding capacity. For the purpose of this exercise, a contingency fund of 10 percent of the annual reoccurring costs of management and monitoring were assumed.

EMPWG Recommendation

The EMPWG was established by the SANDAG Board of Directors via the Regional Planning Committee to assist with the implementation of the *TransNet* EMP. Included in the EMPWG charter is the provision that:

> *The EMPWG will assist with the development of a regional funding measure (a ballot measure and/or other secure funding commitments) to meet the long-term requirements for implementing habitat conservation plans in the San Diego region.*

[6] Assumes establishment of a sinking fund with a nominal interest rate of 6 percent, which could generate a 3 percent inflation-adjusted return on the endowment.

The EMPWG helped to define the five key program components above, their associated costs, and vet the issues related to a regional habitat conservation funding measure at their meetings on: August 14, 2007; September 11, 2007; November 13, 2007; November 13, 2008; and February 10, 2009. The EMPWG recommendations are shown in Attachment 1 and the total costs are summarized below.

Projected Costs

Annual and cumulative costs for these program components as recommended by the EMPWG were presented to the Board in 2008, the Quality of Life Ad Hoc Steering Committee in 2009, and the Quality of Life Stakeholder Working Group in 2010. These estimates have been updated to 2010 dollars.

(2010$ millions)	Land Acquisition, Management, and Monitoring	Endowment	Contingency	Total
Annual	$43.64	$30.38	$3.04	$77.06
40 Years (2010 – 2050)	$1,746	$1,215	$121.5	$3,083

Attachment: 1. Recommendations of the Environmental Mitigation Program Working Group on Regional Habitat Conservation Funding – February 10, 2009

Key Staff Contact: Keith Greer, (619) 699-7390, kgr@sandag.org

Attachment 1

Recommendations of the Environmental Mitigation Program Working Group on Regional Habitat Conservation Funding February 10, 2009

Introduction

The Environmental Mitigation Program Working Group (EMPWG) was established by the Regional Planning Committee of the SANDAG Board. Among other activities, the EMPWG Charter indicates that "*the EMPWG will assist with the development of a regional funding measure (a ballot measure and/or other secure funding commitments) to meet the long-term requirements for implementing habitat conservation plans in the San Diego region*".

The EMPWG discussed the elements, costs, and issues related to a regional habitat conservation funding measure at their meetings on: August 14, 2007; September 11, 2007; and November 13, 2007. The EMPWG identified key policy issues that the SANDAG Board of Directors would have to address in the future and provided recommendations on these issues at their November 13, 2008, and February 10, 2009, meetings.

Discussion

The EMPWG focused on providing recommendations to key policy questions that will be face by the SANDAG Board of Director in consideration of a future quality of life funding measure. Establishing a position on these questions allows for the determination of the necessary investment level for habitat conservation. The following are the policy questions and the EMPWG recommendations:

- **Should a standardized management plan be developed with generic costs for the purposes of estimating regional funding needs? If so, should an independent third party be contracted to develop these costs?**

  EMPWG Recommendation: Yes, a subcommittee has already been established to discuss what should be included in habitat management plans. Funding has been provided and no addition efforts are need. No, the subcommittee feels that the financial model and the estimates on cost have been validated by outside sources, they are robust, and any additional analysis would not yield significantly different results.

- **Should a regional funding source include an endowment for perpetual management and monitoring? If no endowment is developed, what is proposed at the end of the current funding measure?**

  EMPWG Recommendation: The regional funding source should yield a perpetual funding source. The method (e.g. endowment, perpetual tax, etc.) should be open for discussion.

- **Should the jurisdictions be required to maintain their current level of effort regarding open space management? If so, how do you establish equity amongst the jurisdictions?**

  EMPWG Recommendation: The regional conservation plans rely upon the promise of a regional funding source. Some jurisdictions have active open space divisions and/or stable funding sources (i.e., non-general fund). The EMPWG feels that the regional funding source should cover the biological management and monitoring cost, and one-half of the land (stewardship) management costs on lands conserved as part of the NCCP. The regional funding source would be a match to the jurisdictions or other land manager's management cost as required by the conservation plans.

  This would augment the existing basic land stewardship costs for all land managers in the region—both jurisdictions and NGOs. The method of funding could be a pro-rata share of the funds based on land management acreage, and not necessarily a matching fund program. It is recommended that the method be determined as part of the Quality of Life Ad Hoc Committee's efforts.

- **Should the regional funding provide the funds for basic land management of private property dedicated to a jurisdiction through a development entitlement process?**

  EMPWG Recommendation: Yes, one-half of the cost as described above.

- **Should a regional funding source include a contingency for unforeseen events? If a contingency is desirable, should it be generated from the proposed land management funding until an established threshold is met?**

  EMPWG Recommendation: Yes, a 10 percent contingency should be included. It should build up to a predetermined minimum target amount is achieved, and then funds should be redirected towards other management and/or monitoring effort until the fund is used drop below the predetermined amount. This is similar to SANDAG's existing contingency fund policy (No. 30).

  Since it is expected that the open space Preserve will be built out over a 40-year period (i.e., the land to be managed and monitored will grow), the proposed contingency should be set at 10 percent of the annual operating budget for that given year, with any replenishments necessary to achieve the minimum balance. Policies on the qualifying uses of the fund, the decision-maker on the approval of any use, and the length of replenishment of the contingency after its use should open for further discussion by the Quality of Life Committee.

- **Should the local jurisdictions provide for the program administration costs?**

  EMPWG Recommendation: Yes, one-half of the land management cost only as described above.

The Subcommittee recommendations would result in the following funding needs:

EMPWG Recommendation Option
(Updated in September 2010)

Totals (2010$)[a]	**Average Annual (in millions)**	**40-Year Total (in millions)**
One-time Costs: Land Acquisition, Restoration and Start-Up	$13.26	$530.6
Totals (2010$)[b]	**Annual Recurring Cost**	**40-Year Total (in millions)**
Annual Reoccurring Costs: Habitat Management and Monitoring	$30.37	$1,216
Contingency (10%) on Management and Monitoring	$3.037	$121
Program Administration (10%)[c]	-----	-------
Annual Payment into Perpetual Endowment for Management and Monitoring assuming a 3 percent inflation adjusted rate of return	$30.38	$1,215
Stewardship Management on Lands Conserved through Entitlement Process	Included above	Included above
Annual Cost Recurring Cost After Year 40	$43.24	N/A
40 Years (2010 – 2050) **(in millions)**		$3,083

[a] All costs are in 2010 dollars. Actual contributions would need to rise to off-set inflation.

[b] All costs are in 2010 dollars. Actual contributions would need to rise to off-set inflation.

[c] Program Administration left out of this analysis and deferred to future discussion of the entire quality of life funding measure.

San Diego Association of Governments

ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

September 28, 2010

AGENDA ITEM NO.: **5**

Action Requested: DISCUSSION/RECOMMENDATION

AD HOC COMMITTEE'S RECOMMENDATION ON FISCAL YEAR (FY) 2011 LAND MANAGEMENT GRANT PROGRAM

File Number 3200100

Introduction

During the July 13, 2010, EMPWG meeting, an ad hoc subcommittee was formed to review and propose revisions to the FY 2011 Land Management grant program. The ad hoc committee was formed to review the current eligible activities and the application process and make recommendations to the EMPWG at its September meeting.

The ad hoc subcommittee met on August 23, 2010, and consisted of Thomas Oberbauer, Mike Grim, Mike Beck, Susan Wynn, Megan Cooper, James Whalen, and Robert Fisher and was chaired by Bruce April. SANDAG contractors, Ron Rempel and Yvonne More of the San Diego Management and Monitoring Program, provided an analysis of the existing program and recommendations for revisions.

Discussion

During the July 13, 2010, EMPWG meeting, the group voted to recommended to the Regional Planning Committee that a total of $2.1 million be available for land management grants in FY 2011. The group also recommended that an ad hoc committee be formed to determine how the process of how these funds could be allocated.

The ad hoc committee identified two major recommendations: (1) the majority of the funds should continue to be allocated through a competitive land management grant process and (2) a portion of the funds should be set aside for petitions from land managers to address emergencies that occur in between grant cycles.

Land Management Grants ($1.95 million proposed)

The competitive grant process has proven to be a successful process to distribute needed funding to the land managers in the region. A review of the last four cycles of the grant program has shown that the funding is being distributed across the region (not just aggregated to one land manager), and the quality of the proposals has become very well written.

The San Diego Management and Monitoring Program has recommended revisions to the program to align the grant program to better reflect the most at-risk species while still maintaining some funding for general, habitat-related management. The goal is to better align the regional needs with the available funding. The ad hoc committee is proposing three eligible activities as follows:

1. Invasive Control and Habitat Restoration ($950,000)
2. Species-Specific Management ($650,000)
3. Habitat Maintenance, Access Control/Management, and Volunteer Coordination ($350,000)

Details on these eligible activities are described in Attachment 1. The ad hoc committee has recommended that the projects be eligible to apply for any of these activities, as appropriate, but that separate evaluation and prioritization criteria are used for each of the three eligible activities. Minor revisions to the submission form have been recommended and are included as Attachment 2.

Emergency Funds for Land Management ($150,000 proposed)

The ad hoc committee discussed the possibility of creating an emergency fund to assist land managers with land management emergencies that arise in between the grant cycle. This proposal would allow for funds to be quickly accessed for emergency responses. Land managers would have to request the funds through SANDAG once a set of findings were made and approved by a committee. The ad hoc committee discussed what would constitute a land management emergency (some examples included landslides and pest invasions that need prompt attention). A process and criteria have been proposed by SANDAG staff (Attachment 3). The ad hoc committee has received copies of this proposal, and some have provided individual input, but the committee has not had a chance to vet this issue out as an ad hoc committee.

The EMPWG will review and discuss the proposals at its September 28, 2010, meeting. SANDAG staff will take the EMPWG recommendation to the Regional Planning Committee and the SANDAG Board of Directors along with changes to the Five-Year Funding Strategy.

Attachments:
1. Environmental Mitigation Program (EMP) FY 2011 Land Management Grants – Program Overview and Instructions
2. SANDAG Grant Submission Form: For Consideration for *TransNet* Environmental Mitigation Program (EMP)
3. Criteria for Emergency Land Management Funding for Discussion Purposes Fiscal Year 2011 Funding for Land Management

Key Staff Contact: Keith Greer, (619) 699-7390, kgr@sandag.org

San Diego Association of Governments

ENVIRONMENTAL MITIGATION PROGRAM (EMP)
FY 2011 LAND MANAGEMENT GRANTS –
PROGRAM OVERVIEW AND INSTRUCTIONS

Program Description

The *TransNet* Extension Ordinance and Expenditure Plan, as approved by the voters on November 2, 2004, includes an Environmental Mitigation Program *(*EMP). The EMP is a funding allocation category for the costs to mitigate habitat impacts for regional transportation projects. The EMP is a unique component of the *TransNet* Extension in that it goes beyond traditional mitigation for transportation projects by including a funding allocation for habitat acquisition, management, and monitoring activities as needed to help implement regional habitat conservation plans.

On XXXX, XX 2010, the SANDAG Board of Directors approved land management and monitoring activities and a budget for FY 2011. The Board approved $1.95 million for management projects related to 1) Invasive Control and Habitat Restoration 2) Species-specific Management Actions, and 3) Maintenance, Access Control/Management and Volunteer Coordination.

Eligible Projects

SANDAG has allocated $1.95 million to address invasive species control and restoration of degraded habitat areas, management to preclude damage caused by human use, and species-specific management. Review of the monitoring data collected since 1997 indicates some species and habitats are at significant risk due to a variety of stressors and that action is needed to reverse downward trends in habitat or species conditions. It is envisioned that the $1.95 million would be part of a multi-year strategic approach that includes one or more of the following **eligible activities**:

1. Invasive Control and Habitat Restoration ($950,000)– Projects that reduce existing or emerging invasive species that threaten endangered and/or other sensitive species **AND** that engage in active habitat restoration on degraded habitat lands to promote recovery of native vegetation communities and/or threatened, endangered, and other sensitive species habitat. Projects that focus on the following vegetation communities will be given the highest priority for funding:
    - Grasslands
    - Maritime succulent scrub/coastal bluff scrub
    - Coastal sage scrub
    - Riparian and Inland aquatic systems, including vernal pools.

2. Species-Specific Management ($650,000) – Projects that focus on managing species at risk of extirpation which are species covered under the regional habitat conservation plans, generally by identifying and reducing threats, and that include monitoring to demonstrate success at increasing or stabilizing populations. Pursuant to a regional assessment of monitoring efforts conducted in 2010, the following species have been determined to be the highest at risk species in the region where land management activities could benefit existing populations. Projects that focus on the following species will be given the highest priority for funding:

- Western pond turtle
- Coastal cactus wren
- Golden Eagle
- Nuttall's lotus
- San Diego ambrosia
- San Diego thornmint
- Short-leaved dudleya
- Sticky dudleya
- Orcutt's spineflower

3. Habitat Maintenance, Access Control/Management and Volunteer Coordination ($350,000) – Regular day-to-day habitat maintenance, management of public use combined with monitoring of effects on species and habitats, and the coordination of volunteer programs to implement management actions. This includes signage (both interpretive and cautionary), education, erosion control, culvert maintenance, fencing, patrolling public use, costs related to volunteer coordination, law enforcement, and efforts to remove garbage in existing preserve systems to allow habitat areas to recover. Eligible projects also include data collection/monitoring to:
    - Determine the effects in public use on species and vegetation communities
    - Track types, quantity, and seasonality of public use
    - Assess areas for compatible public use prior to allowing access.

Projects that are not ready to start within 12 months of submission of the application to SANDAG will not be eligible for this funding cycle. Projects approved by the SANDAG Board of Directors for funding, that do not start within one year of will be at risk of losing their funding. Projects will only be funded for a maximum of 3 years initially.

Process for Allocating the Funds

SANDAG will accept project proposals from land managers in San Diego County that will benefit regional conservation planning under the Natural Communities Conservation Planning Program. The applicant must own the land, or be designated to manage the land by the land owner by contract or other written form of legal documentation and should have any applicable state and federal permits prior to the initiation of work. The land must be conserved as open space for natural resources. Representatives of the land owner and land manager must be identified on the application form and be authorized in writing to enter into a contract agreement with SANDAG.

Applicants must complete a Grant Submission application (Attachment 2) that does not exceed 12 pages. The proposal will include the purpose of the project, the scope of work, timeline, and costs. Applicants must clearly identify their proposed tasks in the scope of work, funding requested for each task, start and end dates of the tasks, and deliverables. **Applicants may apply for more than one eligible activity in their grant application, but MUST group the proposed tasks by the corresponding activity. Applicants are encouraged to identify phasing in their proposal in case full-funding for the project is not available.**

All project proposals will be reviewed for eligibility, ranked, and prioritized as described below. A list of recommended projects will be submitted for consideration to the Environmental Mitigation Program (EMP) Working Group and the Regional Planning Committee (RPC), and the projects are subject to approval by the SANDAG Board of Directors.

Successful applicants will then be required to enter into a contract with SANDAG for grant funding. Successful applicants will be required to submit quarterly reports on their progress and a final summary report of the project's contribution to promote habitat conservation in the region along with the final invoice.

Who Will Score The Projects?

An evaluation committee will be made up of EMP Working Group members and/or other qualified individuals who do not have an affiliation with any of the proposed projects. The committee will include people with knowledge of the regional preserve system and land management.

Project Evaluation and Ranking

The following evaluation and ranking criteria will be used by the evaluation committee.

Eligible Activity: 1. Invasive Control and Habitat Restoration Projects

Project Evaluation Criteria	Point Range	Weight	Maximum Score Possible	Total Score
Lack of management of vegetation communities and/or exotic species may result in extirpation of covered species	**0-5**	**5**	**25**	
Project addresses species or vegetation community at highest risk of loss.	**0-5**	**5**	**25**	
Critical linkage parcels or in regional wildlife corridor	**0-5**	**4**	**20**	
Long term success of management activities is likely with clear measurable positive results which will reduce future land management costs. Success criteria have been identified and will be monitored and reported. (High Cost-Effectiveness)	**0-5**	**5**	**25**	
Urgent action is needed to address a problem that would severely degrade a sensitive vegetation community	**0-5**	**5**	**25**	
Project part of a larger strategic effort which covers a large area with multiple partners and multiple benefits? High Economy-of-Scale	**0-5**	**3**	**15**	
Sufficient matching funds available to complete the project	**0-5**	**3**	**15**	
Project promotes public awareness of sustainable land management through public outreach and participation	**0-5**	**2**	**10**	
Total			**160**	

Eligible Activity: 2. Species-Specific Management

Project Evaluation Criteria	Point Range	Weight	Maximum Score Possible	Total Score
Lack of management of vegetation communities and/or exotic species may result in extirpation of covered species	0-5	5	25	
Project addresses species or vegetation community at highest risk of loss.	0-5	3	15	
Critical linkage parcels or in regional wildlife corridor	0-5	2	10	
Long term success of management activities is likely with clear measurable positive results which will reduce future land management costs. Success criteria have been identified and will be monitored and reported. (High Cost-Effectiveness)	0-5	5	25	
Urgent action is needed to address a problem that would severely degrade a sensitive vegetation community	0-5	4	20	
Project part of a larger strategic effort which covers a large area with multiple partners and multiple benefits? High Economy-of-Scale	0-5	5	25	
Sufficient matching funds available to complete the project	0-5	1	5	
Project promotes public awareness of sustainable land management through public outreach and participation	0-5	1	5	
Total			130	

Eligible Activity: 3. Habitat Maintenance, Access Control/Management and Volunteer Coordination

Project Evaluation Criteria	Point Range	Weight	Maximum Score Possible	Total Score
Lack of management of vegetation communities and/or exotic species may result in extirpation of covered species	0-5	5	25	
Project addresses species or vegetation community at highest risk of loss.	0-5	1	5	
Critical linkage parcels or in regional wildlife corridor	0-5	2	10	
Long term success of management activities is likely with clear measurable positive results which will reduce future land management costs. Success criteria have been identified and will be monitored and reported. (High Cost-Effectiveness)	0-5	5	25	
Urgent action is needed to address a problem that would severely degrade a sensitive vegetation community	0-5	3	15	
Project part of a larger strategic effort which covers a large area with multiple partners and multiple benefits? High Economy-of-Scale	0-5	4	20	
Sufficient matching funds available to complete the project	0-5	5	25	
Project promotes public awareness of sustainable land management through public outreach and participation	0-5	4	20	
Total			145	

Proposed Schedule

XXXX, 2010 – A call for projects is provided to interested stakeholders including in SANDAG's EMP *TransNet* EMP stakeholder database. A call for projects will also be posted on the SANDAG Web site.

XXXX, XXXX – Applications are due to SANDAG. One signed hard copy, and one electronic version emailed to kgr@sandag.org.

XXXX, XXXX – The evaluation committee will review and rank projects following the criteria above and forward the proposals to the EMP Working Group for consideration.

XXX, XXX – The EMP Working Group will recommend a list of prioritized projects to the Regional Planning and Transportation Committees who will be asked to recommend a list of land management projects for funding. The list of projects will be subject to approval by the SANDAG Board of Directors.

Grant Submission Form

For Consideration for *TransNet* Environmental Mitigation Program (EMP) Fiscal Year 2011 Funding for Land Management

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

Applicant Name: _____

Address: _____

Name of Property: _____

General Location: _____

Jurisdiction: _____

Total Acres: _____

Estimated Acres Requiring Management: _____

Owner(s) of Property: _____

Land manager(s) of property (include name[s]), years of experience managing habitat lands, existing land management responsibilities, and references):

* 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. Attach letter or right-of-entry permit if applicable.

Brief Project Summary (200-word maximum)
Quantify Expected Results (add bullets as necessary)
• • •
Brief Description of dedicated staff and/or consultants that would work on project (200-word maximum)

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	$	$	Includes all equipment and supplies
Personnel Expenses Staff	$	$	Includes all staff time for work on the project
Consultant Expenses	$	$	Includes all costs for consultant services
Administrative Expenses	$	$	All costs to administer the contract
Overhead Costs	$	$	All indirect charges for overhead on the project, if any
TOTAL	$	$	

*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.

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. Describe the proposed management activity and why it is needed. Is there current management occurring or has past management occurred (please describe)? How will this project benefit vegetation communities and/or sensitive species?

2. Describe the geographic area of the project site, including adjacent surrounding properties and landowners, and the current conditions of the vegetation communities and sensitive species. Is the project area already part of an approved regional conservation plan and if so, how does the proposed project contribute to the plan?

3. Describe the stressors and/or threats to the vegetation communities and/or sensitive species in the project area. Does the area 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)?

4. Describe why immediate action is needed to prevent the vegetation communities and/or sensitive species from degrading further. Would the further degradation potentially affect covered species?

5. Describe the management techniques proposed and whether or not they have been successfully used previously. Are there any negative effects to other sensitive species and/or vegetation communities that could results from the proposed management action?

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)? Which landowners will be participating in the project and which will not be participating and why? 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 or future ongoing maintenance)?

7. How would the project result in measurable biological success to implement the Natural Communities Conservation Program regional preserve system? What criteria will be used to measure success? If applicable, what quantitative monitoring data will be collected to demonstrate success? Who will be collecting the monitoring data and what are their qualifications?

8. How would the project involve public outreach/public participation or volunteers to identify and/or implement the land management activities being funded and promote awareness of grant-funded project? In your proposal, please estimate the following, if any:

    i. number of proposed volunteer hours on project

    ii. number and use of signage and interpretation features to be used to educate public on purpose of project

9. How will the project 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 reports?

    Type Here

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.

Type Here

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	Grant Request	Total Match	Year X Grant Request	Year X Match	Name of Eligible Activity[1]
	$	$	$	$	$	
	$	$	$	$	$	
	$	$	$	$	$	
	$	$	$	$	$	
	$	$	$	$	$	
	$	$	$	$	$	
	$	$	$	$	$	

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).

Task # and Name	Proposed Start Date	Proposed End Date
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy
	mm/dd/yy	mm/dd/yy

[1] Eligible Activities include: Invasive Control and Habitat Restoration, Species-Specific Management and/or Habitat Maintenance, Access Control/Management, and Volunteer Coordination.

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 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 a 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.

Grantee Name/Title (print or type)

mm/dd/yy

Grantee Signature (print or type) Date

Criteria for Emergency Land Management Funding
For Discussion Purposes

This funding would allow for an emergency response to address ongoing land management issues that arise between land management grant cycles. This program would be structured to fund "first year" emergency actions where no other funding sources are readily available within the time period needed to address the emergency. It is assumed that follow up adaptive management and monitoring actions could be funded through the annual allocation of management and monitoring funds via the *Transnet* EMP annual budget approval process. This program would apply to San Diego NCCP covered species, habitats, linkages and corridors.

The program would be structured to allow allocation of funds within the shortest possible timeframe. This would require approval of the funding by the SANDAG Executive Director based upon the support of a committee made up of the U.S. Fish and Wildlife Service, California Department of Fish and Game, *TransNet* EMP Program Manager, and an at -large member of the EMP Working Group representing land managers.

The initial funding allocation ($150,000) if unused, would roll over to subsequent years until an account of $500,000 was established. The fund would be replenished as needed during the annual *Transnet* EMP annual budget cycle.
Criteria for consider include:

- A sudden and clear threat to a "critical, major, or core" population of a covered species or sensitive habitat has been documented and a clear method to address the issue has been proposed,

- A catastrophic event (that severely impacts population(s) of covered species or wildlife movement (examples include, fires, flooding, landslides, hazardous waste spills),

- Immediate action necessary to rehabilitate or eliminate illegal human activities that severely threaten the integrity of a preserve, by impacts to large populations of covered species, sensitive habitats or wildlife linkages (examples include, restoration of illegal grading, elimination of the sudden expansion of feral invasive animals, controlling access of the sudden increase in off-highway vehicles),

- A documented rapid or early invasion of habitat by aggressive invasive species with the potential to severely alter ecosystem dynamics (e.g., fire frequency, flooding, salinity). Examples include the identification of an aggressive invasive species new to the County, or an invasive species known to occur in the County but previously undocumented in a regional preserve.

San Diego Association of Governments

ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

September 28, 2010

AGENDA ITEM NO.: **6**

Action Requested: RECOMMENDATION

REVIEW OF REVISED FY 2011 AND FIVE-YEAR FUNDING STRATEGY File Number 3200100

Introduction

The EMPWG recommended a budget allocation for FY 2011 and revisions to the Five-Year Funding Strategy. The EMPWG also formed an ad hoc committee to review the process and eligible activities for land management grants. The ad hoc committee is proposing a modification to the land management funds, as discussed in Item 5 on the agenda and shown in Attachment 1. In addition to the proposed change in FY 2011, SANDAG staff has revised the text that accompanies the Five-Year Funding Strategy to make sure it reflects the current status of the activities proposed for funding (Attachment 2). The EMPWG will review and provide recommendations on both the proposed ad hoc committee's change to the recommended FY 2011 allocations and the text of the Five-Year Funding Strategy.

Attachments: 1. Summary of Recommended FY 2011 Funding Allocation
2. Five-Year Funding Strategy for Management and Monitoring (Updated 2010)

Key Staff Contact: Keith Greer, (619) 699-7390, kgr@sandag.org

Summary of Recommended FY 2011 Funding Allocation

Activity	Funding Allocated Prior Years FY 06-10	Proposed Funding FY 2011	Recommended Approach
Regional Coordination			
Program Developer/Administrator	$450,000	$150,000	RFP once existing contract expires
GIS Specialist	$150,000	$150,000	Continue to fund SANDAG staff and USFWS staff working on these activities
Database Support	$0	$200,000	Fund through procurement
Subtotal Regional Coordination	***$1,590,000***	***$500,000***	
Regional Management			
Conserved Lands Database	$125,000	$50,000	Continue to fund SANDAG staff working on these activities
Land Management Implementation	$5,280,000	*$1,950,000*[1]	*Competitive grant process*[1]
Emergency Land Management Fund[1]	*$0*	*$150,000*[1]	*Contract to qualifying land manager*[1]
Invasive Animal Species Removal	$0	$225,000	Fund through procurement
Updated Vegetation Mapping	$600,000	$300,000	Fund through existing contract
Subtotal Regional Management	**$8,935,000**	**$2,575,000**	
Regional Monitoring			
Post Fire Monitoring	$1,725,000	$325,000	Fund through existing MOA with USGS
Vegetation Monitoring	$295,000	$100,000	Fund through existing contract with SDSU
Rare Butterfly Monitoring	$230,000	$100,000	Fund through procurement
Wildlife Corridor Monitoring	$300,000	$200,000	Fund through procurement
Other Wildlife Monitoring	$140,000	$200,000	Fund through procurement
Subtotal Regional Monitoring	**$4,475,000**	**$925,000**	
TOTAL FUNDING STRATEGY	**$15,000,000**	**$4,000,000**	

Note: Some activities will require implementation over multiple years.

[1] Changes proposed since July 13, 2010 meeting by ad hoc committee.

Five-Year Funding Strategy for
Management and Monitoring
(Updated 2010)

Background

This attachment provides specific details on the activities and funding allocations related to management and monitoring under the *TransNet* Environmental Mitigation. This includes a conceptual five-year funding strategy (Attachment 1) to serve as a future blueprint for management and monitoring activities and funding allocations.

Regional Coordination

Currently, there is an effort to close the gap in the regional coordination of management and monitoring. SANDAG through its Regional Conservation Fund has assisted with the coordination of the habitat preserve activities at a regional level. Coordination is required to comprehensively identifying gaps in resources, knowledge, leveraging funds, and developing cost-effective programming. Initial starts by the South County Land Manager Group and by the new formed North County Lands Managers Group are starting to close these gaps. The following activities will help to assist these efforts.

Program Developer/ Program Administrator

The Program Developer helped to create the San Diego Management and Monitoring Program (SDMMP). After this contract ends in July 2011, it is envisioned that this position will take on more of the overarch administrator functions to coordinate among federal, state, local agencies and non-profits, to assist in leveraging funding, and to guide regional management and monitoring efforts. Until a regional funding source is identified; the Program Administrator will be an independent contractor of SANDAG.

Role and functions of the Program Administrator:

- Review other regional habitat preservation programs, institutional structures, and operations as models for a San Diego regional coordinating entity.
- Define the roles and functions of staff of the regional coordinating entity, with a reporting structure.
- Draft a scope of work and contract for the next three to five years based on the *TransNet* needs assessment.
- Draft a scope-of-work and structure for science advisors.
- Identify complementary roles and in-kind contributions of agencies and partner groups, including the U.S. Fish and Wildlife Service, California Department of Fish and Game, U.S. Geological Survey (USGS), San Diego Natural History Museum, Conservation Resource Network, etc.
- Re-evaluate Multiple Species Conservation Program (MSCP) implementation committees (e.g., Interagency Coordinating Committee, Habitat Management Technical Committee.)

- Prepare and oversee the work plan for the Management and Monitoring Coordinator

- Identify and collaborate with other state and federal programs (e.g. FWS Landscape Conservation Collaborative, Partners In Flight, etc.) to help them implement actions/programs complimentary to the monitoring and management goals in San Diego County.

- Prepare annual budget recommendations to implement the monitoring, management and connectivity strategic plans and annually oversee their updates.

Management and Monitoring Coordinator

The Management and Monitoring Coordinator is the lead for bringing the regional management and monitoring efforts into close coordination, ensuring that monitoring data is used to inform management of preserves, monitoring efforts are focused at providing the data needed by preserve managers, and that management actions implemented by preserve manages will in aggregate help achieve species and habitat goals.

Specific Roles and Responsibilities include:

- Utilize existing (or establish additional) land management groups to help identify regional management issues (management/focal species, invasive species, habitats and threats/stressors etc.), identify priorities for management actions based on priorities, risk levels and other considerations.

- Identify land managers for each preserve area by watershed, utilize their experience to identify cost-effective methods to address specific threats/stressors and identify appropriate technical assistance to help land managers.

- Work with an advisor group and land managers to develop a multi-year budget, to address high priority actions identified in the strategic plan (including invasive species) and establish a time frame for periodic review of management actions and evaluate their success at meeting specific objectives.

- Develop a regional Geographic Information System (GIS) database of management action locations including habitat restoration efforts, location of invasive species, and edge effects (increased urban runoff which modifies habitats, illegal trails, trash dumping etc.) common to multiple preserves. Track efforts including costs and evaluate their success.

- Work with an advisor group, land managers, public agencies, and stakeholders within the watershed to allocate available funding for implementation of priority actions identified in the strategic plan. Review budgets annually.

- Oversee and manage contracts for funded projects

- Coordinate the collection and analysis of monitoring data throughout San Diego County with an emphasis on permitted jurisdictions within the NCCP.

- Coordinate with the wildlife agencies on monitoring priorities.

- Coordinate and make recommendations for future grant proposals.

- Work with the wildlife agencies and science advisors to develop training workshops for field data collection efforts.

- Prepare and oversee the work plan for the program science support biologist

This position would be an independent contractor and report to the Program Developer/Administrator with oversight from SANDAG.

Biologist/Scientist

The Biologist/Scientist will provide the science support for the Management and Monitoring Coordinator and the Program Developer/Administrator. This position will be the lead for on-the-ground activities and evaluations of activities.

Specific Roles and Responsibilities include:

- Providing biological input for updating the 5-year horizon monitoring and adaptive management program documents.

- Organizing workshops to obtain input from scientists on priority monitoring and adaptive management needs.

- Literature review and synthesis.

- Synthesizing and analyzing monitoring data.

- Reviewing biologically based management practices.

- Designing monitoring strategies/protocols (including cost analyses) for monitoring Risk Group 2 species (and any other species identified as a priority monitoring species).

- Developing prioritized a research needs list.

- Preparing grant proposal to help implement elements of the adaptive management and monitoring programs and identified research needs.

- Assisting with the design and coordination of the connectivity monitoring efforts.

- Developing a matrix of similarities/differences in preserve management issues including habitats and species.

- Identifying mechanisms to engage preserve managers' participation in preserve management coordination efforts/meetings; preparing synthesized and analyzed data sets utilizing the multi-taxa database and using the products to inform the stakeholders on the benefits and use of the database to help inform management and monitoring efforts.

This position would be an independent contractor (or part of a university lead effort) and report to the Monitoring and Management Coordinator with oversight from SANDAG.

GIS and Database Support

The GIS Specialist would take data collected by the region and incorporated them into a geographic information system for analysis. They would also initiate a regional database for management and monitoring data that could serve as a regional hub for information collection, analysis and sharing.

Additional contract positions and support may be required in future years depending on the progress and needs of the regional coordination entity. Annual funding requests would be required to be approved by the SANDAG Board in the future prior to pursuing any new contract positions.

Administrative and Science Support

Implementing a county-wide effort to coordinate the coordination and logistical functions of land managers and biological monitoring will require administrative support (office space, computers administration, etc.) and specific scientific support to address key issues that arise. It is envisioned that the science support would be a short-term, specific issue assist that could come from local universities or species specific experts.

Regional Management

Lands preserved as part of the regional habitat conservation plans need to be actively managed to retain and, in many cases, enhance their quality as habitat for the covered species. The EMPWG identified a preliminary list of regional management issues. These included invasive plants, invasive animals, off-road vehicle impacts, use of grazing as a management tool, fire management, and restoration of native habitats, erosion, and control of runoff.

Conserved Lands Database

This completed project developed a GIS data layer of all the existing lands conserved in San Diego County. The data layer was reviewed by regional stakeholders and land managers. Future activities include adding more information on the management and monitoring activities associated with each parcel and keeping the database current.

Regional Land Management Grants

Since 2006, SANDAG has solicited land management grants from land managers around the region to provide funding to address regional habitat management issues such as; invasive species, post wildfire recovery, habitat restoration and access control and litter removal. This program is designed to provide critical funding to address management efforts that if left unaddressed, could lead to regional impediments to protecting habitats and endangered species. For Fiscal Year 2011, the focus of the grant will be on weed removal and habitat restoration; project to help specific imperiled species, and general land stewardship.

Emergency Land Management Actions

Emergencies can arise in the course of the management of land that need to be addressed promptly or sever ramification could occur. This funding allotment would allow a small contingency of funds to be reserved to address emergencies were no other funding source exists. The funding would only be used if findings could be made to the satisfaction of the SANDAG Executive Director with the

support of an oversight committee comprised of [EMP WORKING GROUP TO MAKE RECOMMENDATION ON AT SEPTEMBER 28 MEETING].

Invasive Weed Control and Removal

This project has been initiated and would create a strategic plan(s) for invasive weed removal. Timing and allocations of the funds would be established in the strategic plan(s). This multi-year effort would identify the key species and priority areas, and methods to address invasive species in the region. The goal is to identify where funding would most efficiently be spent to address invasive species.

Updated Vegetation Mapping

The existing regional vegetation database is, in some areas, over ten years old. In addition, the vegetation classifications have error rates of 35 percent to 45 percent (San Diego State University 1995) and 34 percent (USFWS 2002). This update is approximately half way completed. A new classification system for mapping vegetation in San Diego is being finalized. The new system is more applicable to track changes in vegetation over time and thus will add land managers track their management efforts. This classification system would be used to revise the current vegetation mapping starting in winter of 2011.

Open Space Enforcement

Illegal off-highway vehicle use, dumping of litter, hunting, and other illegal uses impact the open space areas set aside for habitat conservation and legal public recreation. A one-year pilot project is underway which is allowing SANDAG to work with the Sheriff Department Off-road Enforcement Team and the California Department of Fish and Game Enforcement Branch to determine the success of the increased presence of enforcement as an effective means to deter illegal uses in open space. The results of this one-year pilot effort will determine a course of action for future enforcement recommendations.

Standardized Management Plans

Standardization of Natural Resource Management Plans is critical to assure coordination among the region's land managers. This standardized plan or template would identify and prioritize the specific species populations and vegetation communities to be managed in a given area and identify activities, specific to individual regions, core areas, or linkages of the jurisdiction, that address specific covered species requirements and the individual preserve objectives. The template will include recommendations and protocols for how to collect this type of data and how the preserve manage could adapt their management as new information is provided from monitoring or changes in methodologies. The goal would be develop a unified resource management plan that is grounded in an adaptive management framework.

Regional Monitoring

Lands preserved as part of the regional conservation plans need to be actively monitored to evaluate their success at effectively conserving the covered species and maintaining the processes that allow for their persistence. Contractors are in various stages of updating the biological monitoring plans for the MSCP, which can serve as model for all other San Diego conservation plans. The contractors working on the monitoring plans have consistently commented on the need for regional coordination and an institutional structure. The following lists of actions are needed to address biological monitoring in the region.

Post-Fire Monitoring

Approximately 300,000 acres were burned in the Cedar and Otay Fires in San Diego County in the fall of 2003. This included approximately half of the natural lands of the County of San Diego MSCP planning area. The USGS, in coordination with the USFWS, CDFG, and County of San Diego, have completed a five-year study on the impacts of these massive fires, and resultant changes in vegetation communities, vegetation structure, and prey availability over the period beginning in 2005. The USGS also has pre-fire data (some dating back to 1995) from within the footprint of both the Cedar and Otay Fires providing for an excellent pre- and post-burn analysis.

What has been learned from these studies has help refine future post-fire monitoring efforts. Specifically the five-year funding strategy envisions continued monitoring of focal small vertebrate communities that have not recovered since the fires, a 4th year of monitoring for riparian birds located in the 2007 burn areas and control sites, and a synthesize data of collected across all species taxa on the fire responses to develop adaptive management actions that will be implemented to manage for diversity following similar future fire events.

Vegetation Monitoring

Monitoring the conditions of the vegetation provides a surrogate for the conditions of the habitat of endangered species. Monitoring has been started through San Diego State to look at the most efficient and cost-effective approaches towards monitoring the vegetative conditions of the open space lands. This is especially critical since the 2003 and 2004 wildfires. The following activities are envisioned for the five-year strategic plan:

- *Continued vegetation monitoring in the spring of 2011 to determine the inter-annual variation in vegetation communities. The addition of a structural monitoring element to look at physical aspects such shrub height, gap size, and bare ground to address correlates with the vegetation conditions,*

- A comparative analysis of the vegetation conditions to other vegetation monitoring data to determine the repeatability, compatibility and increase the same size of the current efforts,

- A direct comparison of various vegetation monitoring efforts and techniques (field vs. remote sensing) to determine the cost-effectiveness of these approaches to establish a best management practice.

Rare Plant Monitoring Protocols

This activity would provide a standardization for the required monitoring of rare and endangered plants in the NCCP preserves. The analysis of 11 years of rare plant monitoring data has been completed by the U.S. Geological Survey under contract to SANDAG. The next steps for this activity include:

- Development of an expert oversight committee to assist in the development of the rare plant protocol development.

- Prepare standardized final protocols for monitoring rare plants.

- Train other to utilize the protocols.

California Gnatcatcher Monitoring

As the flagship species of the NCCP, monitoring of the California Gnatcatcher is required for the regional preserves. The USFWS has developed a new protocol for conducting California Gnatcatcher monitoring. The protocol was peer reviewed, and monitoring was completed in 2002 (Orange County and parts of San Diego County), 2004 (MSCP areas only) using this new protocol, and 2007and 2009 throughout the San Diego region. Information provided by these efforts has lead to the conclusion that monitoring for this species could be reduced to one every three years redirecting efforts to other taxa.

Burrowing Owl Monitoring

Western Burrowing owls have been reported to be on the decline across the majority of their range for over a decade. The decline is recognized by ornithologists working in California, where it is a Species of Special Concern, and in San Diego, the decline could be described as precipitous. The San Diego Bird Atlas reports that only eight of the 28 locals prior to 1997 still have owls. Burrowing owls also are a covered species under the San Diego MSCP, as well as other Habitat Conservation Programs. Systematic surveys in Southern San Diego County were completed in 2010 and the results are being analyzed. A coordination committee led by the San Diego Management and Monitoring Program, which includes the U.S. Fish and Wildlife Service, California Department of Fish and Game, San Diego State University, U.S. Geological Survey and the San Diego Zoological Society, will be discussion options for future burrowing owl efforts.

Rare Butterfly Monitoring

San Diego County contains several rare butterflies that are declining for unknown reasons. These butterflies are part of the regional open space system and additional monitoring is needed to determine the distribution, abundance and threats to their populations and habitat. Currently survey work is being conducted for the Thorne's hairstreak and Hermes copper butterflies. Both of these species were dramatically impacted by the 2003 and 2007 wildfires.

Wildlife Corridor Monitoring

It well understood in the scientific literature that fragmentation and isolation of open space areas will lead to the extinctions of native species. Maintain the connectivity between open space and enhancing existing connections is critical. Currently the San Diego Management and Monitoring Program is working with specific experts to design a strategy for wildlife corridor monitoring that includes specific objectives and a scope of work.

Other Wildlife Monitoring

San Diego State has conducted a peer review of the monitoring plan for the region and has indicated a prioritization for various faunal monitoring. The key species (priority 1) have been addressed above. There are several priority 2 species that should also be addressed. The specific species and scope of the study would still need to be established prior to initiating the monitoring over the coming years.

TransNet Environmental Mitigation Program
Conceptual Five-Year Funding Strategy
Updated September 2010
changes to approve Plan shown in strikeout/ underline

		Approved Prior FYs	PROPOSED YR-1		YR-2	YR-3	YR-4	YR-5
	REGIONAL COORDINATION	FY06-10	FY 11		FY 12	FY 13	FY 14	FY 15
1	Program Developer/Administrator	$450,000	*$150,000*		*$150,000*	*$150,000*	*$150,000*	*$150,000*
	~~Management Coordinator~~	$450,000	*$0*	1	*$0*	*$0*	*$0*	*$0*
	~~Monitoring Coordinator~~	$450,000	*$0*	1	*$0*	*$0*	*$0*	*$0*
2	*Management & Monitoring Coordinator*		*$0*		*$150,000*	*$150,000*	*$150,000*	*$150,000*
3	Biologist	$0	*$0*	1	$150,000	$150,000	$150,000	$150,000
4	Administrative & Science Support	$90,000	*$0*	1	$90,000	$90,000	$90,000	$90,000
5	GIS Support	$150,000	*$150,000*		$150,000	$150,000	$150,000	$150,000
6	Database Support	$0	*$200,000*		$130,000	$130,000	$130,000	$130,000
	Subtotal Regional Coordination	**$1,590,000**	***$500,000***		**$820,000**	**$820,000**	**$820,000**	**$820,000**
	REGIONAL MANAGEMENT							
7	Conserved Lands Database Development	$125,000	*$50,000*		*$50,000*	*$50,000*	*$50,000*	*$50,000*
8	Land Management Implementation	$7,365,000	*$1,950,000*		*$1,640,000*	*$2,040,000*	*$2,290,000*	*$1,915,000*
9	*Emergency Land Management Fund*	$0	*$150,000*		$0	$0	$0	$0
10	Invasive Plant Species Mapping	$250,000	*$0*	1	$0	$0	$0	$0
11	*Invasive Animal Species Removal*		*$225,000*		*$125,000*	*$125,000*	*$125,000*	*$0*
12	Updated Vegetation Mapping	$600,000	*$200,000*		$0	$0	$0	$0
13	Enforcement	$370,000	*$0*	1	$0	$0	$0	$0
14	Preserve level management plan standardization	$225,000	*$0*	1	$0	$0	$0	$0
	Subtotal Regional Management	**$8,935,000**	***$2,575,000***		**$1,815,000**	**$2,215,000**	**$2,465,000**	**$1,965,000**
	REGIONAL MONITORING							
15	Post Fire Monitoring/ Recovery Planning	$1,725,000	*$325,000*	1	*$250,000*	*$0*	*$0*	*$0*
16	Vegetation Monitoring	$295,000	*$100,000*		$0	$0	$165,000	$165,000
17	Rare and Endemic Plant Monitoring	$300,000	*$0*	1	$0	$295,000	$0	$0
18	California Gnatcatcher Monitoring	$740,000	*$0*		$445,000	$0	$0	$500,000
19	California Coastal Cactus Wren Monitoring & Recovery	$450,000	*$0*	1	$150,000	$150,000	$150,000	$150,000
20	Burrowing Owl Monitoring	$295,000	*$0*	1	$0	$0	$0	$0
21	Rare Butterfly Monitoring	$230,000	*$100,000*		$120,000	$120,000	$0	$0
22	Wildlife Corridor and Linkages Monitoring (including genetic studies)	$300,000	*$200,000*	1	$200,000	$200,000	$200,000	$200,000
23	Other Species Monitoring (e.g. priority 2 species)	$140,000	*$200,000*	1	*$200,000*	*$200,000*	*$200,000*	*$200,000*
	Subtotal Regional Monitoring	**$4,475,000**	***$925,000***		**$1,365,000**	**$965,000**	**$715,000**	**$1,215,000**
	TOTAL FUNDING STRATEGY	**$15,000,000**	**$4,000,000**		**$4,000,000**	**$4,000,000**	**$4,000,000**	**$4,000,000**
	Note: Some activities will require implementation over multiple years.							

1 Funds encumbered in FY10 are available in FY 2011