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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.

May 13, 2008

1 to 3 p.m.

SANDAG, 8th Floor Conference Room
 401 B Street, Suite 800
 San Diego, CA 92101-4231

Staff Contact: Keith Greer
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AGENDA HIGHLIGHTS

- COASTAL WETLAND MONITORING
- CALIFORNIA COASTAL CACTUS WREN HABITAT RECOVERY
- FIVE-YEAR STRATEGIC PLAN UPDATE

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ENVIRONMENTAL MITIGATION PROGRAM WORKING GROUP

Tuesday, May 13, 2008

ITEM #		RECOMMENDATION
1.	WELCOME AND INTRODUCTIONS (Chair, Mayor Pro Tem Carrie Downey, City of Coronado)	
+2.	SUMMARY OF APRIL 8, 2008, MEETING Review and approve the meeting summary of the April 8, 2008, meeting.	APPROVE
3.	PUBLIC COMMENTS AND COMMUNICATIONS Members of the public will have the opportunity to address the Environmental Mitigation Program Working Group (EMPWG) on any issue within the jurisdiction of the Working Group. Speakers are limited to three minutes each.	COMMENT
+4.	STATUS OF LAND MANAGEMENT GRANTS (Keith Greer, SANDAG) Mr. Greer will provide a status of the past land management grants funded under the <i>TransNet</i> Environmental Mitigation Program and the current "Call for Projects" being solicited by SANDAG.	INFORMATION
5.	COASTAL WETLAND MONITORING (Chris Solek, SCCWRP) Wetland Scientist, Mr. Chris Solek of the Southern California Coastal Water Research Project, will present information on coastal monitoring assessments in San Diego County using the CRAM methodology. The California Rapid Assessment Method (CRAM) is a standardized, cost-effective tool for assessing the health of wetlands and riparian habitats.	INFORMATION/ DISCUSSION
6.	CALIFORNIA COASTAL CACTUS WREN HABITAT RECOVERY (Mark Doderer, RECON) Senior Biologist, Mark Doderer of RECON will present the challenges and opportunities of coastal cactus wren recovery. Suitable habitat for the cactus wren was damaged very heavily during the 2003 and 2007 wildfires.	INFORMATION/ DISCUSSION

ITEM #

RECOMMENDATION

- +7. FIVE-YEAR STRATEGIC PLAN UPDATE
(Susan Wynn, USFWS)

DISCUSSION/ POSSIBLE
ACTION

On May 2, 2008, ad hoc subcommittees of the EMPWG met to review the adopted Five-Year Funding Strategy for *TransNet* EMP Funding related to land management and monitoring. Ms. Wynn will present the status of the subcommittee's efforts for discussion and possible action.

- 8. ADJOURN

INFORMATION

NOTE: THE JUNE MEETING HAS BEEN CANCELED. THE NEXT EMPWG MEETING IS SCHEDULED FOR JULY 8, 2008, FROM 1 TO 3 P.M.

+ next to an item indicates an attachment

San Diego Association of Governments
ENVIRONMENTAL MITIGATION PROGRAM
WORKING GROUP

May 13, 2008

AGENDA ITEM NO.: **2**

Action Requested: APPROVE

SUMMARY OF APRIL 8, 2008, MEETING

File Number 3002700

Members in Attendance:

Tom Oberbauer (Vice Chair), County of San Diego
Bruce April, Caltrans
Michael Beck, Endangered Habitats League
Patti Brindle, City of Poway, North County Inland
Robert Fisher, USGS
Bill Gallup, (alternate) Wildlife Conservation Board
Mike Grim, City of Carlsbad, North County Coastal
Ann Harvey, San Diego Conservation Network
Jeanne Korsch, City of San Diego
Marissa Lundstedt, City of Chula Vista, South County
David Mayer, Department of Fish and Game
Mary Small, (alternate) California Coastal Conservancy
Jim Whalen, Alliance for Habitat Conservation
Susan Wynn, U.S. Fish and Wildlife Service

SANDAG Staff in Attendance:

Keith Greer
Kevin Wood

Others in Attendance:

Betsy Miller, City of San Diego
Chris Zirkle, City of San Diego
Josh Garcia, City of San Diego
Pat Atchison, TAIC
Adrian Acosta
Andrea Bitterling, Helix Environmental
Rod Dossey
Anne Fege, SD Natural History Museum
Teri Fenner, EDAW
Shirley Innecken, Southern California Wetlands Recovery Project
Mike Kelly
Michael Nelson, San Diego River Conservancy
Frank Ohrmund, Otay Real Estate
Carlton Rochester, USGS
Carla Scheidlinger, AMEC
Kit Wilson, Environmental Land Solutions

1. Welcome and Introductions

Vice Chair Tom Oberbauer called the meeting to order at 1 p.m., welcomed the group, and had members introduce themselves. Keith Greer, SANDAG, recognized Ann Harvey who is the new representative for the Conservation Resources Network.

2. March 11, 2008, Meeting Summary

Mike Grim, City of Carlsbad, motioned to approve the minutes. Bill Gallup, Wildlife Conservation Board, seconded the motion, which carried without opposition. Michael Beck, Endangered Habitats League, abstained.

3. Public Comments and Communications

Members of the public had the opportunity to address the Environmental Mitigation Program Working Group (EMPWG) on any issue within the jurisdiction of the Working Group.

Mr. Beck asked the Chair if Item 7 could be taken before Item 6 since he had to leave early but would like to comment on the Item. It was agreed to move the Item up.

Mr. Greer reminded members that they would need to submit a Form 700 if they had not already done so.

No other public comments were made.

4. Update on the Status of Land Management Grant Criteria

Mr. Greer updated the Working Group on recent SANDAG Regional Planning Committee (RPC) actions relating to the Environmental Mitigation Program (EMP). The RPC was briefed on the presentations and discussion at the recent Forum on Habitat Management and Fire Safety. The RPC has accepted the informational report and forwarded it to the Board of Directors. It was suggested that staff continue to follow the status of fire-related legislation and track its effect on habitat conservation plans. The Board will consider this at their April 25 meeting.

The RPC also recommended approval of the updated Land Management Grant criteria, which staff drafted from input from individuals with experience in implementing the FY 2006 land management grants. The criteria are similar to those used in the past, but with a few improvements. The criteria now gives priority to projects that are cost-effective in use of funds and address issues on a larger economy-of-scale. Required quantitative reporting standards also are included. Since the Working Group did not take action on the criteria, no members are conflicted from applying for the grants. Grant applications would be reviewed by an ad hoc committee of members of the EMPWG that do not have a conflict of interest and knowledgeable experts that are not applying for grant funds. If the EMPWG lacks a quorum due to conflict of interest, the recommendations of the ad hoc committee will go to the RPC as a staff recommendation.

Mr. Greer also mentioned the protocols for animal monitoring that had been released by USFWS and the City of San Diego. Betsy Miller from the City of San Diego said that she would be organizing workshops with the jurisdictions responsible for monitoring to explore the protocols in manageable chunks. The workshops will take place throughout the summer and she would provide an e-mail to interested members of the Working Group.

5. Conserved Lands Database Status

Mr. Greer said that Sue Carnevale of SANDAG had been the lead on this project, but that he would brief the Working Group on the project in her absence. The project was funded by an EMP grant in 2006 and is now mostly complete. The goal was to identify all the conserved lands in the region, their ownership, and what type of management, if any, was taking place. The project has now reached a point where all the readily available data has been input. SANDAG will need help from other stakeholders to help fill in the remaining data gaps. There is little to no land management information on many parcels, as well as gaps in how lands were conserved and when. SANDAG staff would like to have this project finished by the end of the fiscal year. He asked for input as to the best way to distribute the information to cities and to get a response.

Mr. Beck said that in gathering the information, we should think about why the data was being gathered. The goal of the database was to help see what was being done, facilitate gap analysis, and aid the propagation of management directives. We need to focus on the data that will help us do this. He also thought that there should be information on whether a parcel is part of a RMP, ASMD, or NCCP.

There was some discussion on the importance of certain categories and the best way to gather the needed information. Although there is a need to identify and understand the differences of lands covered by the NCCP, HOA lands, and lands covered by open space easements, there is still basic information that is missing. Some jurisdictions have better data than others. It was suggested that one-on-one meetings with each jurisdiction may be the best way to get data. This may be a time consuming process. The database project will be updated and maintained as time goes on, so new data can be added at a later date. Mr. Greer will take these suggestions back to the SANDAG team and formulate a way to complete the necessary review to complete this project.

6. Southern California Wetland Recovery Project Presentation

Mary Small, California Coastal Conservancy, introduced the Southern California Wetland Recovery Project (SCWRP). The SCWRP focuses on coastal wetlands from Point Conception to the Mexican Border. The goal of the project is to reestablish a mosaic of functioning wetland and riparian systems by accelerating wetland restoration through the implementation of a regional prioritization plan. The organization is a multi-agency partnership made up of twenty state and federal agencies along with local county taskforces. She indicated that information could be found on the SCWRP Web site at www.scwrp.org.

The SCWRP works through a number of different groups. The governing board meets once or twice a year to set broad policy for the WRP. The managers group meets more frequently to assess and manage projects, and a science advisory panel helps to define the scientific basis for management and monitoring. There also are public advisory committees and local task forces that build local support for wetlands and identify regional priorities.

The SCWRP has two major programs; Community Restoration Grants of up to \$30,000 to fund small-scale projects that include education, local involvement, and public participation. There also is the work plan made up of large-scale acquisition, restoration, and management projects. Projects are proposed by local participations and are evaluated for inclusion in the work plan. Nearly 50 projects have been completed and there are 80 more on the work plan, which is updated biannually. Projects for the work plan are selected based on ecological, policy, and feasibility criteria. Projects are sorted by priority, and those at the top receive funding as it becomes available. Being on the work plan does not guarantee funding, but simply identifies it as a priority project. Most of the funding has come from state and local sources, but there is an effort to get more federal funds.

The SCWRP's original focus was only on tidal areas, but now includes some riparian areas, since the health of the watershed affects the wetlands. Since the work plan relies on projects to be proposed, it is not a very proactive process. The solicitation is completely open, although there has been analysis done to identify the most important needs. The group is currently trying to update the needs assessment and cultivate new projects that fulfill unmet needs. San Diego's task force is led by Supervisor Slater-Price and is currently formulating site-specific tasks. The group normally meets the 4th Monday of every month.

Dave Cannon, Everest Consultants, updated the group on the Buena Vista Lagoon restoration. The projects started in 1999 with baseline data collection. A restoration feasibility study took place in 2002-2004 and preliminary engineering and environmental review is on hold pending funding, but construction could start in 2010 as the funds become available.

Buena Vista Lagoon is a unique freshwater system, closed off by the ocean by a weir since the 1970's. Restoration alternatives were prepared for freshwater, saltwater, and mixed regimes. The no-action alternative shows eventual habitat type conversion to a homogenous freshwater marsh or a mix of upland, riparian forest, and freshwater marsh. Calculating habitat value, a saltwater regime shows the greatest value, followed closely by the mixed regime. A range of costs were developed for various dredge disposal options, so an overall cost per habitat unit can be calculated.

There was some discussion of the unique nature of the lagoon and the project. Best management practices have been utilized upstream and alluvial sediment is a limited problem in the lagoon, although sediment coming in from the ocean inlet would require dredging every two to four years. The study focused on threatened and endangered species, although it did not give more weight to one species over another. It also did not select which alternative would be undertaken. Historically, the lagoon was probably a dynamic system, but there is not much information.

There are a number of different considerations when looking at a fresh versus saltwater system. A regional analysis done outside the feasibility study found that the resources of the lagoon are not unique to the region. However, there would be undoubtedly some negative impacts to convert to a saltwater system, notably, fish and turtles. Freshwater is more troublesome from a vector control prospective. Water quality is currently challenged with sedimentation and algal blooms, but there are surprising few chemical or fertilizer problems. The cleanliness may be attributed to the BMPs used upstream.

7. Five-Year Strategic Plan Update

Susan Wynn, USFWS, said the Working Group should convene an ad-hoc committee to examine and make changes in the five-year strategic plan. The MOA that was recently signed set the amount to be spent at \$4 million/year. The Working Group might want to reexamine priorities and provide more detail for years four and five.

Mr. Beck said that he was at a symposium on the cactus wren and the data he saw indicated that 70 to 80 percent of the population has been eliminated. It takes up to ten years for recolonization and there is a danger of the wren being expatriated. The Working Group needs to allocate funding for this crisis. Mr. Greer said that the \$2.9 million dedicated for active habitat management could be used for habitat restoration for target species, including the wren. The criteria also includes measures to give priority to urgent projects. There is \$150,000 allocated for cactus wren monitoring, but restoration can occur concurrently by implementing the obvious projects. The Call for Projects will be put out in the first week of May. Applications will be due in June and reviewed by the Working Group in July.

There was some discussion as to who would be on the subcommittee and when it was meeting. The group will contain less than a quorum per the Brown Act requirements, but interested parties from the public would be welcome. It will take place the afternoon of May 2, 2008, from 1 to 3 p.m. at the Caltrans District 11 Office in Old Town.

8. Adjourn

Vice Chair Oberbauer adjourned the meeting at 2:42 p.m. The next meeting is scheduled for May 13, 2008, from 1 to 3 p.m.

April 29, 2008

STATUS OF TRANSNET EMP LAND MANAGEMENT AND MONITORING FUNDED PROJECTS

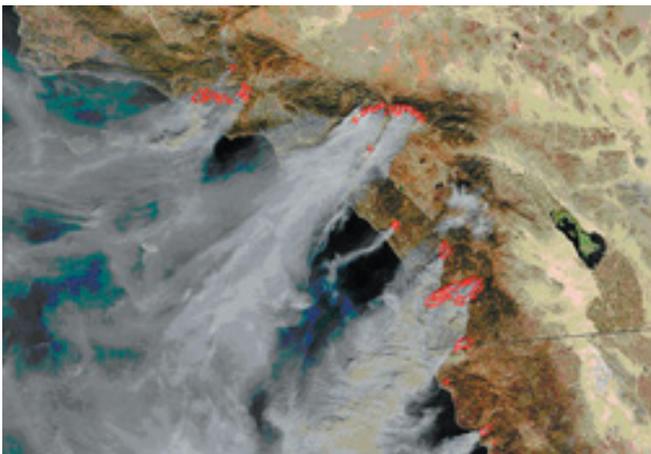
Regional Habitat Conservation Fund Grants FY 2006						
IFAS Project #	Contractor	Project	Funding Encumbered	General Land Management/Monitoring Activities	Status	
1200301	SANDAG/USFWS	Conserved Lands Database	\$125,000	Development of a parcel-level database of lands conserved in the region for the protection of natural resources, habitats, and open space.	Conserved land data layer and attributed completed. QA/QC required by jurisdictions. SANDAG determining best way to get database reviewed.	
1200302	USGS	Post-Fire Monitoring	\$125,000	Monitoring of flora and faunal changes as a result of the October 2003 wildfires.	Completed.	
1200303	City and County of San Diego	Vernal Pools	\$264,006	Invasive control, dethatching, fencing, reshaping vernal pools, reintroduction.	Restoration and Management Recommendation report is complete. Dethatching has been occurring on several vernal pool complexes. Implementation of additional recommendations will be completed by December 31, 2008.	
1200304	County of San Diego	Lakeside Linkages	\$70,750	Fencing, access control, trash removal, signage.	Completed.	
1200305	US Fish and Wildlife Refuge System	USFWS Refuge - Vernal Pools	\$108,000	Invasive control, dethatching, seed collection, reshaping vernal pools, reintroduction.	Completed.	
1200306	City of Encinitas/ CNLM	Manchester Mitigation Bank	\$52,744	Erosion control, hydrology study.	Completed.	
1200307	San Dieguito River Park JPA	Lake Hodges/ Bernardo Mountain	\$50,000	Habitat rehabilitation, invasive and erosion control, bio surveys, trail maintenance.	Completed.	
1200308	Back Country Land Trust	Wrights Field	\$39,000	Fencing and access control.	Fencing is completed. Final work to be completed by May 30, 2008.	
1200309	City of San Diego	Crest Canyon	\$23,000	Access control to protect sensitive resources.	All work to be completed by December 31, 2008.	
1200310	San Elijo Lagoon Conservancy	Indian Head Canyon/ Rancho Carrillo	\$142,500	Invasive control, re-vegetation.	All work to be completed by June 30, 2008.	
Regional Habitat Conservation Fund Grants FY 2007						
120311	USFWS	California Gnatcatcher Monitoring	\$295,000	Conduct a regional survey of the California gnatcatcher to estimate population size.	Field work and analysis completed. Final report due. Contract expired on April 30, 2008.	
120302	USGS	Post-Fire Monitoring	\$399,970	Continued monitoring of flora and faunal changes as a result of the October 2003 wildfires.	Completed (see Attachment 1).	

Regional Habitat Conservation Fund Grants FY 2008						
120311	USFWS	California Gnatcatcher Monitoring	\$440,000	Conduct a regional survey of the California gnatcatcher to estimate population size.	Amendment to existing contract is being executed.	
120302	USGS	Post Fire Monitoring	\$649,399	Continued monitoring of flora and faunal changes as a result of the October 2003 wildfires.	Amendment to existing contract is being executed.	
120312	RFP	Program Developer	\$150,000	Hire a contractor to lead the development of a regional entity for regional land management and monitoring.	Scope has been developed. A RFP is set for release in mid-May.	
120313	USFWS	Cactus Wren Monitoring	\$150,000	Map and monitoring the status of the remaining coastal cactus wren habitat in San Diego County.	Amendment to existing contract is being executed.	
120314	USGS	Rare Plant Monitoring	\$100,000	Complete protocols for monitoring rare plants per past recommendations of USGS as part of the revisions to rare plant monitoring protocols.	Scope of work is being developed.	
120315	RFP	Invasive Species Mapping	\$200,000	Development of detailed GIS database of invasive plant species in San Diego County.	Scope of work to be developed.	
120316	TBD	Burrowing Owl Distribution	\$65,000	Map distribution of burrowing owls in San Diego County.	Scope of work to be developed.	
120317	TBD	Rare Butterfly Survey	\$50,000	Regional surveys for one or more rare butterfly species.	Scope of work to be developed.	
120318	TBD	Management Coordinator	\$150,000	Contractor to coordinate regional land management activities.	Program Developer is scoped to propose how to hire this contractor.	
120319	TBD	Management Coordinator	\$150,000	Contractor to coordinate regional land monitoring activities.	Program Developer is scoped to propose how to hire this contractor.	
120319	TBD	Vegetation Mapping	\$150,000	Update outdated regional vegetation mapping with new vegetation classification system.	Scope of work to be developed.	
XXXXXXXX	Call for Projects	Land Management Grants	\$2,900,000	Competitive Call for Projects for land management project that (1) reduce invasive species, (2) promote post-fire recovery, (3) restore habitat conservation, and (4) provide access control.	A Call for Projects was released on May 5 with projects to be submitted by June 5.	

Western Ecological Research Center <http://www.werc.usgs.gov>

Response and Recovery of Plants and Animals to the 2003 San Diego County Wildfires

Fire can have both negative and positive impacts on the flora and fauna of southern California. The native vegetation communities have evolved with the regional fire regime and have adapted various survival strategies in response. However, as fire frequency increases above historic levels, the trend is for shrublands, whether chaparral or coastal sage scrub, to be vegetation type-converted to grasslands. Just as fires alter the composition and structure of vegetation communities, animals may experience similar shifts in community structure and species occurrence. With the type-conversion of vegetation communities, we may expect a concomitant shift and potential biodiversity loss in faunal populations. Fire may cause direct mortality or loss of habitat and food resources that result in the decline of some species. Other species that survive the fire and prefer open or disturbed landscapes may benefit, thereby increasing in numbers.



Satellite imagery of the massive Santa Ana-driven 2003 southern California wildfires (Image courtesy of Jacques Desclotres, MODIS Rapid Response Team at NASA GSFC).

The U.S. Geological Survey is investigating how plant and animal communities are responding and recovering from the massive 2003 San Diego County wildfires. The taxa being investigated include plants, invertebrates (selected terrestrial macro-invertebrate taxa and ants) and vertebrates (reptiles, amphibians, small mammals, birds, bats, and carnivores). Investigations include comparisons of post-burn conditions to pre-burn baseline conditions and comparisons of responses of the various taxa between burned and unburned control sites based on available pre-burn data and data collected over the five-year study. The goal of this study is to provide scientifically based information to aid in land management planning and reserve design. These conservation and monitoring decisions should include considerations of the effects of large wildfires on structure and function of the biological community. Many of the species documented during these efforts are covered in the habitat conservation plan of San Diego, the Multiple Species Conservation Program (MSCP).

Taxon specific methods have been applied and coordinated with other researchers in the area to insure that data collected from this study can be compared across studies. All of the data collected are being transmitted to the California Department of Fish and Game – Biogeographic Information & Observation System (BIOS) database for long-term storage and access by other researchers and managers. The focus of this summary document is to report the results from the first two years of the five-year post-burn studies and determine what responses are found within these different taxa (ants, reptiles, amphibians, birds, small mammals, and bats).



Example of post-fire succession at a pitfall trap array in the Santa Ysabel Open Space Preserve burned during the Cedar Fire. Photos above taken approximately 18 months prior to fire, one month after the fire, and 18 months after the fire.

Results

We recorded or detected the following numbers of species by taxa and total observations from 1995–2006:

Ants — 62 species; 34,396 captures

Reptiles / amphibians — 36 species; 6,475 captures

Birds — 107 species; 6,962 observations

Small mammals — 16 species; 4,444 captures

Bats — 15 species; 920 detections

This represents 236 species and over 50,000 captures or observations.

Preliminary findings by taxonomic group

- Two to three years after the 2003 fires, shrub and tree cover in the burned study areas was reduced by 76% in coastal sage scrub (12.6 vs. 53.0%) and 55% in chaparral (30.6 vs. 67.5%). In contrast, cover did not significantly differ in the grassland or riparian-woodland study plots.
- There was a net decrease in ant diversity at burned plots versus unburned plots across the study sites. Most notably in coastal sage scrub, harvester ant (*Messor andrei*) was not detected before the fire, but made up one-third of the total ant captures in post-burn habitat. This could be related to increased seed availability due to increased grasses and other fire followers in the first several years post-burn. The acrobat ant (*Crematogaster californica*), which is a preferred food for hatchling horned lizards, showed a post-fire decrease.
- We detected a loss in species diversity of reptiles and amphibians and a shift in community structure at burned sites within coastal sage scrub and chaparral habitats. There were increases in the capture rates of certain herpetofauna, such as the orange-throated whiptail and coast horned lizard (MSCP-covered species), at burn sites relative to the same sites before the fires. Salamanders and some snake species in particular showed decreases in post-fire chaparral habitats.

- There was a change in composition of bird species at low-elevation coastal sage scrub and chaparral habitats after the fires. There were increases in the detection rates of certain birds, such as the lazuli bunting, spotted towhee, and phainopepla, and decreases in others, such as Anna's hummingbird, at burned sites relative to the same sites before the fires.
- We found changes in small-mammal community structure following the fires in coastal sage scrub. Proportionally, above-ground nesters declined (woodrats, California mice, California voles) with the exception of the harvest mouse, which increased. This species may take advantage of the increased seed set following fires and be more flexible in the use of nesting opportunities. The generalists and open-habitat specialists, deer mice and kangaroo rats, increased.
- We did not detect any significant post-burn changes in bat activity or species richness.

Management implications

In general, lower-vagility groups (ants, reptiles, amphibians, and small mammals) showed greater changes in post-burn habitats than did higher-vagility groups (birds and bats). Within the lower-vagility groups, species that could take advantage of added seed resources and/or newly open habitat increased in relative abundance (e.g., harvest mice, harvester ants, kangaroo rats, orange-throated whiptails, and coast horned lizards), while species that require moist microhabitats (e.g., leaf litter) or prefer shrubs for nesting or foraging above ground (e.g., salamanders, some snakes, wood rats, acrobat ants) decreased.

These studies need to be continued to determine if and how the habitat and community structure recover, particularly for low-vagility groups. The firestorms in 2007 reburned much of the same areas burned in 2003. Repeated burning may greatly affect the successional dynamics, and thus the rate and trajectory of recovery. Without habi-

tat recovery, species composition could become permanently altered, leading to a simplification of the animal community. Monitoring the newly burned and reburned areas should remain a priority. Understanding these processes and patterns will inform our management options for maintaining sensitive species in these habitats.

Citations from this project to date

Backlin, A., Stokes, D., Brehme, C., Rochester, C., & R. Fisher. 2008. Effects of large-scale wildfire on bats in southern California. U.S. Geological Survey draft report prepared for SanDAG.

Clark, D., Brehme, C., Rochester, C., & R. Fisher. Manus in review. Effects of large-scale wildfires on rodents in southern California. To be submitted to: Journal of Mammalogy.

Fisher, R., Rochester, C., Brehme, C., Clark, D., Stokes, D., & S. Hathaway. Manus in review. Reptile and amphibian responses to large-scale wildfires in southern California. To be submitted to: Journal of Herpetology.

Matsuda, T., Turschak, G., Brehme, C., Rochester, C., & R. Fisher. Manus in review. Effects of large-scale wildfires on ground foraging ants (Hymenoptera: Formicidae) in southern California. To be submitted to: Environmental Entomology.

Mendelsohn, M., Brehme, C., Rochester, C., Stokes, D., Hathaway, S., & R. Fisher. Manus in review. Effects of large-scale wildfires on breeding birds in southern California. Submitted to: Fire Ecology.

For more information, contact:

Carlton Rochester, Project Lead
 USGS WERC San Diego Field Station
 4165 Spruance Road, Suite 200, San Diego, CA 92101
 Phone: 619-225-6424 Fax: 619-225-6436
 For a list of technical products from this field station, click on the "Products" button on our home page at <http://www.werc.usgs.gov/>

Agenda Item #7
Environmental Mitigation Program Working Group
May 13, 2008

CONCEPTUAL FIVE-YEAR FUNDING STRATEGY
Updated 2008

	Prior YRs	YR-1	YR-2	YR-3	YR-4	YR-5	
	FY06-08	FY 09	FY 10	FY 11	FY 12	FY 13	
REGIONAL COORDINATION							
1	Program Developer	\$150,000	\$150,000	\$150,000	\$0	\$0	\$0
2	Program Administrator	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000
3	Administrative Support	\$0	\$0	\$90,000	\$90,000	\$90,000	\$90,000
4	GIS Specialist	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
5	Database Specialist	\$0	\$0	\$150,000	\$150,000	\$150,000	\$150,000
6	GIS/Database Technican	\$0	\$0	\$0	\$130,000	\$130,000	\$130,000
7	Conserved Lands Database Development	\$125,000	\$0	\$0	\$0	\$0	\$0
	Subtotal Regional Coordination	\$275,000	\$300,000	\$540,000	\$770,000	\$770,000	\$770,000
REGIONAL MANAGEMENT							
8	Management Coordinator	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
9	Land Management Implementation	\$3,650,000	\$1,630,000	\$1,740,000	\$1,640,000	\$1,645,000	\$1,540,000
10	Invasive Species Mapping	\$200,000	\$50,000	\$0	\$0	\$0	\$0
11	Updated Vegetation Mapping	\$150,000	\$150,000	\$150,000	\$0	\$0	\$0
12	Enforcement	\$0	\$220,000	\$0	\$0	\$0	\$0
	Subtotal Regional Management	\$4,150,000	\$2,200,000	\$2,040,000	\$1,790,000	\$1,795,000	\$1,690,000
REGIONAL MONITORING							
13	Monitoring Coordinator	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
14	Biologist	\$0	\$0	\$150,000	\$150,000	\$150,000	\$150,000
15	Post Fire Monitoring	\$1,175,000	\$550,000	\$225,000	\$325,000	\$325,000	\$325,000
16	Vegetation Monitoring	\$145,000	\$150,000	\$0	\$0	\$0	\$165,000
17	Rare and Endemic Plant Monitoring	\$100,000	\$200,000	\$0	\$0	\$295,000	\$0
18	California Gnatcatcher Monitoring	\$740,000	\$0	\$500,000	\$0	\$0	\$500,000
	California Coastal Cactus Wren Monitoring						
19	& Recovery	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
20	Burrowing Owl Monitoring	\$65,000	\$80,000	\$45,000	\$0	\$0	\$0
21	Rare Butterfly Monitoring	\$50,000	\$120,000	\$60,000	\$120,000	\$120,000	\$0
	Wildlife Corridor and Linkages Monitoring						
22	(including genetic studies)	\$0	\$100,000	\$100,000	\$395,000	\$245,000	\$100,000
23	Other Monitoring (priority 2 species)	\$0	\$0	\$40,000	\$150,000	\$0	\$0
	Subtotal Regional Monitoring	\$2,575,000	\$1,500,000	\$1,420,000	\$1,440,000	\$1,435,000	\$1,540,000
	TOTAL FUNDING STRATEGY	\$7,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
Note: Some activities will require implementation over multiple years.							