

**FINAL HABITAT MITIGATION AND
MONITORING PLAN**

DESERT CAHUILLA MITIGATION SITE

SUNRISE POWERLINK

**CORPS FILE NO. 2007-00704-SAS
SWRCB 401 CERTIFICATION FILE NO. SB090151N
CDFG LAKE AND STREAMBED ALTERATION AGREEMENT NO. 1600-2009-0365-R5**

SUBMITTED BY:

**San Diego Gas & Electric Company
8315 Century Park Court, CP21G
San Diego, California 92123-1548**

**Contact: Alan Colton
Manager, Sunrise Powerlink Environmental Services**

PREPARED BY:

**WRA, INC.
2169-G East Francisco Blvd
San Rafael, CA 94901**

MAY 6, 2011

TABLE OF CONTENTS

1.0	INTRODUCTION AND PURPOSE	1
1.1	Responsible Parties	1
1.2	Purpose and Organization	5
1.4	Differentiation of the HMMP Mitigation Parcel within the Desert Cahuilla Mitigation Site	8
2.0	MITIGATION GOALS AND OBJECTIVES FOR THE HMMP MITIGATION PARCEL WITHIN THE DESERT CAHUILLA MITIGATION SITE	8
2.2	Basis for Request to Include Preservation as Part of Compensatory Mitigation	9
3.0	SITE SELECTION	13
3.1	Watershed Setting and Context	13
3.2	Beneficial Uses Provided	14
4.0	LONG-TERM SITE PROTECTION	19
4.1	Long-Term Protection Requirements	19
4.1.1	<i>Summary of Site Protection Requirements</i>	19
	Site Documentation	19
	Management Decisions	19
	Legal Agreements/Actions	20
4.1.2	<i>Site Protection Requirements by Source Document</i>	20
	404 NWP	20
	401 Certification	21
	LSAA	21
	BO	22
	MMCRP	23
4.2	Status of Site Protection Measures for the HMMP Mitigation Parcel	24
5.0	BASELINE INFORMATION	25
5.1	Preliminary Jurisdictional Determination and Function-Based Assessment of Impact Sites	25
5.2	Baseline Condition of the Desert Cahuilla HMMP Mitigation Parcel	26
5.3	Function-Based Assessments at Project Mitigation Sites	29
5.3.1	<i>Function-Based Improvements at the Desert Cahuilla HMMP Mitigation Parcel</i>	30
6.0	DETERMINATION OF CREDITS	31
6.1	Mitigation Credits within the Desert Cahuilla HMMP Mitigation Parcel	31
6.2	. Summary of Mitigation Credits for Entire Mitigation Program at all Sites	32
7.0	MITIGATION WORK PLAN	34
7.1	Activities Planned at the Mitigation Site	34
7.1.1	<i>Preservation</i>	34
	Sequence and Timing	34
8.1	As-built Conditions Reporting	37

8.2	Initial Mitigation Monitoring Activities and Performance Criteria	37
8.2.1	<i>Monitoring of Desert Dry Washes</i>	37
8.3	Monitoring Schedule and Reporting Requirements	37
9.0	MAINTENANCE OF HMMP DRY WASHES DURING THE MONITORING PERIOD	38
10.0	INITIAL MANAGEMENT OF THE MITIGATION PARCEL AND THE MITIGATION SITE UNDER THE HAP/HMP	38
10.1	.Initial Management Tasks and Funding Commitments for the Mitigation Parcel	38
10.2	.Initial Management Tasks and Funding Commitments for the Mitigation Site	39
11.0	LONG-TERM MANAGEMENT OF THE MITIGATION PARCEL AND MITIGATION SITE UNDER THE HAP/HMP	39
11.1	Long-term Management Tasks and Funding Commitments for the Mitigation Parcel	40
11.2	Long-term Management Tasks and Funding Commitments for the Mitigation Site	40
12.0	ADAPTIVE MANAGEMENT PLAN	41
12.1	Incorporation of Adaptive Management Principles	41
12.2	Natural Occurrences	41
11.3	Potential Remedial Actions	41
13.0	FINANCIAL ASSURANCES	41
13.1	Estimated Costs for Mitigation Measures	41
13.1.1	<i>Land Acquisition</i>	42
13.1.2	<i>Plan Implementation</i>	42
13.1.3	<i>Monitoring and Maintenance for Performance Period</i>	42
13.1.4	<i>Long-Term Maintenance</i>	42
13.1.5	<i>Remediation</i>	42
13.2	Form of Financial Assurances	43
13.0	REFERENCES	43

List of Appendices

- Appendix A. All CRAM Scores Collected for the Sunrise Powerlink Project
- Appendix B. Detailed Mitigation Implementation Cost Estimate to Support Financial Assurances
- Appendix C. Legal Description of the HMMP Mitigation Parcel

List of Figures

Figure 1.	Project Area Location Map.....	2
Figure 2.	Overview of Mitigation Site Locations	3
Figure 3.	Existing Conditions at the Desert Cahuilla HMMP Mitigation Parcel	11
Figure 4.	Desert Cahuilla Transaction Area	14
Figure 5.	Desert Cahuilla HMMP Mitigation Parcel: West Salton Watershed	27
Figure 6.	Projected Average Changes in CRAM Score at Stream Impact Sites and Stream Mitigation Sites 5 Years after Mitigation Implementation.....	30
Figure 7.	Mitigation Activities at the Desert Cahuilla HMMP Mitigation Parcel	35

List of Tables

Table 1.	HMMP Mitigation Parcel and Desert Cahuilla Mitigation Site Location Details	13
Table 2.	Definitions for Beneficial Uses of WOS.....	15
Table 3.	Beneficial Uses of WOS That May Be Affected by the SRPL Project.....	17
Table 4.	Combined Average CRAM Scores for Existing and Post-Project Conditions at Impact Sites along the Project ROW.....	26
Table 5.	Jurisdictional Areas at the Desert Cahuilla Mitigation Site.....	26
Table 6.	Average CRAM Attribute and Overall Scores for all Assessed Streams at the Chocolate Canyon, Lightner, Long Potrero, and Suckle Mitigation Sites.....	30
Table 7..	Summary of SRPL Aquatic Resource Mitigation at the Desert Cahuilla Mitigation Site	31
Table 8.	Summary of Sunrise Powerlink Project Mitigation for Permanent Impacts to Waters of the U.S.	32
Table 9.	Summary of Sunrise Powerlink Project Mitigation for Temporary Impacts to Waters of the U.S.	33
Table 10.	Summary of the Project's Aquatic Resource Mitigation.....	33
Table 11.	Summary of Mitigation at the Desert Cahuilla Mitigation Site.....	34
Table 12.	Monitoring and Reporting Activities at the Desert Cahuilla HMMP Mitigation Parcel	38
Table 13.	Desert Cahuilla Mitigation Costs	43

List of Acronyms

AA(s)	Assessment Area(s)
ABDSP	Anza Borrego Desert State Park
BO	Biological Opinion
Corps	U.S. Army Corps of Engineers
CDFG	California Department of Fish and Game
CPUC	California Public Utilities Commission
CRAM	California Rapid Assessment Method
CWA	Clean Water Act
HAP/ HMP	Habitat Acquisition Plan/Habitat Management Plan
HMMP	Habitat Mitigation and Monitoring Plan
OHV	Off-highway Vehicle
PAR	Property Analysis Record
PBS	Peninsular Bighorn Sheep
PJD	Preliminary Jurisdictional Determination
ROW	Right-of-Way
SDG&E	San Diego Gas and Electric Company
SDRWQCB	San Diego Regional Water Quality Control Board
SRPL	Sunrise Powerlink
SVRA	State Vehicular Recreation Area
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service
WOS	Waters of the State
WOUS	Waters of the U.S.

1.0 INTRODUCTION AND PURPOSE

San Diego Gas & Electric Company (SDG&E) is constructing a new 500/230 kilovolt (kV) electric transmission line (Sunrise Powerlink, the Project) that will extend approximately 117 miles from the El Centro area of Imperial County to southwestern San Diego County in southern California (Figure 1). Construction of the transmission line structures, access roads, and ancillary facilities will result in permanent and temporary impacts to “waters of the United States” (WOUS) and “waters of the State” (WOS). In compliance with federal and state regulations, SDG&E has applied for and received authorization for the impacts from the U.S. Army Corps of Engineers (Corps), the State Water Resources Control Board (SWRCB), and the California Department of Fish and Game (CDFG).

- The Corps has determined that the Project complies with its Nationwide Permit (NWP) No. 12 and No. 3 under section 404 of the Clean Water Act (CWA), as specified in the notification dated January 7, 2011 (File No. 2007-00704-SAS);
- SWRCB has issued a certification that the Project is in compliance with section 401 of the CWA, as specified in the notification dated November 10, 2010 (File No. SB090151N); and
- CDFG has approved a Lake and Streambed Alteration Agreement (LSAA) for the Project in accordance with sections 1602 and 1603 of the California Fish and Game Code, as specified in agreement no. 1600-2009-0365-R5 dated November 29, 2010.

The authorizations are conditioned on implementation of the impact avoidance, minimization, monitoring, and mitigation measures identified in the Corps NWP notification letter, SWRCB 401 certification, and CDFG LSAA. For permanent impacts to WOUS and WOS, the required mitigation includes the preservation, restoration, enhancement, and management of wetlands and waters at five mitigation sites (Chocolate Canyon, Desert Cahuilla, Lightner, Long Potrero, and Suckle) at the locations shown on Figure 2. This Final Habitat Management and Monitoring Plan (Final HMMP) identifies the mitigation for permanent impacts that will be implemented at the Desert Cahuilla Mitigation Site in Imperial County, California. This Final HMMP describes the specific mitigation activities and plans, performance criteria to measure success, initial monitoring and management actions, long-term management activities, and estimated costs for the implementation of HMMP mitigation. It supplements the Conceptual HMMP (WRA 2010b) that was conditionally approved when the Corps, SWRCB, and CDFG issued their authorizations. A Final HMMP also has been prepared for each of the other mitigation sites.

1.1 Responsible Parties

SDG&E is responsible for implementing mitigation for the Project, including the measures identified in this Final HMMP.

WRA, Inc. (WRA) is SDG&E's authorized agent; prepared SDG&E's applications to the Corps, SWRCB, and CDFG; and prepared this and the other four Final HMMPs. WRA is also the prime contractor for implementation of the restoration, enhancement, maintenance, and monitoring measures identified in the Final HMMPs, excluding the long-term (in perpetuity) management of the mitigation sites.



Figure 1. Project Area Location Map

Sunrise Powerlink
San Diego/Imperial County, California



Map Date: June 2010
Map By: Derek Chan
Base Source: ESRI
Filepath: L:\Acad 2000 Files\17000\17128-3\GIS\ArcMap\Mitigation\
Fig1_LocMap_20100630.mxd



Sunrise Powerlink

 San Diego/Imperial County,

 California

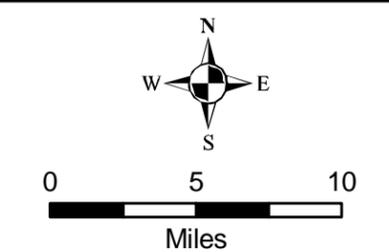
Figure 2.

 Overview of Mitigation

 Area Locations

Legend

 Mitigation Area



Long-term (in perpetuity) management of the Desert Cahuilla Mitigation Site will be conducted by the California Department of Parks and Recreation (State Parks) as part of the management of Anza-Borrego Desert State Park (ABDSP) (see Section 4.0 for details). The authorizations for impacts to WOUS and WOS require that the land manager, the provisions for permanent site protection, the long-term management plan for the site, and the financial commitments for management be approved by the Corps, SWRCB, and CDFG (see Sections 4, 11, and 13 for details).

Primary contact information for these parties is below:

Permittee: SDG&E
8315 Century Park Court, CP21G
San Diego, California 92123-1548
Contact: Alan Colton
Contact Phone: (858) 654-8727

Authorized Agent: WRA, Inc.
2169-G East Francisco Blvd.
San Rafael, CA 94901
Contact: Michael Josselyn, PhD, PWS
Contact Phone: (415) 454-8868

Land Manager California Department of Parks and Recreation. Contact information will be provided when the Desert Cahuilla transaction has been completed.

1.2 Purpose and Organization

The purpose of this Final HMMP is to identify the compensatory mitigation measures that will be implemented on the Desert Cahuilla Mitigation Site for the Project's permanent impacts to WOUS and WOS. The impacts to be mitigated include those resulting from Project activities along the first 29 miles of 500 kV line, from the Imperial Valley Substation to tower EP240.

The document generally is organized to follow the regulations set forth in the 2008 Clean Water Act (CWA) Section 404 Final Compensatory Mitigation Rule (33 CFR Parts 325 and 332), as well as 401 certification and LSAA requirements. Because regulations from multiple agencies are addressed, the terminology and order of requirements sometimes differs from that in the 2004 Los Angeles District Final Mitigation Guidelines and Monitoring Requirements. However, all Corps requirements are addressed. In addition, as requested by the Los Angeles District Corps office and the SWRCB, the HMMP includes a function-based assessment of the impact areas and mitigation sites that was prepared using the California Rapid Assessment Method (CRAM).

The regulatory requirements contained in 33 CFR 332.4(c), as issued by the Corps in 2008, generally encompass the requirements of mitigation and monitoring plans for all of the resource agencies (Corps 2008b). We have included additional information described in the 2004 Los Angeles District Final Mitigation Guidelines and Monitoring Requirements and information required in the forthcoming mitigation guidelines, as feasible. The required content of the HMMP is listed below, with the location of the information within this document indicated in parentheses.

- Mitigation Goals and Objectives, including resource type, amounts, and methods of compensation and justification for inclusion of preservation as part of the compensatory mitigation (see Section 2.0)

- Site Selection, including key factors for providing mitigation at a site (see Section 3.0)
- Site Protection Instrument (see Section 4.0)
- Baseline Information, including the ecological characteristics of impact areas and mitigation sites and CRAM evaluation (see Section 5.0)
- Determination of Credits, including a description of how the mitigation will provide compensatory mitigation for impacts (see Section 6.0)
- Mitigation Work Plan, including detailed descriptions of the work to be performed in implementing mitigation (see Section 7.0)
- Ecologically-based Performance Standards (see Section 8.0)
- Monitoring Requirements and Methods (see Section 8.0)
- Maintenance Plan, including maintenance activities to ensure continued viability of the mitigation site (see Sections 9.0 and 10.0)
- Long-term Management Plan, (see Section 11.0)
- Adaptive Management Plan (see Section 12.0)
- Financial Assurances to ensure project mitigation will be effectively implemented and maintained (see Section 13.0)

Supplemental information is provided in three appendices:

Appendix A. All CRAM Scores Collected for the Sunrise Powerlink Project

Appendix B. Detailed Mitigation Implementation Cost Estimate to Support Financial Assurances

Appendix C. Legal Description of the HMMP Mitigation Parcel

Project impacts were described in the Pre-Construction Notification (PCN) prepared for the Corps, as part of the LSAA Notification Package prepared for the CDFG, as part of the Water Quality Certification Application prepared for the SWRCB, and as modified by subsequent submittals. All permit application documents contain a complete project description. Project modifications have been made throughout the permit process to further reduce environmental impacts, including those to streams, wetlands, and desert dry washes. Mitigation for temporary impacts to streams, wetlands, and desert dry washes will occur through restoration within the temporary impact areas, as described in the Conceptual HMMP (WRA 2010b), and is not addressed in this document.

1.3 Relationship to the Project's Habitat Acquisition Plan/Habitat Management Plan (HAP/HMP)

The measures in this Final HMMP for the acquisition, permanent protection, and long-term management of the mitigation site are from the Project's Habitat Acquisition Plan/Habitat Management Plan (HAP/HMP). The HAP/HMP is required under the Project's Mitigation Monitoring, Compliance, and Reporting Program (MMCRP, Aspen 2010) and the 2010 Biological Opinion (BO, USFWS 2010) issued by the U.S. Fish and Wildlife Service (USFWS) to mitigate the Project's impacts on sensitive vegetation communities and special status species. It is an appropriate vehicle for implementation of parts of the HMMP because:

1. The Chocolate Canyon, Desert Cahuilla, Lightner, Long Potrero, and Suckle Mitigation Sites in the Final HMMPs and the HAP/HMP are the same properties;

2. The requirements specified in the MMCRP and BO regarding mitigation land acquisition, management, site protection assurances, and funding guarantees are fundamentally the same as those specified by the Corps, SWRCB, and CDFG in the NWP conditions, 401 certification, and LSAA; and
3. The HAP/HMP includes provisions for coordinating initial and long-term management of the entire mitigation property with implementation of HMMP measures on the site.

The HAP/HMP measures in this HMMP are from the HAP/HMP dated September 22, 2010 (SDG&E 2010a), which was developed by qualified biologists and conservation planners working in close coordination with USFWS and CDFG. The September 2010 HAP/HMP includes a management plan and Property Analysis Record (PAR) or PAR equivalent for each of the mitigation sites. The management plan:

- Identifies the mitigation function of the property,
- Identifies potential land managers and holder of the fee title or conservation easement,
- Describes the property and its biological resources,
- Identifies the biological resource and land stewardship tasks necessary to conserve and maintain the property's mitigation values,
- Summarizes the results of the PAR or PAR-equivalent for each property in terms of funding required for the first five years of management and for ongoing management, and
- Indicates whether the property has been acquired.

The HAP/HMP also includes a description of the PAR assumptions, the PAR spreadsheets for each property, and legal descriptions of the properties.

As required by the MMCRP and BO, the HAP/HMP was submitted for approval to the CPUC, BLM, USFWS, and CDFG as the mitigation plan for vegetation and species' impacts outside CNF. A separate HAP/HMP was prepared for and has been approved by USFS to mitigate vegetation (independent of wetlands and waters) and species impacts within CNF. Consistent with their regulatory role, USFWS and CDFG took the lead in reviewing the September 2010 HAP/HMP. They issued a joint letter on December 2, 2010 (USFWS and CDFG 2010) indicating their approval for MMCRP purposes of several Project mitigation plans, including conditional approval of the HAP/HMP. Subsequently, the CPUC and BLM also approved the HAP/HMP for MMCRP purposes.

The conditional approval by the USFWS and CDFG requires that a final management plan and a final PAR be prepared for each mitigation site. As stated in the December 2, 2010, letter:

...the HMP will require further revisions once the mitigation lands have been acquired and land managers have been identified and approved by the Wildlife Agencies. Once the land managers are approved, San Diego Gas & Electric (SDG&E) will be required to provide a revised final HMP that will include revised Property Analysis Records, approved by the identified land managers, for Wildlife Agency review and approval. The final HMP must be implemented no later than 18 months from the initiation of construction activities.

To facilitate the final identification and approval of the land managers and the subsequent preparation of final management plans and PARs, USFWS and CDFG has initiated discussions with entities identified as potential land managers in the HAP/HMP. They also are preparing their recommended revisions to the individual management plans and PAR assumptions. For the five HMMP mitigation sites, the discussions with land managers and HMP/PAR revisions will be coordinated with and will include the Corps, SWRCB, and CDFG LSAA staff. SDG&E will be responsible for completing the revised final documents and submitting them back to the agencies for final review and approval. For MMRP purposes, the CPUC and BLM also must approve the final plan and PAR.

When the revised final HMP/PAR is approved for the Desert Cahuilla Mitigation Site, it will supersede the HAP/HMP tasks and estimates in Sections 10 and 11 of this Final HMMP. It also should be noted that the Desert Cahuilla component of the HAP/HMP has a different format than the management plans for the other mitigation sites and management costs were estimated using a PAR-equivalent approach.

1.4 Differentiation of the HMMP Mitigation Parcel within the Desert Cahuilla Mitigation Site

In this HMMP, a distinction is made between the Desert Cahuilla Mitigation Site as described in the HAP/HMP and the location where all HMMP measures will be implemented. The mitigation site as described in the HAP/HMP is the area incorporated into ABDSP as a result of the Desert Cahuilla transaction (see Section 3.0 for details). All HMMP measures will occur on one parcel (APN 00701001) within the mitigation site, hereafter cited as the "HMMP Mitigation Parcel."

In the sections that follow, the focus is on the HMMP Mitigation Parcel. Information about the total area that will be added to ABDSP is included to provide a context for the preservation and management measures on the mitigation parcel.

2.0 MITIGATION GOALS AND OBJECTIVES FOR THE HMMP MITIGATION PARCEL WITHIN THE DESERT CAHUILLA MITIGATION SITE

The mitigation goals and objectives for the HMMP Mitigation Parcel are to:

- Preserve and manage aquatic resources and associated uplands in perpetuity as a "watershed" approach to mitigation
- Compensate for Project impacts to WOS beneficial uses
- Provide the legal structure and funding for long-term management of weeds, trash, vandalism, trespassing and any other human-induced disturbances in perpetuity through a non-wasting endowment.

Mitigation activities include preservation of desert dry wash habitat on the mitigation parcel. This mitigation action is defined in the Corps 2008 Mitigation Rule (Corps 2008b) as follows:

- **Preservation:** The permanent protection of ecologically important wetlands or other aquatic resources through the implementation of appropriate legal and physical mechanisms (i.e. conservation easements, title transfers). Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection or enhancement of the aquatic ecosystem. Preservation does not result in a net gain of wetland acres and may only be used in certain circumstances, including when the resources to be preserved contribute significantly to the ecological sustainability of the watershed.

2.1 Resource Functions, Types, and Amounts

The Desert Cahuilla Mitigation Site supports an extensive array of undisturbed desert dry washes that are a major portion of the watershed which flows to the Salton Sea (Figure 3). In addition, the mitigation site is designated critical habitat and a known movement corridor for Peninsular Bighorn Sheep (PBS; *Ovis canadensis nelsoni*).

The HMMP Mitigation Parcel includes approximately 675 acres and has an extensive, relatively undisturbed dry wash and creosote desert scrub vegetation. Currently, the parcel is not managed for natural resource functions and services and is threatened by off-highway vehicle (OHV) use. The acquisition of this property ensures that the relatively pristine on-site habitat is preserved and provides for management of the parcel as part of ABDSP. Approximately 84.13 acres of desert dry wash will be preserved. All resources on the parcel will be protected and managed under HMMP and HAP/HMP provisions for the mitigation parcel.

The Project ROW and Project access roads do not cross the mitigation site or the mitigation parcel.

2.2 Basis for Request to Include Preservation as Part of Compensatory Mitigation

As also discussed in the Conceptual HMMP, preservation of resources on the HMMP Mitigation Parcel is appropriate as part of the compensatory mitigation for the Project's impacts because the preservation meets the requirements from the Corps 2008 Mitigation Rule in 33 CFR 332.3(h): (Corps 2008b). 33 CFR 332.3h states that:

(1) Preservation may be used to provide compensatory mitigation for activities authorized by [Corps] permits when all the following criteria are met:

- (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed;*
- (ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available;*
- (iii) Preservation is determined by the district engineer to be appropriate and practicable;*
- (iv) The resources are under threat of destruction or adverse modifications; and*
- (v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).*

(2) Where preservation is used to provide compensatory mitigation, to the extent appropriate and practicable the preservation shall be done in conjunction with aquatic resource restoration, establishment, and/or enhancement activities.

The justification for including preservation on the mitigation parcel as part of the compensatory mitigation for the Project is as follows:

- Important watershed functions are preserved. The dry wash on the mitigation parcel and those on the rest of the mitigation site are part of a major wash that flows directly to the Salton Sea. The mitigation parcel is important to watershed health, including conditions on the overall mitigation site, because of its size, remote location, and proximity to protected resources on adjacent lands in the ABDSP Santa Rosa Mountains Wilderness Zone.
- Significantly contributes to ecological sustainability. Preservation on the mitigation parcel and protection and management of the entire mitigation site as well as the parcel will substantially contribute to the survival and recovery of PBS populations. Preservation of dry washes on the mitigation parcel and elsewhere on the mitigation site also will contribute to existing programs to sustain and recover ecological values at the Salton Sea.
- Preservation is appropriate and practicable. Preservation on the mitigation parcel is appropriate because the amount and quality of the desert dry wash on the parcel exceeds that of the impacts being mitigated and because of the benefits that will result from preserving a large wash. Preservation on the mitigation parcel is practicable because the parcel is already identified for acquisition with funding from SDG&E as part of the Desert Cahuilla transaction and is easily incorporated into and managed as part of immediately adjacent lands in ABDSP lands in the in the ABDSP Santa Rosa Mountains Wilderness Zone.
- Resources are under threat of destruction or adverse modification. The mitigation parcel is not being patrolled or managed for its natural resource values by California State Lands Commission (the current owner); instances of illegal OHV use and other disturbances would likely continue and increase.
- Resources will be permanently protected. Resources on the mitigation parcel will be permanently protected as part of ABDSP and managed in the same way as the adjacent Wilderness Zone. State Parks also would include the parcel (and other parts of the mitigation site) in the Wilderness Zone through the ABDSP General Plan amendment and update process.
- Preservation is coordinated with restoration, establishment, and/or enhancement. Preservation of the WOUS and WOS resources will be coordinated with the management of the upland habitats on the parcel under the HAP/HMP. HAP/HMP management includes enhancement through weed control and road decommissioning.

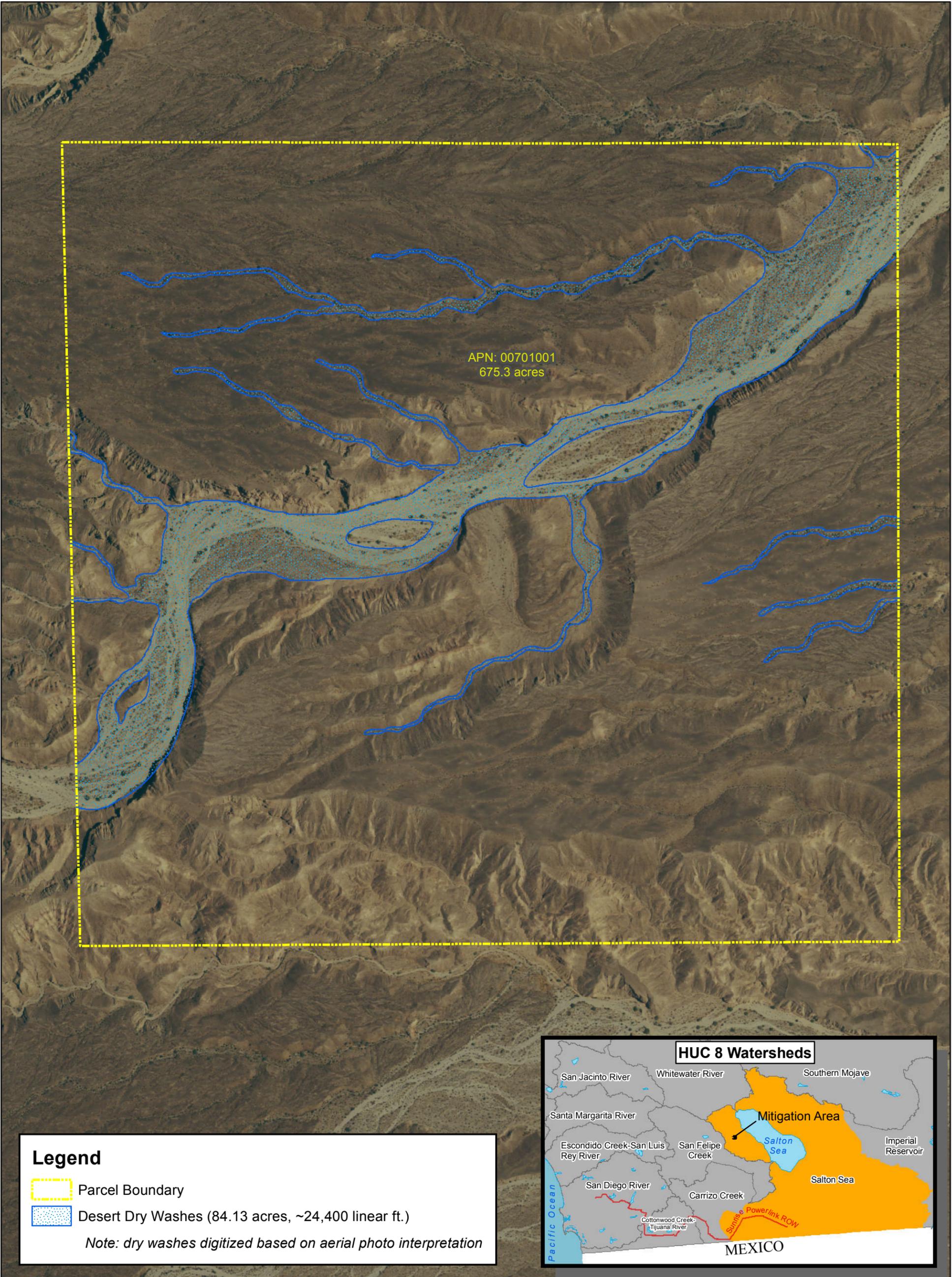
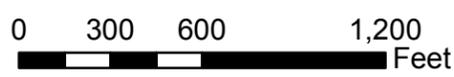


Figure 3. Existing Conditions at the Desert Cahuilla HMMP Mitigation Site

Sunrise Powerlink
Imperial County, California



Map Date: November 2010
Map By: Derek Chan
Base Source: NAIP, 2005; Imperial County, NHD, NWI
Filepath: L:\Acad 2000 Files\17000\17128-3\GIS\ArcMap\Mitigation\DesertCahuilla_Existing_20101104.mxd

3.0 SITE SELECTION

The HMMP Mitigation Parcel was selected based on the presence of extensive desert dry wash habitat (approximately 84 acres), the relative lack of disturbance of the site due to its remote location, its adjacency to the ABDSP Santa Rosa Mountains Wilderness Zone, and inclusion in the Desert Cahuilla transaction.

As described in the September 2010 HAP/HMP, the Desert Cahuilla transaction the acquisition and consolidation of State lands within a 14,899-acre area west of Route 86 near the Salton Sea in Imperial County, California (Figure 1). The primary goal of the transaction is to conserve the area’s unique resources while also accommodating public uses of State lands. Under the transaction, nine parcels currently owned by the California State Lands Commission (State Lands) will be acquired by State Parks with funding provided by SDG&E, consolidated with other lands owned by State Parks, and added to ABDSP and the Ocotillo Wells State Vehicular Recreation Area (OWSVRA). Figure 4 shows the properties within the transaction area and the proposed divide of lands for the ABDSP and OWSVRA. State lands north of the red line on Figure 4 will go to ABDSP and, for purposes of this HMMP and the HAP/HMP, are the Desert Cahuilla Mitigation Site. State lands south of the boundary will go to OWSVRA. This division of lands was determined by State Parks working in cooperation with environmental and recreation groups and in consultation with CDFG and USFWS. The division of lands and the overall transaction also is specified in State legislation (Senate Bill 855) that was passed and signed by the Governor in 2010. The transaction area is identified as the “Freeman Properties” in SB855 and Figure 4.

The 675-acre HMMP Mitigation Parcel is in the northwest corner of the transaction area and is one of the nine parcels that State Parks will acquire from State Lands with funding provided by SDG&E. It is in the area that will be added to ABDSP (i.e., the Desert Cahuilla Mitigation Site). In addition to funding acquisition, SDG&E will provide State Parks with management funding for the mitigation parcel and for the mitigation site as a whole. HAP/HMP management measures for the mitigation parcel and mitigation site are presented in Sections 10.0 and 11.0 of this HMMP. Funding for management is addressed in Section 13.0

3.1 Watershed Setting and Context

The HMMP Mitigation Parcel and Desert Cahuilla Mitigation Site are within the West Salton hydrologic unit (HUC 12). Specific information on the mitigation parcel and mitigation site location is provided in Table 1.

Table 1. HMMP Mitigation Parcel and Desert Cahuilla Mitigation Site Location Details

Mitigation Parcel and Site Location	Located within the upper portion of the Salton Sea watershed, 7 miles west of the Salton Sea.
Mitigation Parcel Latitude/Longitude	116° 04' 31" W, 33° 19' 51" N
Name of Watershed and Hydrologic Unit	West Salton Hydrologic Unit (721.00)
Mitigation Parcel and Site City and County	Unincorporated area, Imperial County

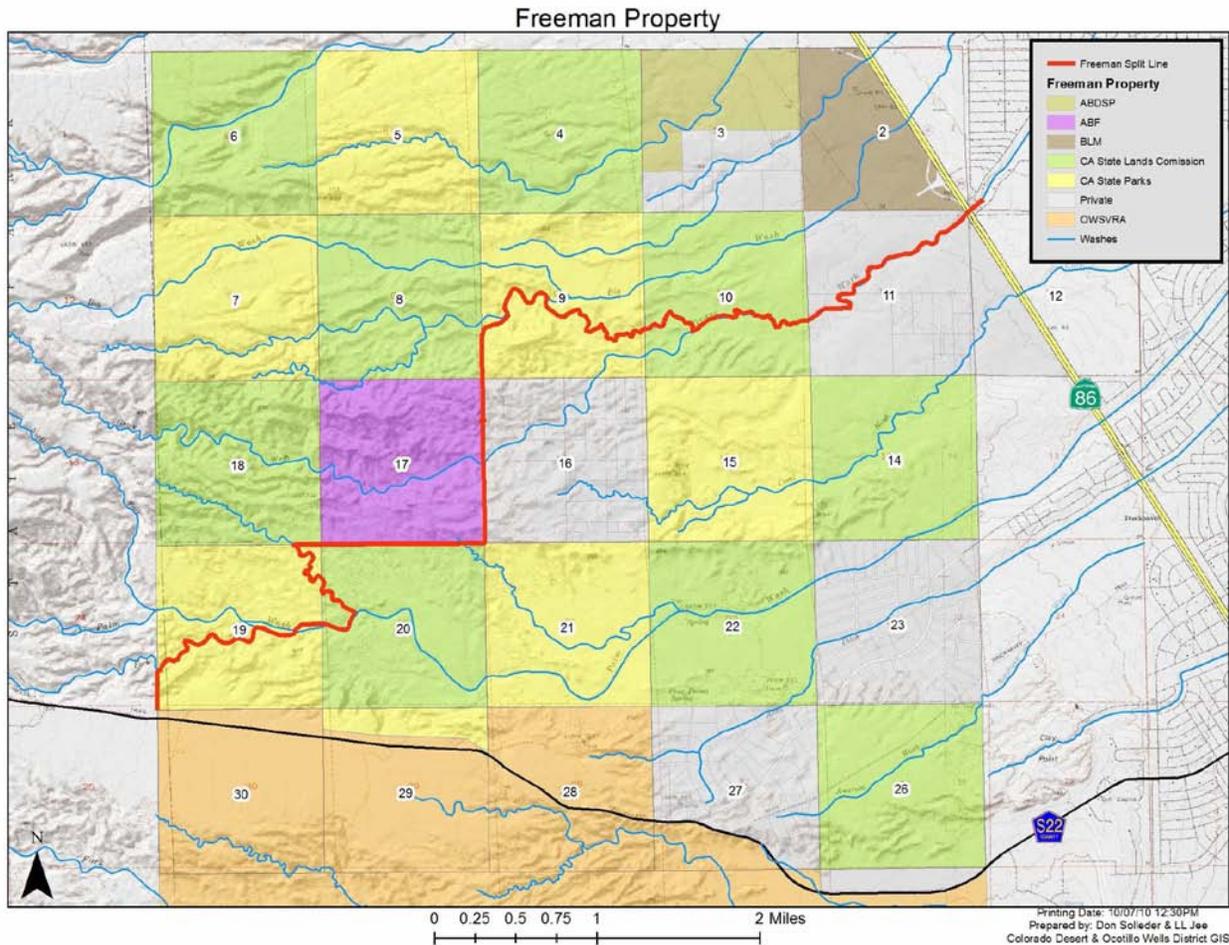


Figure 4. Desert Cahuilla Transaction Area

3.2 Beneficial Uses Provided

Beneficial uses and water quality objectives are required to be established for all WOS, including both surface and ground waters. Beneficial uses of surface and ground waters of the San Diego Region are discussed in the Water Quality Control Plan for the Colorado River Basin (CRWQCB 1994). Beneficial uses for surface waters are designated under section 303 of the CWA (40 CFR 131) and under the Porter-Cologne Act (California Water Code section 13050[f]). The State is required to specify appropriate water uses to be achieved and protected. Definitions and abbreviations for beneficial uses provided by WOS are summarized in Table 2.

Waters in the Desert Cahuilla Mitigation Site are part of the West Salton hydrologic unit watershed and are considered surface waters under the category “washes (ephemeral streams)” located in the west Colorado River Basin. For washes in the watershed in which the Desert Cahuilla Mitigation Site occurs, the Colorado River Regional Water Quality Control Board has designated the following beneficial uses (Table 3): Freshwater Replenishment (FRSH), Ground Water Recharge (GWR), Noncontact Water Recreation (REC2), Warm Freshwater Habitat (WARM), and Wildlife Habitat (WILD). Table 2 contains definitions of all beneficial uses, including some which have not been designated for this watershed and mitigation site, but they are included in the table as references for Table 3.

Table 2. Definitions for Beneficial Uses of WOS.

State Recognized Beneficial Uses	Description
Municipal and Domestic Supply (MUN)	Uses of water for community, military, or individual water supply systems, including, but not limited to, drinking water supply.
Agricultural Supply (AGR)	Uses of water for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
Industrial Service Supply (IND)	Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
Industrial Process Supply (PROC)	Uses of water for industrial activities that depend primarily on water quality.
Hydropower Generation (POW)	Uses of water for hydropower generation.
Freshwater Replenishment (FRSH)	Uses of water for natural or artificial maintenance of surface water quantity or quality.
Ground Water Recharge (GWR)	Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting salt water intrusion into fresh water aquifers.
Water Contact Recreation (REC1)	Uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and uses of natural hot springs.
Noncontact Water Recreation (REC2)	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where water ingestion is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
Preservation of Biological Habitats of Special Significance (BIOL)	Includes uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.
Wildlife Habitat (WILD)	Uses of waters that support wildlife habitats, including, but not limited to, the preservation and enhancement of vegetation and prey species used by wildlife, such as waterfowl.
Cold Freshwater Habitat (COLD)	Uses of water that support cold water ecosystems, including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Warm Freshwater Habitat (WARM)	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Aquaculture (AQUA)	Includes the uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
Inland Saline Water Habitat (SAL)	Includes uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.
Estuarine Habitat (EST)	Includes uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Table 2. Definitions for Beneficial Uses of WOS.

State Recognized Beneficial Uses	Description
Marine Habitat (MAR)	Includes uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).
Rare, Threatened, or Endangered Species (RARE)	Includes uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.
Migration of Aquatic Organisms (MIGR)	Includes uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
Spawning, Reproduction, and/or Early Development (SPWN)	Includes uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish. This use is applicable only for the protection of anadromous fish.
Shellfish Harvesting (SHELL)	Includes uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters and mussels) for human consumption, commercial, or sport purposes.

One goal of the mitigation program is to compensate for Project-related impacts to WOS and their beneficial uses. Beneficial uses of WOS on the HMMP Mitigation Parcel will be preserved to mitigate a portion of the beneficial uses affected by Project activities; mitigation activities on the other four mitigation sites are intended to compensate for any remaining beneficial uses not provided at the Desert Cahuilla parcel (i.e., there will be no net loss of beneficial use from any project activity).

The HMMP Mitigation Parcel at the Desert Cahuilla Mitigation Site will provide 84.13 acres of desert dry wash habitat to mitigate for the 2.45 acres of permanent impact to desert dry washes along with the beneficial uses associated with these systems. Beneficial uses associated with desert dry wash habitat in the Colorado River Basin are described above and are the same as those to be impacted indirectly by the Project. By preserving 84.13 acres of this habitat, there will be a 34.3:1 gain in overall beneficial uses. In addition, all 6.53 acres of temporary impact will be restored to pre-impact condition. The full restoration of temporary impacts plus the Desert Cahuilla mitigation site and the remaining four sites will fully compensate for all beneficial uses impacted within the same regional watershed so that there is no net loss in overall beneficial uses associated with the Project.

All designated beneficial uses of WOS potentially impacted by Project activities are summarized in Table 3; however, not all uses listed in Table 3 are necessarily affected by the Project. Only those that are marked as such have the potential to be affected.

Table 3. Beneficial Uses of WOS That May Be Affected by the SRPL Project.

SAN DIEGO REGION INLAND SURFACE WATERS	Hydrologic Unit Basin Number	M U N	A G R	I N D	P R O C	G W R	F R S H	P O W	R E C 1	R E C 2	B I O L	W A R M	C O L D	W I L D	R A R E	S P W N
San Diego River Watershed	907.31	X	X	X	X				X	X		X	X	X		
Conejos Creek 7.31	907.31	X	X	X	X				X	X		X	X	X		
Alpine Creek	907.31	X	X	X	X				X	X		X	X	X		
Chocolate Canyon	907.33	X	X	X	X				X	X		X	X	X		
Chocolate Canyon	907.31	X	X	X	X				X	X		X	X	X		
Sweetwater River	909.31	X	X	X	X				X	X		X	X	X		X
Viejas Creek	909.31	X	X	X	X				X	X		X	X	X		
Viejas Creek	909.33	X	X	X	X				X	X		X	X	X		
Taylor Creek	909.31	X	X	X	X				X	X		X	X	X		
Tijuana Hydrologic Unit	911															
Cottonwood Creek	911.23	+							X	X		X		X		
Dry Valley	911.23	+							X	X		X		X		
Bob Owens Canyon	911.23	+							X	X		X		X		
McAlmond Canyon	911.24	+							X	X		X		X		
McAlmond Canyon	911.23	+							X	X		X		X		
Rattlesnake Canyon	911.23	+							X	X		X		X		
Potrero Creek	911.25	+							X	X		X		X		
Potrero Creek	911.23	+							X	X		X		X		
Bee Creek	911.23	+							X	X		X		X		
Cottonwood Creek	911.30	X	X	X	X		X		X	X		X	X	X	X	X
Hauser Creek	911.30	X	X	X	X		X		X	X		X	X	X		X
Pine Valley Creek	911.30	X	X	X	X		X		X	X		X	X	X		X
Wilson Creek	911.30															
Pats Canyon	911.30															
La Posta Creek	911.70	X	X	X	X		X		O	X		X	X	X		
Simmons Canyon	911.70	X	X	X	X		X		O	X		X	X	X		
Diablo Canyon	911.84	+														
Reservoirs & Lakes																
El Capitan Reservoir	907.31	X	X	X	X			X ¹	X	X	X	X				
Loveland Reservoir	909.31	X	X	X	X		X	X	X	X	X					
Barrett Lake	911.30	X	X	X	X		X	X	X	X	X	X	X			
San Vicente Reservoir	907.20	X	X	X	X		X	X	X	X	X	X				

COLORADO RIVER BASIN REGION		Water Board Hydrologic Unit Code	MUN	AGUA	FAH	IRSD	IGNWR	RECI	RECI	WARIM	COLLD	WILLD	PLOW	RARE
	Tule Creek	22.71, 22.72	P	X			X	X	X	X		X		
	Unlisted Perennial and Intermittent Streams		P ¹¹		I ¹²	X ¹²	I	X	I	I	X	I	X	I ¹³
	Washes (Ephemeral Streams)				I ¹²		I		I	see note 7		I		

Key:
 X = Existing Beneficial Use
 0 = Potential Beneficial Use
 I = Intermittent Uses
 + = Excepted from MUN. The water body has been exempted by the Regional Board from the municipal use designation under the terms and conditions of State Board Resolution No. 88-63, *Sources of Drinking Water Policy*.)

Note 1: Waterbodies are listed multiple times if they cross hydrologic area or sub area boundaries.)
 Note 2: Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

FOOTNOTES: Footnotes are numbered as found in the Basin Plan.
 7. Use, if any, to be determined on a case-by-case basis.
 11. Potential use designations will be determined on a case-by-case basis as necessary in accordance with the "Sources of Drinking Water Policy".
 12. Applies only to tributaries to Salton Sea.
 13. Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the CDFG on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

4.0 LONG-TERM SITE PROTECTION

This section summarizes the requirements for long-term protection of the mitigation site as per the 404 NWP terms and conditions, 401 certification, LSAA, BO, and MMCRP and indicates the status of establishing the protection measures for the Suckle site as of May 2010.

4.1 Long-Term Protection Requirements

The 404 NWP, 401 certification, LSAA, MMCRP, and BO specify the type and timing of the measures required to assure the long-term protection of the mitigation sites. Generally the requirements are the same in these documents, but there are differences in terminology used and/or the timeline for actions. Key requirements stated in all of the documents are summarized below, followed by the specific provisions in separate documents.

4.1.1 Summary of Site Protection Requirements

Long-term protection of each mitigation site will occur through a combination of site documentation, management decisions, and legal agreements/actions involving the Corps, SWRCB, CDFG, USFWS, the entities selected to manage the sites, and SDG&E.

Site Documentation

The site documentation relevant to long-term protection includes a title report, County Assessor's parcel map, Phase One Environmental Assessment Report, plat map, and any Williams Act/Farmland Security Zone contracts for the site. These materials are compiled during the acquisition process and identify any existing easements, ROWs, agricultural contracts, mineral rights, and other conditions/constraints that come with the property. The information is directly or indirectly required by all of the agencies that must approve the long-term protection measures for the site. SDG&E also requires the information for company authorization to proceed with an acquisition.

Management Decisions

There are three key management decisions required for long-term site protection:

- Selection of a land manager qualified to own the property and manage it in accordance with the goals, objectives, and measures identified in the Final HMMP and in the final revised HMP with funding provided by SDG&E;
- Approval of the Final HMMP, revised final HMP, and revised final PAR for the site; and
- Approval of the funding arrangements for long-term management.

These decisions will be made by and/or with the approval of the Corps, SWRCB, CDFG, and USFWS for the HMMP mitigation sites. For MMCRP purposes, the CPUC and BLM also must approve the land manager, final HMP/PAR, and funding arrangement. The agencies also directly or indirectly require that the final PAR be approved by the selected land manager.

All of the agencies require that these decisions be made within a specific timeframe.

Legal Agreements/Actions

There are three legal agreements/actions relevant to the long-term protection of the mitigation sites:

1. Acquisition of the mitigation site;
2. Execution of a conservation easement agreement or its equivalent for the mitigation site. The agreement must be approved in advance by the agencies and also must be accepted by the land manager.
3. Conveyance of fee title and/or the conservation easement or its equivalent to one of the agencies or an entity approved by them (such as the land manager).

All of the agencies require that this step be complete prior to the line being energized. The agencies also acknowledge that federal and state agencies cannot accept fee title for lands subject to conservation easements.

4.1.2 Site Protection Requirements by Source Document

404 NWP

1. SDG&E will assure the five mitigation sites are protected as natural open space in perpetuity. SDG&E shall submit draft site-protection mechanisms to the Corps for approval in advance of or concurrent with impacts within waters of the U.S (Condition #10)
2. Permittee shall also submit a detailed timeframe and action plan addressing the progress for achieving site protection (e.g., steps in the land acquisition/transfer process, identification of land managers and site protection mechanisms, agency planning documentation) for each mitigation site within 30 days of the date of issuance of this permit verification letter (Condition #10)
3. The Permittee shall receive written notification from the Corps of the draft site-protection mechanism prior to them being executed and recorded (Condition #10)
4. The Corps shall require a Conservation Easement (CE) as site protection instrument for each mitigation site. Draft CE must include a 3rd party easement holder. The CE must provide that the 3rd party easement holder may enter upon and do any and all work to comply with special condition #1 in the event the permittee has failed to do so (Condition #10)
5. Corps must approve the use of alternative site-protection mechanism if a CE is not available or feasible (Condition #10)
6. Monthly progress reports for each mitigation site will be submitted to the Corps until the Corps approves the draft site-protection mechanism (Condition #10)

7. For any mitigation site where the Corps-approved third party land manager is a state or Federal agency, a qualified land specialist shall be retained by SDG&E to shepherd the transfer of the mitigation property to the designated agency. SDG&E shall include in the monthly progress reports required per Special Condition #10 the progress of the land transfer and document compliance. (Condition #11)
8. SDG&E must provide monies in the form of a non-wasting endowment (endowment amount to be determined by a revised PAR) to fulfill the land manager's long-term responsibilities, including maintenance activities, etc. (Condition #13)
9. The revised PAR must be submitted by Oct 31st of Year 2 of the mitigation and monitoring period for each mitigation site (Condition #13).
10. SDG&E will provide the endowment within 30 days of the Corps' approval of the revised PAR of the five mitigation sites (Condition #13).

401 Certification

1. Conduct, document, and report compensatory mitigation in compliance with the Final HMMPs. (Condition #7)
2. Full title and ownership or land transfer agreements for all compensatory mitigation properties shall be finalized before energization of the transmission line. (Condition #8)

LSAA

1. DFG has tentatively agreed to the mitigation activities described in the HMMP. Final approval of these sites will occur following DFG's receipt and review of the following, for each site: (1) current Preliminary Title Report, (2) County Assessor's Parcel Map, (3) Phase One Environmental Site Assessment Report, (4) Plat map showing pre-existing easements encumbering the mitigation areas, (5) copies of any Williamson Act contracts and Farmland Security Zone contracts that exist on the mitigation areas, and (6) identification of the long-term property owners and their written commitment to manage consistent with the conservation purposes of the mitigation sites. (Condition #3.7)
2. Within 120 days of signing this SAA agreement (i.e. March 29, 2011), provide to DFG the following for the proposed mitigation sites: (1) Preliminary Title Report, (2) Phase One Environmental Site Assessment Report, (3) Final Mitigation Plan, and (4) any required technical reports (e.g., hydrology studies) (Condition #3.8).
3. Prepare a Habitat Management Plan (HMP) for each mitigation property that follows the criteria in Biological Opinion Measure G-CM-17. (Condition #3.21)
4. Prepare a wildlife conservation easement or its equivalent on each mitigation site to protect existing fish and wildlife resources in perpetuity. Complete the easement or its equivalent prior to energizing the transmission line (Condition #3.22)
5. If a conservation easement is not possible due to a transfer of the property to federal, state, or local jurisdiction, notify DFG of the entity the property is being transferred to and the manner under which it will be held by that entity. Receive written approval from DFG (Condition #3.23).

6. SDG&E shall cause the conservation easement or its equivalent to be conveyed such that the easement's position in title shall not be inferior to any existing monetary liens on the land (e.g., deeds of trust are to be subordinate to the conservation easement). A plat drawn to scale that depicts the conservation easement and delineates the metes and bounds easement description shall be prepared by a professional certified land surveyor or civil engineer and the plat shall be attached as an exhibit. (Condition #3.24)
7. SDG&E shall include with the submission of the conservation easement for its equivalent: (1) a completed Proposed Land for Acquisition Form, (2) a County Assessor's Parcel Map for the subject property, (3) a site location map, (4) a Phase One Environmental Site Assessment Report (no more than 6 months old), (5) a current (no more than 6 months old) Preliminary Title Report, together with (5a) copies of documents supporting the title exceptions, (5b) copies of documents regarding title encumbrances and/or analysis of those encumbrances, and (5c) include a plat showing pre-existing easements encumbering the conservation easement area, (6) copies of any Williamson Act contracts and Farmland Security Zone contracts that exist on the parcels and a copy of all Notification of Public Acquisition of Williamson Act Land memos, if applicable, (7) digital spatial data compatible with ESRI software or geo-referenced CAD files depicting the boundaries of the conservation easement area, and (8) the SAA permit number 1600-2009-0365-R5. (Condition #3.25)
8. DFG has the right to deny the proposed mitigation site/conservation easement if DFG determines the site does not have suitable conservation value. (Condition #3.26)
9. SDG&E is responsible for all land/easement acquisition costs, including title document cost, escrow fees, recording fees, title insurance premiums, Phase One Environmental Site Assessment Report, and any other escrow-related fees. If DFG becomes the grantee then DFG staff time will be charged to SDG&E. (Condition #3.27)

BO

General Conservation Measure (G-CM) #17 in the 2010 BO includes the long-term protection requirements specified by both USFWS and CDFG for the HAP/HMP. G-CM-17 also is the measure cited in the LSAA. It reads in its entirety as follows:

G-CM-17: *This conservation measure has been changed to reflect updated information and progress made in acquiring off-site conservation.*

(a) Prior to initiating ground- or vegetation-disturbing project activities, SDG&E will provide and implement the following assurance:

- *Unless already acquired, SDG&E will provide assurances (e.g., performance bond, letter of credit, or escrow account) to fund the acquisitions listed below in (c).*

(b) SDG&E will fully fund an endowment for in-perpetuity management of all parcels acquired in (c) within 3 months of the Wildlife Agencies' approval of the final endowment amounts.

(c) Unless otherwise authorized by the Wildlife Agencies, no later than 18 months from the date of the revised 2010 biological and conference opinion, SDG&E will acquire and permanently preserve the nine (9) parcels identified in the September 2010 Habitat Acquisition Plan and Habitat Management Plan (HAP/HMP; referenced by name as Nabi,

Lakeside Ranch, Hamlet, El Capitan, Chocolate Canyon, Lightner, Long Potrero, Suckle, and Desert Cahuilla) in a manner consistent with the HAP/HMP and the following provisions:

- *The land-owner, land management entity, conservation easement grantee, and endowment fund manager for each property will be approved by the Wildlife Agencies. SDG&E will coordinate efforts with the Wildlife Agencies to identify potential candidates and review their qualifications to hold and manage lands and/or endowment funds. This task will be completed within 6 months of issuance of the 2010 revised biological and conference opinion.*
- *SDG&E will conduct a revised Property Analysis Record (PAR) or PAR-like analysis for each property once the land management entity for individual properties has been identified and approved by the Wildlife Agencies. This revised PAR will be used to determine the final endowment amount SDG&E will provide for in-perpetuity habitat management of each property.*
- *Conservation easement language, or its equivalent where an easement is not allowed by the land manager (State Parks), for all properties will be approved by the Wildlife Agencies prior to easement recordation; and*
- *SDG&E will complete the required acquisition, protection, and transfer of all properties and record the required conservation easements in favor of DFG, or other entity approved by the Wildlife Agencies, no later than 18 months after the start of the ground- or vegetation-disturbing activities.*

MMCRP

The MMCRP requirements regarding site protection are as follows:

1. A HAP/HMP must be prepared for offsite mitigation parcels (for impacts to sensitive vegetation and special status species), must be approved by the CPUC, BLM, USFWS, CDFG, and – for mitigation parcel for impacts to CNF – by USFS; and must include (among other items):
 - a. Legal descriptions of the parcels
 - b. Designation of a land management entity approved by the CPUC, BLM, USFWS, CDFG, and – for mitigation for impacts to CNF – USFS.
 - c. A PAR prepared by the designated land management entity that explains the amount of funding required to implement the HMP;
 - d. Designation of responsible parties and their roles (e.g., provision of endowment by the Applicant to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity)
 - e. Management specifications including, but not limited to, regular biological surveys; exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports (measures B-1a and elsewhere)
2. The HAP/HMP must be approved by CPUC, BLM, USFWS, CDFG, and – for mitigation parcel for impacts to CNF – by USFS prior to vegetation clearing activities

3. All offsite mitigation parcels shall be approved by the CPUC, BLM, USFWS, CDFG, and – for mitigation parcel for impacts to CNF – by USFS and must be acquired or their acquisition assured prior to the line being energized (measure B-1a and elsewhere)

The MMCRP also includes an earlier version of BO G-CM-17 on a table that summarizes USFWS measures. The G-CM-17 measure in the 2010 BO supersedes that in the April 2010 MMCRP.

4.2 Status of Site Protection Measures for the HMMP Mitigation Parcel

As of May 2011, the status of site protection measures for the HMMP Mitigation Parcel at Desert Cahuilla is as follows:

- Acquisition. State Parks was authorized to acquire the parcels included in the Desert Cahuilla transaction by legislation (SB855) in 2010. An appraisal has been completed for the nine parcels in the transaction, including the Mitigation Parcel. State Lands is reviewing the appraisal. SDG&E has placed the required funding for acquisition in an escrow account. The acquisition has not yet occurred but is expected to occur in 2011.
- Site Documentation. A legal description of the HMMP Mitigation Parcel has been prepared and is included as Appendix C. A title report, County Assessor's parcel map, Phase One Environmental Assessment Report, plat map, and any Williams Act/Farmland Security Zone contracts will be compiled when the acquisition is formally initiated.
- HMP/PAR. A management plan and PAR-equivalent were prepared for the mitigation parcel and overall mitigation site as part of the September 2010 HAP/HMP and were conditionally approved by USFWS, CDFG, BLM, and the CPUC for MMCRP purposes. The management plan and PAR-equivalent for the mitigation parcel is being revised in coordination with and will require final approval by the Corps, SWRCB, CDFG, and USFWS. The management plan and PAR-equivalent for the overall mitigation site also is being revised and will require agency approval for MMCRP (but not HMMP) purposes. The information in Sections 10 and 11 of this Final HMMP will be superseded by the revised final approved plans and funding estimates. The rHMP/PAR will be completed by May 2012 (18 months after the date of the BO).
- Selection of Land Manager. State Parks is the proposed land manager for the mitigation parcel and mitigation site. The Corps, SWRCB, and CDFG LSAA staff will be asked to concur with this arrangement as part of their review and approval of the final management plan for the mitigation parcel.
- Conservation Easement or Equivalent Agreement. SDG&E will work with State Parks to prepare a draft agreement that assures permanent preservation of the resources on the mitigation parcel. The draft will be provided to the Corps, SWRCB, CDFG, and USFWS for review and approval. A separate agreement also will be drafted regarding protection and management of the resources on the Desert Cahuilla Mitigation.
- Funding Arrangements. Based on the estimates prepared in coordination with State Parks for the September 2010 HAP/HMP, SDG&E has committed to providing State Parks with \$1,000,000 for management of the mitigation parcel and \$3,500,000 for management activities on the mitigation site. The funds have been placed in an escrow account.

- Other. As required by the Corps, SDG&E has prepared and is implementing an action plan and schedule for ensuring progress on the long-term site protection requirements. A site visit to the mitigation parcel by the Corps, SWRCB, and CDFG is scheduled for May 2011.

5.0 BASELINE INFORMATION

5.1 Preliminary Jurisdictional Determination and Function-Based Assessment of Impact Sites

A preliminary jurisdictional determination (PJD) of the extent of wetlands and waters along the SRPL Right-of-Way (ROW) (WRA 2010a) has been approved by the Corps and is included in permit application packages for the Project. The PJD was used during Project planning to avoid unnecessary impacts to WOUS and WOS and to quantify unavoidable impacts to wetlands and waters. Impacts to unvegetated waters included perennial, intermittent, and ephemeral streams. Ephemeral streams were described using two subcategories, including desert dry washes and mountain ephemeral streams. Vegetated wetlands delineated using the Corps 3-parameter approach as outlined in the Corps Wetland Delineation Manual and the Regional Supplement to the Corps Wetland Delineation Manual: Arid West Region (Environmental Laboratory 1987, Corps 2008a) also occur at two impact sites along the margins of intermittent streams.

A function-based assessment of 30 impact sites along the Project ROW was performed using CRAM methodology, covering both existing conditions and projected post-project conditions. The Conceptual HMMP (WRA 2010b) describes the results of the CRAM function-based assessment of impact sites in full detail. Combined average CRAM scores for impacted jurisdictional areas are summarized in Table 4. CRAM scores for existing conditions will be used as baseline data, while CRAM scores for post-project conditions were estimated as a means to predict the effects of impacts to wetland functions and services. An estimate of the reduction in functions and services in impacted WOUS and WOS was generated by comparing existing and projected post-project CRAM scores at impacted sites. All assessments of impact sites used the CRAM methodology for riverine wetlands, although ephemeral streams and Corps wetlands were also included in the assessments. Further detail on the assessments and CRAM methodology can be found in the Conceptual HMMP (WRA 2010b). Raw CRAM scores for all impact and mitigation assessment areas (AAs) are presented in Appendix A.

As outlined in the Conceptual HMMP (WRA 2010b), the combined average CRAM score of representative impact sites for the Project is expected to decrease by an average of 3 percentage points from project implementation. This represents the average decrease in functions and services resulting from impacts to WOUS and WOS from the Project. The CRAM score for the one perennial stream within the ROW is not expected to measurably decrease. The majority of individual projected impacts would result from aggradation/degradation of stream channels and degradation of wetland buffer areas.

Table 4. Combined Average CRAM Scores for Existing and Post-Project Conditions at Impact Sites along the Project ROW.

CRAM Index and Attributes	Existing (Baseline) Mean Scores	Projected Post-Project Mean Scores	Decrease Between Existing and Projected Post-Project Conditions (percentage points)
Overall Index Score	72.3%	69.3%	3.0
Landscape Context	93.4%	89.0%	4.4
Hydrology	88.6%	82.8%	5.8
Physical Structure	47.5%	46.3%	1.2
Biotic Structure	59.7%	59.3%	0.4

While impacts to Buffer Condition and Channel Stability are likely to be common among desert dry wash and mountain ephemeral impact locations, these combined stream categories saw a decline of less than 2 percentage points in overall CRAM scores. The largest decline in CRAM score came from one intermittent stream on the Lightner Mitigation Site where the Suncrest Substation is proposed, causing a loss of both stream channel and adjacent riparian habitat. Where the stream is directly filled the CRAM score is reduced to zero (0) because the habitat is no longer present. The indirect effects of the Suncrest Substation on downstream areas is projected to be a drop of 38.7 percentage points in overall CRAM score. This is the most substantial single impact of the SRPL project as reflected in projected CRAM scores. This indirect effect to functions and services also accounts for the substantial portion of the 11.6-point drop for all intermittent streams combined. Restoration and enhancement activities at the Lightner Mitigation Site, in combination with mitigation at other sites included in the overall mitigation package, are intended to offset these impacts to functions and services.

5.2 Baseline Condition of the Desert Cahuilla HMMP Mitigation Parcel

The Desert Cahuilla HMMP Mitigation Parcel is a 675-acre property located within the upper portion of the West Salton Watershed (HUC 12) which is situated within the western portion of the Salton Sea Watershed (HUC 8) of Imperial County, California (Figure 5). It is situated approximately 7 miles west of the Salton Sea and is bounded on all sides by desert dry wash habitat with no urban development nearby. The site ranges from approximately 350 to 680 feet National Geodetic Vertical Datum (NGVD) in elevation. The mitigation site includes a large portion of the upper watershed of a major wash that flows to the Salton Sea and supports PBS habitat.

Table 5 shows the acreage of potential jurisdictional desert dry wash habitat on the Desert Cahuilla Mitigation Site based on an analysis of recent aerial photography and a site reconnaissance.

Table 5. Jurisdictional Areas at the Desert Cahuilla Mitigation Site

	Area (acres)	Length (linear feet)
Desert Dry Wash	84.13	24,400



ENVIRONMENTAL CONSULTANTS

2169-G East Francisco Blvd.
San Rafael, CA 94901
(415) 454-8868 Phone
(415) 454-0129 Fax

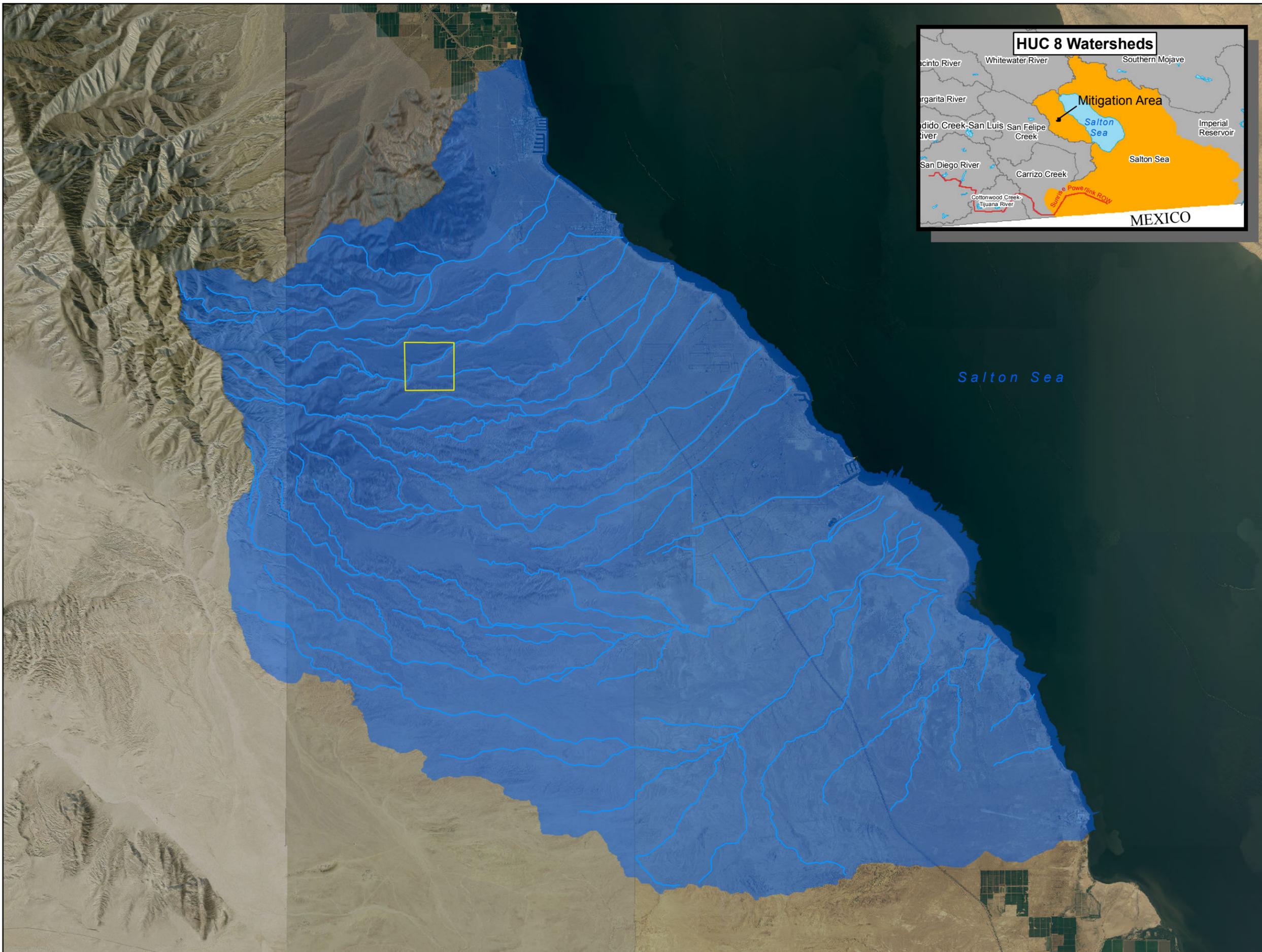
Sunrise Powerlink

San Diego County,
California

Figure 5

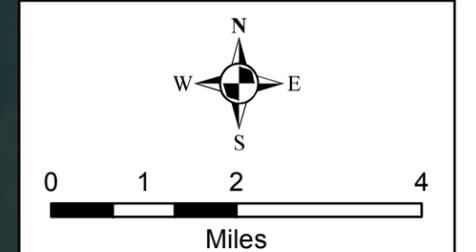
Desert Cahuilla HMMP
Mitigation Parcel:

West Salton
Watershed



Legend

-  Parcel Boundary
-  West Salton Watershed (HUC 12)
-  USGS Blueline Stream



Map Date: January 2011
Map By: Derek Chan
Base Source: San Diego County photo; NAIP, 2005

Soils: Soils in this region are mapped as Badland-Beeline-Rillito. Badland soils are characterized as very rapid runoff. Beeline soils are well drained with medium to rapid runoff and moderately rapid permeability. The Rillito soil series is somewhat excessively drained with slow or medium runoff and moderate permeability (USDA 2010a). Badland, Beeline and Rillito soils are classified as non-hydric on the hydric soils list (USDA 2010b).

Vegetation: This mitigation site is made up of Sonoran creosote bush scrub and Sonoran creosote bush scrub-disturbed vegetation communities with a large desert dry wash. Dominant plant species observed within these communities include creosote bush (*Larrea tridentata*), with white bursage, brittlebush (*Encelia farinosa*), and ocotillo (*Fouquieria splendens*). Areas that were void of any vegetation were classified as unvegetated habitat-desert pavement. Non-native, invasive annual grasses are known to occur on the site, but no other significant non-native, invasive species populations are currently known from the site. Future surveys will be conducted to determine the presence of non-native, invasive plant species and management of any populations that are discovered will occur.

Hydrology: Precipitation is the main source of hydrology for this site. This site typically receives approximately 3.21 inches of rainfall per year (USDA 2010c). Site hydrology is essentially undisturbed.

5.3 Function-Based Assessments at Project Mitigation Sites

Mitigation activities for the Project should provide improvements in the same areas of functions and services that are likely to be impacted by the Project, as reflected in CRAM scores. Comparing existing CRAM scores to projected scores for the stream mitigation AAs, it is possible to consider the nature and magnitude of likely improvements to functions and services. Although CRAM was not conducted at the Desert Cahuilla mitigation site, CRAM scores for all assessed streams at the mitigation sites; Chocolate Canyon, Long Potrero, Lightner, and Suckle are summarized in Table 6. Average improvements at these sites are shown in comparison to average decreases in CRAM score at stream impact sites in Figure 6. Raw CRAM scores are presented in Appendix A, and further information on the CRAM assessments can be found in Appendix B of the Conceptual HMMP (WRA 2010b).

All CRAM attributes at impact sites had some level of decrease as a result of the Project, but the largest impacts were in the areas of Hydrology and Buffer & Landscape Context (Table 6). Mitigation actions at the mitigation sites should provide improvements in the areas of Buffer & Landscape Context, Hydrology, and Biotic Structure that are apparent within 5 years of mitigation implementation. In addition, there is a high potential for further increases in stream and wetland condition leading to increases in CRAM scores, particularly in the areas of Physical and Biotic Structure. However, indicators that would allow a higher CRAM score for these attributes may take longer to develop than the 5-year period discussed in this report.

Table 6. Average CRAM Attribute and Overall Scores for all Assessed Streams at the Chocolate Canyon, Lightner, Long Potrero, and Suckle Mitigation Sites.

CRAM Index and Attributes	Existing (Baseline) Mean Scores	Projected Post-Project Mean Scores	Projected Increase Following Mitigation Implementation (percentage points)
Overall Index Score	75.9%	77.9%	2.0
Buffer & Landscape Context	85.8%	89.8%	4.0
Hydrology	90.0%	91.7%	1.7
Physical Structure	55.0%	55.0%	0
Biotic Structure	72.8%	75.0%	2.2

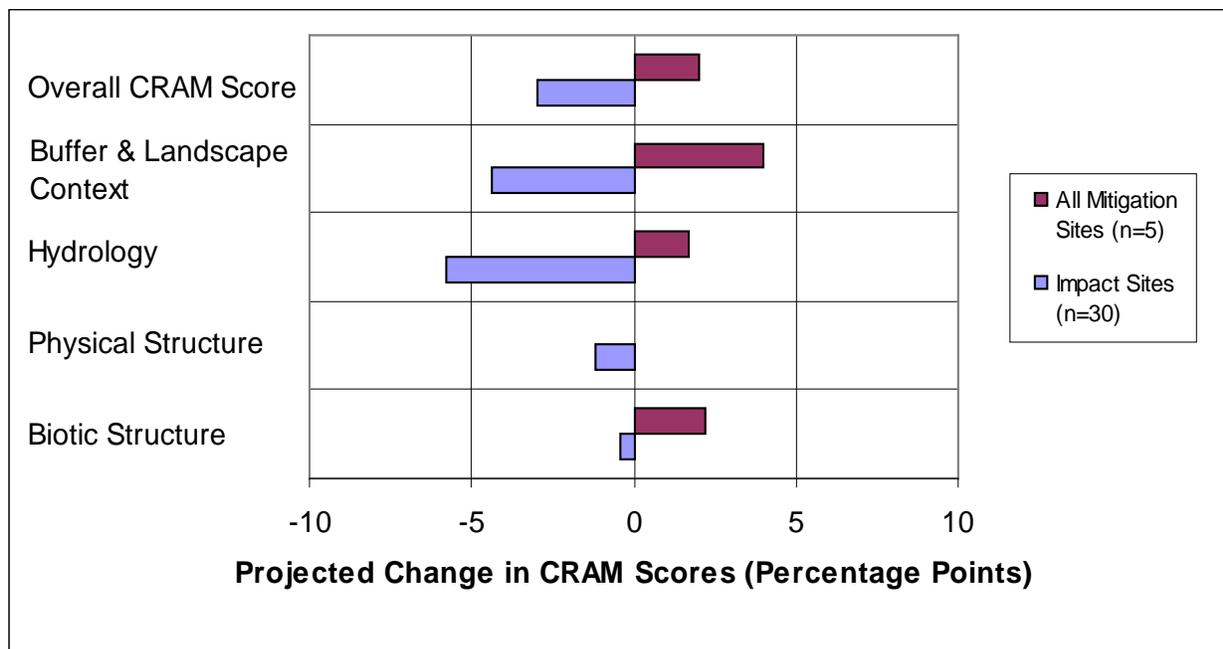


Figure 6. Projected Average Changes in CRAM Score at Stream Impact Sites and Stream Mitigation Sites 5 Years after Mitigation Implementation

5.3.1 Function-Based Improvements at the Desert Cahuilla HMMP Mitigation Parcel

Although no active mitigation actions are proposed at Desert Cahuilla, preservation and management are likely to increase the functions and services of streams within this mitigation site. Streams within the Desert Cahuilla Mitigation Site were not included in the CRAM function-based assessment of mitigation sites, but some assumptions can be made about stream condition based on existing site descriptions and field observations in similar habitats along the Project ROW.

OHV use which currently occurs on the mitigation parcel has resulted in habitat disturbance. It is likely that streams within the Desert Cahuilla Mitigation Site would receive scores of B or C for the Buffer Condition submetric (Buffer & Landscape Connectivity attribute) due to OHV traffic, which likely promotes the spread of invasive plants such as Saharan mustard (*Brassica tournefortii*) and Mediterranean grass (*Schismus barbatus*) in addition to causing soil

disturbance. The soil disturbance caused by OHV traffic would likely contribute to aggradation and degradation within stream channels on the site, causing most streams to score a “B” for the Channel Stability metric (Hydrology attribute).

Under Project plans, the mitigation parcel and mitigation site at Desert Cahuilla would be preserved and managed as a part of ABDSP (Section 3.0). Under the new management, it is proposed that OHV use and all vehicular access would be prohibited. Park rangers, with the support of an SDG&E endowment, will enforce the OHV ban through signage and patrols. These actions should be beneficial to the mitigation parcel. Over time, the cessation of soil disturbance caused by OHV use should allow the site to return to more natural conditions. This has the potential to increase the scores for Buffer Condition and Channel Stability for most streams on the site by approximately one letter grade. The OHV ban would also be likely to benefit the site in ways that are not necessarily reflected in CRAM scores, including reduction of noise, human visitation, trash, oil and air pollution, and artificial lights at nighttime, all of which should increase the habitat value for plants and animals. These improvements should begin to be evident within five years, although sufficient improvement to allow an increase in CRAM score may take additional time.

As described above, proposed preservation and management actions have the potential to increase the functions and services of all stream habitats at this site. These potential improvements within the 5,500-acre Desert Cahuilla Mitigation Site comprise additional Project benefits that were not considered in the function-based analysis for mitigation (Section 5.3).

6.0 DETERMINATION OF CREDITS

The Desert Cahuilla HMMP Mitigation Parcel contains one habitat type (desert dry wash habitat) which will contribute to the overall mitigation acreage contained in the five mitigation properties. Within this mitigation site, compensation for permanent impacts to desert dry washes will be provided. Mitigation acreages and credits are discussed in more detail in the following sections.

6.1 Mitigation Credits within the Desert Cahuilla HMMP Mitigation Parcel

The Desert Cahuilla HMMP Mitigation Parcel provides 84.7 percent of the total mitigation acreage for desert dry washes. Additional credits for this habitat type are provided by the Suckle Mitigation Site. A summary of mitigation acres provided by the Desert Cahuilla parcel is presented in Table 7 below. A summary of collective mitigation acres provided by the entire mitigation program at all five sites is presented in Section 6.2.

Table 7.. Summary of SRPL Aquatic Resource Mitigation at the Desert Cahuilla Mitigation Site

Site	Resource Type	Mitigation Area [acres; linear feet for streams]	
		Preservation	Total
Desert Cahuilla HMMP Mitigation Parcel	Desert Dry Wash	84.13 (24,400)	84.13 (24,400)

6.2 Summary of Mitigation Credits for Entire Mitigation Program at all Sites

A summary of total mitigation for permanent impacts (Table 8) and temporary impacts (Table 9) for each resource type is detailed below. In addition, a summary of mitigation activities at each mitigation site for the Project is contained in Table 10. On an acreage basis, the Project provides more than adequate mitigation to compensate for unavoidable permanent impacts to jurisdictional areas. In addition, enhancement and restoration activities at four of the five mitigation sites will increase the functions and services provided by jurisdictional areas at the mitigation sites. Cumulatively, this provides ample mitigation to compensate for reduced functions and services in temporarily and permanently impacted jurisdictional areas.

Proposed mitigation activities for the Project will provide improvements in the same areas of functions and services that are likely to be impacted by the Project. Overall, the average projected decrease of 3 CRAM percentage points at stream impact sites will be offset by an average increase of 2 percentage points at stream mitigation sites at the end of the 5-year monitoring period, together with restoration, enhancement, and preservation of these areas at a cumulative 35:1 ratio by acreage for permanent impacts and 2:1 ratio for temporary impacts. CRAM scores for the Physical Structure and Biotic Structure attributes may increase as the habitat areas develop over the long-term, thus raising average overall CRAM scores further than are indicated herein for the term of the 5-year monitoring program.

Projected CRAM data at mitigation sites is intended to serve as a guide for comparison of mitigation and impacts, and should not be directly applied to mitigation ratios. The results of multiplying CRAM score by any dimension of size, such as wetland area, length, or perimeter, might distort the scaling of some metrics, weight the values of other metrics in unintended ways, and thus lead to erroneous results (CWMW 2009). Furthermore, areas of habitat preservation were not included in the CRAM analyses, but are valuable in maintaining the overall condition of their watersheds and protecting the mitigation jurisdictional features from negative external stressors such as edge effects.

Table 8. Summary of Sunrise Powerlink Project Mitigation for Permanent Impacts to Waters of the U.S.

Habitat Type	Permanent Impacts	Off-site Restored Mitigation Acreage	Off-site Enhanced Mitigation Acreage	Off-site Preservation Acreage	Total Mitigation Acreage for Permanent Impacts	Permanent Impact Mitigation Ratio
Desert Dry Washes	2.45	0	4.04	74.50	78.54	32.1:1
Other Streams	0.35	0.04	2.13	1.12	3.29	9.4:1
Wetlands	0.08	0	7.52	11.11	18.63	232.9:1
Total	2.88	0.04	13.69	86.73	100.46	34.9:1

Table 9. Summary of Sunrise Powerlink Project Mitigation for Temporary Impacts to Waters of the U.S.

Habitat Type	Temporary Impacts	On-site Habitat Replacement Acreage	Temporary Impacts Replacement Ratio	Off-site Preservation Acreage	Off-site Mitigation Ratio
Desert Dry Washes	6.53	6.53	1:1	13.06	2:1
Other Streams	0.55	0.55	1:1	1.10	2:1
Wetlands	0	NA	NA	NA	NA
Total	7.08	7.08	1:1	14.16	2:1

Table 10. Summary of the Project's Aquatic Resource Mitigation

Site	Resource Type	Mitigation Area [acres; linear feet for streams]			
		Preservation	Enhancement	Restoration	Total
Desert Cahuilla	Desert Dry Washes	84.13 (24,400)			84.13 (24,400)
	Streams				
	Wetlands				
	Riparian				
Suckle Mitigation Site	Desert Dry Washes	3.43 (7,000)	4.04 (4,200)		7.47 (11,200)
	Streams				
	Wetlands	0.48	0.40		0.88
	Riparian				
Lightner Mitigation Site	Desert Dry Washes				
	Intermittent and Ephemeral Streams	0.55 (17,117)	0.09 (2,751)	0.04 (1,117)	0.68 (20,985)
	Wetlands	0.20	0.63		0.83
	Riparian	15.83	0.63	3.43	19.89
Long Potrero	Desert Dry Washes				
	Intermittent and Ephemeral Streams	1.39 (16,857)	0.96 (6,054)		2.35 (22,911)
	Wetlands	9.92	5.99		15.91
	Riparian	12.62	3.95		16.57

Site	Resource Type	Mitigation Area [acres; linear feet for streams]			
		Preservation	Enhancement	Restoration	Total
Chocolate Canyon	Desert Dry Washes				
	Perennial and Intermittent Streams	0.28 (9,051)	1.08 (3,162)		1.36 (12,213)
	Wetlands	0.99	0.02		1.01
	Riparian	10.25	0.30		10.55
Totals¹	Desert Dry Washes	87.56	4.04		91.60
	Streams	2.22 (43,025)	2.13 (11,967)	0.04 (1,117)	4.39 (56,109)
	Wetland	11.11	7.52		18.63
	Riparian	38.70	4.88	3.43	47.01

7.0 MITIGATION WORK PLAN

7.1 Activities Planned at the Mitigation Site

Preservation activities planned for this mitigation site are described in the following sections. Mitigation for the loss of dry wash functions and services within project impact areas will occur on this site.

7.1.1 Preservation

Preservation of desert dry wash and surrounding upland habitat is the only activity to be implemented at the Desert Cahuilla HMMP Mitigation Parcel. Mitigation acreage within the parcel is listed in Table 11 below and illustrated in Figure 7.

Table 11. Summary of Mitigation at the Desert Cahuilla Mitigation Site

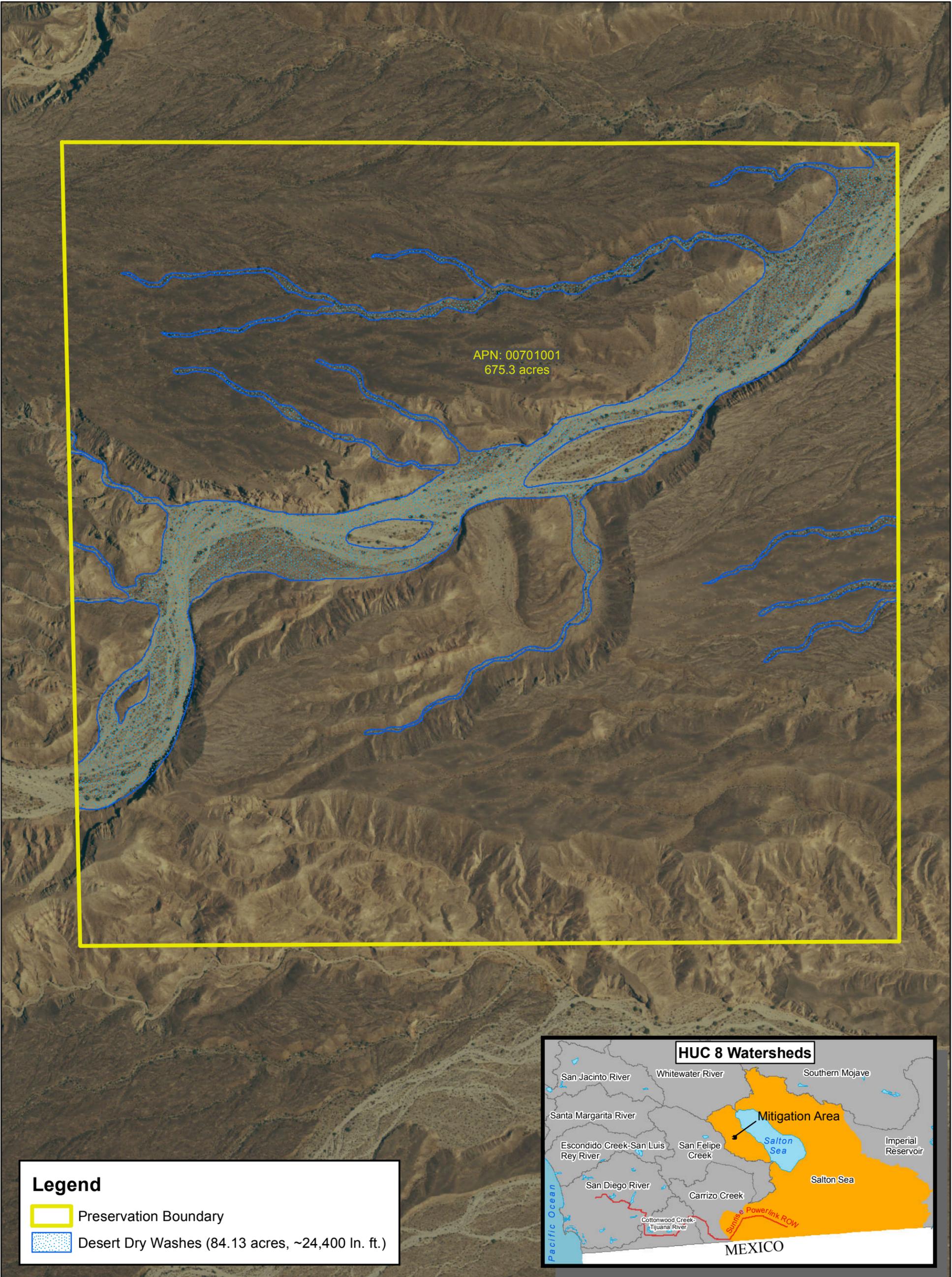
Mitigation Action	Area (acres)	Length (linear feet)
Desert Dry Wash Preservation	84.13	24,400

Inclusion of the property in ABDSP and land designation as wilderness, or some other form of protected lands, will offer substantial protection to this area. It is part of a much larger land transaction that will benefit PBS and other sensitive plant and wildlife species. It will be regularly patrolled and will be managed for natural resource functions and services as opposed to unmanaged lands subject to OHV use. Additional benefits will include placement under State Park guidelines for invasive weed management.

Sequence and Timing

Mitigation will be implemented concurrent with Project impacts to desert dry washes.

¹ Totals reflect mitigation for both permanent and temporary impacts to Waters of the U.S.



APN: 00701001
675.3 acres

Legend

-  Preservation Boundary
-  Desert Dry Washes (84.13 acres, ~24,400 ln. ft.)

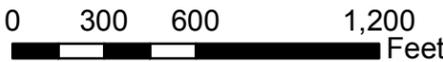
HUC 8 Watersheds

San Jacinto River, Whitewater River, Southern Mojave, Santa Margarita River, Escondido Creek-San Luis Rey River, San Felipe Creek, Carrizo Creek, San Diego River, Cottonwood Creek-Tijuana River, Sunrise Powerlink ROW, MEXICO, Salton Sea, Imperial Reservoir

Mitigation Area

Figure 7. Mitigation Activities at the Desert Cahuilla HMMP Mitigation Parcel

Sunrise Powerlink
Imperial County, California



ENVIRONMENTAL CONSULTANTS

Map Date: October 2010
Map By: Derek Chan
Base Source: NAIP, 2005; Imperial County, NHD, NWI
Filepath: L:\Acad 2000 Files\17000\17128-3\GIS\ArcMap\Mitigation\DesertCahuilla_Existing_20101019.mxd

8.0 HMMP MONITORING AND PERFORMANCE CRITERIA

8.1 As-built Conditions Reporting

A baseline conditions report will be prepared and submitted to all agencies along with a letter of notification regarding the final transfer of property and its protection in perpetuity by State Parks.

8.2 Initial Mitigation Monitoring Activities and Performance Criteria

The purpose of the project's mitigation monitoring program is to assess the effects of preservation activities, as well as to provide guidance for habitat management in the event of negative environmental stressors that may affect ecosystem functions and services.

Mitigation activities at Desert Cahuilla consist of preservation of existing habitat. Due to the remote location of the site, any threats to watershed health will be mapped during site visits conducted for future management. Initial management tasks (Years 1 to 5) to be conducted by the land manager include installation of signage and maintenance, installation of fencing, assessment of desert dry wash and scrub conditions (including mapping of non-native, invasive plant species and problem areas for control), decommissioning an existing road on the parcel, and preparation of annual work plans and reports on management activities.

Monitoring at the mitigation site would be for a minimum 5-year period, with Year 1 beginning following the completion of preservation agreements between SDG&E and ABDSP. Monitoring (as part of management activities) would continue until the site has met all performance criteria *and* all regulatory agencies have agreed in writing that the site has met performance criteria. Monitoring methods are described below.

8.2.1 Monitoring of Desert Dry Washes

Purpose: Monitoring of the overall biotic health of dry desert washes on the mitigation site to provide information for management purposes.

Timing: Spring following Years 1 and 5 of monitoring.

Methods: Any threats to the watershed health will be documented during management site visits. The final maps of the threat and proposed adaptive management to eliminate the threat will be reported in the annual monitoring report in Years 1 and 5.

Performance Criteria: Total acreage of desert dry washes at the site may change under natural conditions during the course of the monitoring period. Such fluctuation may occur at the site as a natural process, and may result in an increase or a decrease in the total size and configuration of desert dry washes. If anthropogenic activities are determined to have resulted in a decrease in total acres of desert dry washes during monitoring, appropriate management actions will be undertaken to address these issues and restore natural site hydrology.

8.3 Monitoring Schedule and Reporting Requirements

As stated above, monitoring at this mitigation site will be completed during spring of each monitoring year and also in accordance with the special conditions outlined in the CDFG 1602 Lake and Streambed Alteration Agreement and will include vegetation monitoring, non-native, invasive plant species monitoring, wildlife monitoring, and other monitoring, as required. A second monitoring visit will be conducted in the fall of each year, if required by CDFG based upon management activities. A mitigation monitoring report will be prepared for the mitigation

site to enable clear communication to the land manager at this location. The final maps of the threat and proposed adaptive management to eliminate the threat will be reported in the annual monitoring report in Years 1 and 5. The report will be submitted to the Corps, CDFG, and SWRCB by October 31 of each monitoring year. A summary of monitoring and reporting activities is outlined in Table 12 below.

Table 12. Monitoring and Reporting Activities at the Desert Cahuilla HMMP Mitigation Parcel

	Monitoring Years				
	Year 1	Year 2	Year 3	Year 4	Year 5
Dry Wash Monitoring					
	Spring	Spring	Spring	Spring	Spring
Reporting					
	Due by October 31				

9.0 MAINTENANCE OF HMMP DRY WASHES DURING THE MONITORING PERIOD

Maintenance activities will consist of monitoring watershed health and mapping threats to the watershed. Such activities will be conducted during site visits for future management due to the remoteness of the mitigation parcel.

10.0 INITIAL MANAGEMENT OF THE MITIGATION PARCEL AND THE MITIGATION SITE UNDER THE HAP/HMP

As discussed in Section 1.3, management of the HMMP Mitigation Parcel and the Desert Cahuilla Mitigation Site as a whole will be conducted by State Parks with funding provided by SDG&E. This section presents the proposed management tasks for the site during the first five years of management and funding requirements identified in the September 2010 HAP/HMP.

10.1 Initial Management Tasks and Funding Commitments for the Mitigation Parcel

1. Of \$1,000,000 provided by SDG&E for management of sensitive vegetation, WOUS, and WOS on the Mitigation Parcel, \$250,000 shall be allocated for initial (first five years) of management.
2. State Parks shall prepare an expenditure plan that identifies the proposed allocation of funds for types of tasks; estimates annual expenditures for staffing, equipment, and materials; and estimates the duration of the funding.
3. Initial management tasks (years 1-5) shall include:
 - a. Installation of signage (year 1) and maintenance (as needed).
 - b. Installation of fencing (6,000 linear feet in selective areas in years 1 and 2) and maintenance of the fencing (as needed).
 - c. Assessment of dry wash and desert scrub conditions, including mapping of exotic invasive plants and any problem areas (completed in year 2).
 - d. Decommissioning and rehab of existing road on parcel (12,000 linear feet) (completed by year 5).
 - e. Monitoring of dry wash and desert scrub vegetation for presence and spread of exotic invasive species (annual) and identification of appropriate control measures to be implemented as part of ongoing management.
 - f. Preparation of annual work plans and annual reports on management activities.

4. PBS monitoring is not a required task on the Mitigation Parcel and will not be funded by the \$250,000.
5. Use of the management funding for tasks other than those identified in items 2-4 above shall require the concurrence of the Corps, SWRCB, CDFG, and USFWS in advance of the expenditure.
6. Implementation of initial management tasks under the HAP/HMP will be coordinated with HMMP monitoring of conditions during the period and with HAP/HMP tasks on other parcels in the mitigation site.

10.2 Initial Management Tasks and Funding Commitments for the Mitigation Site

1. State Parks will prepare an expenditure plan that identifies the proposed allocation of the \$3,500,000 provided for management of the Mitigation Site, excluding the Mitigation Parcel. The expenditure plan will cover initial and ongoing management tasks. It will include cost estimate per type of tasks; estimated annual expenditures for staffing, equipment, and materials; and estimated the duration of the funding.
2. Establishing park boundaries and land use controls is a critical step in establishing the expanded ABDSP and also is crucial to preserving PBS connectivity across the area. It is anticipated these tasks will be a priority in the first five years of management.
3. Management activities funded during the initial period may include:
 - a. Signage to mark the boundaries between the ABDSP and OWSVRA and indicate allowable uses;
 - b. Enforcement patrols/access controls to deter illegal uses in ABDSP and promote compliance with the land use restrictions;
 - c. PBS habitat enhancement (e.g., addition or management of watering locations); and
 - d. Road decommissioning to improve habitat conditions and limit access to certain areas.
4. Use of the management funding for tasks other than those identified in items 2-3 above shall require the concurrence of USFWS and CDFG in advance of the expenditure.
5. Implementation of initial management tasks within the mitigation site will be coordinated with HMMP monitoring and HAP/HMP measures the mitigation parcel during the period.

11.0 LONG-TERM MANAGEMENT OF THE MITIGATION PARCEL AND MITIGATION SITE UNDER THE HAP/HMP

This section presents the long-term management tasks and funding commitments for the HMMP Mitigation Parcel and the Desert Cahuilla Mitigation Site (excluding the Mitigation Parcel). The tasks are based on the measures identified in the September 2010 HAP/HMP. The measures are subject to further modification as part of the revision and final approval process for the agreements with State Parks.

11.1 Long-term Management Tasks and Funding Commitments for the Mitigation Parcel

1. Of \$1,000,000 provided by SDG&E for management of sensitive vegetation, WOUS, and WOS on the Mitigation Parcel, \$750,000 shall be allocated for long-term management tasks.
2. The expenditure plan prepared during the initial period shall include a long-term management component that identifies the proposed allocation of funds for types of tasks; estimates annual expenditures for staffing, equipment, and materials; and estimates the duration of the funding.
3. Ongoing management tasks shall include:
 - a. Maintenance and replacement of signage and fencing (as needed).
 - b. Periodic habitat assessments and mapping updates (every 5 years).
 - c. Invasive plant species monitoring (every 2 years).
 - d. Implementation of invasive plant species control measures (where needed, as determined by monitoring task and within limits of available funding).
 - e. Preparation of annual work plans and annual reports on management activities.
4. PBS monitoring is not a required task on the Mitigation Parcel and will not be funded as part of ongoing management.
5. Use of the management funding for tasks other than those identified in items 2-4 above shall require the concurrence of the Corps, SWRCB, CDFG, and USFWS in advance of the expenditure.
6. Implementation of ongoing management tasks under the HAP/HMP will be coordinated with the completion of HMMP monitoring of the parcel and with the implementation of HAP/HMP tasks on other parcels in the mitigation site.

11.2 Long-term Management Tasks and Funding Commitments for the Mitigation Site

1. The expenditure plan prepared during the initial management period shall include a long-term management component for the mitigation site parcels (excluding the HMMP Mitigation Parcel).
2. Ongoing management activities may include:
 - a. Maintenance and installation of signage to mark the boundaries between the ABDSP and OWSVRA and indicate allowable uses;
 - b. Enforcement patrols/access controls to deter illegal uses in ABDSP and promote compliance with the land use restrictions;
 - c. PBS habitat enhancement (e.g., addition or management of watering locations); and
 - d. Road decommissioning to improve habitat conditions and limit access to certain areas.
3. Use of the management funding for tasks other than those identified in item 2 above shall require the concurrence of USFWS and CDFG in advance of the expenditure.
4. Implementation of ongoing management tasks within the mitigation site will be coordinated with the completion of HMMP monitoring and with the implementation of HAP/HMP measures on the mitigation parcel.

12.0 ADAPTIVE MANAGEMENT PLAN

If the management and maintenance methods applied to the HMMP Mitigation Parcel are not successful in addressing negative environmental stressors identified as part of monitoring reports, the methods will be examined and altered to increase the potential for success based on best professional judgment and management methods that are shown to be successful based on scientific research. In some cases, success of management and maintenance activities may not be evident over the course of only 1 year. This will be accounted for within monitoring reports that evaluate the success of management actions towards the ultimate mitigation goal. In these cases, it may be necessary to wait 2 years or more before altering methods as part of an adaptive management strategy. Each monitoring report will contain a section dedicated to evaluation of management and maintenance actions as part of the adaptive management strategy.

12.1 Incorporation of Adaptive Management Principles

The principles of adaptive management are fully incorporated into the implementation, monitoring, maintenance, and long-term management of the Desert Cahuilla HMMP Mitigation Parcel and Mitigation Site.

12.2 Natural Occurrences

Remedial actions will be carried out during the initial monitoring period if habitat quality is reduced due to the occurrence of a natural disaster. Remedial actions will also be carried out during long-term management if habitat quality is reduced due to management activities. These actions are described in the HAP/HMP (SDG&E 2010) and summarized in the following section.

11.3 Potential Remedial Actions

Habitat remediation consists of minor restoration of habitat resulting from negative anthropogenic effects (e.g. unauthorized access); it is not considered ecological habitat restoration or creation. This task may include weed removal. Habitat remediation is included during the initial monitoring (start-up) period for this mitigation site and is also an integral part of the habitat management in perpetuity.

13.0 FINANCIAL ASSURANCES

13.1 Estimated Costs for Mitigation Measures

An estimated cost for mitigation measures for inclusion in the Financial Assurance mechanism has been developed in cooperation with the State Parks and CDFG. Negotiations with State Parks took place as part of the HAP/HMP process and have since been approved by CDFG as a condition of final approval of the HAP/HMP (SDG&E 2010) document. These costs are detailed in Appendix C. They include an estimated cost for land acquisition, implementation of the HMMP, monitoring during the first 5 years, and long-term maintenance and remediation (covered under the endowment cost). The final funding agreement was based on negotiations with the State Parks and was part of the HAP/HMP process and was approved by the CDFG during the review of the HAP/HMP (SDG&E 2010).

13.1.1 Land Acquisition

SDG&E will provide a total of \$2 million towards the acquisition of all nine parcels associated with the Desert Cahuilla transaction. The appraisal and valuation process is an exhaustive one; employing numerous comparable Sold properties within a finite range of the Subject property. Numerous aspects of the properties are physically viewed and studied which include: location, size, and shape of the property, topography, improvements, utilities, street improvements, zoning/general plan, price, terms of sale and method of transaction, Buyer, Seller and any miscellaneous comments regarding anything relating to the property and or sales transaction. In addition, standards regulated by the CPUC require the “highest and best use value, just compensation” to be paid for properties per a certified appraisal document.

The purchase price paid for the property was determined by these standard appraisal methods that required analysis of comparable properties in the region; therefore, should the Corps seek to purchase similar lands under the Letter of Credit, the land valuations for comparable properties would be similar to that paid by SDG&E.

13.1.2 Plan Implementation

Implementation costs for the HMMP are estimated to be \$150,000, as shown in Table 14 below. Implementation tasks include finalizing all activities associated with the transfer of Desert Cahuilla mitigation site to the long-term land manager.

13.1.3 Monitoring and Maintenance for Performance Period

Monitoring costs for the HMMP are estimated to be \$20,446, as shown in Table 14 below. These costs represent the first 5 years of monitoring. In addition, maintenance costs from the HAP/HMP (SDG&E 2010) are estimated to be \$10,223 for the first 5 years.

13.1.4 Long-Term Maintenance

A long-term endowment of \$1 million, as shown in Table 13 below, will be set in place for the management of the Desert Cahuilla HMMP Mitigation Parcel. As stated in Section 10.1, the site will be guaranteed protection in perpetuity as part of the Condition of Agreement on the transfer of property to the State Parks. Language regarding protection of the site will be received from the Corps and CDFG and will be incorporated as necessary.

13.1.5 Remediation

Remediation costs are combined with maintenance costs in Table 13 below. Remediation efforts may include weed removal.

Table 13. Desert Cahuilla Mitigation Costs

Category	Cost
Acquisition	
Acquisition Assurances ¹	\$2,000,000
HMMP Mitigation Activities	
Preservation, Restoration, Enhancement	\$150,000
5-year Monitoring Costs for HMMP	\$20,446
Maintenance/Remediation	\$12,268
Management of the HMMP Mitigation Parcel	
Endowment to State Parks	\$1,000,00
Management of the Mitigation Site (Lands Added to ABDSP)	
Endowment to State Parks	\$3,500,000

¹ The estimated amount is for acquisition of nine parcels.

13.2 Form of Financial Assurances

Financial assurance has been guaranteed to the Corps by SDG&E through a Performance Bond issued on January 19, 2011 that covers the estimated costs for each of the five Final HMMPs. The bond calls out the amounts for HMMP implementation at Lightner as identified in Table 24 based on implementation costs detailed above. SDG&E also is in the process of preparing a Letter of Credit as financial assurance to CDFG for LSAA implementation. The CDFG LOC will be provided on or before May 27, 2011.

Cost estimates for initial land management of the mitigation site described in this document are included in Appendix B.

13.0 REFERENCES

Aspen Environmental Group (Aspen). October 2008. Final Environmental Impact Report/Environmental Impact Statement and Proposed Land Use Amendment. San Diego Gas & Electric Company Application for the Sunrise Powerlink Project. SCH #2006091071. DOI Control No. FES-08-54. Prepared for the California Public Utilities Commission and U.S. Department of Interior Bureau of Land Management.

Aspen Environmental Group (Aspen). April 2010. Final Mitigation Monitoring, Compliance, and Reporting Program. Sunrise Powerlink Project. Prepared for the California Public Utilities Commission and U.S. Department of Interior Bureau of Land Management.

California Wetlands Monitoring Workgroup (CWMW). 2009. Using CRAM (California Rapid Assessment Method) to Assess Wetland Projects as an Element of Regulatory and Management Programs. Technical Bulletin. 46 pp.

Colorado River Regional Water Quality Control Board (CRRWQCB). 1994. Water Quality Control Plan for the Colorado River Basin. Accessed November 2010. http://www.usbr.gov/lc/socal/reports/brineconcentrate/3Regs_part6.pdf.

ICF International, Inc. and Chambers Group, Inc. 2010. Restoration Plan for Sensitive Vegetation Communities in Temporary Impact Areas. Prepared for SDG&E.

- San Diego Gas & Electric (SDG&E). 2010. Habitat Acquisition Plan and Habitat Management Plan. September 22, 2010.
- Southern California Coastal Water Research Project (SCCWRP). 2010. An evaluation of the application of the California Rapid Assessment Method (CRAM) for assessment of arid, ephemeral stream condition: Draft technical report. 31 pp.
- U.S. Army Corps of Engineers (Corps). 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.
- U.S. Army Corps of Engineers (Corps). 2008b. Corps 2008 Mitigation Rule 332.3(h). Federal Register.
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). 2010a. Soil Survey of San Diego County, California. In cooperation with the University of California Agricultural Experiment Station.
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). 2010b. Official List of U.S. Hydric Soils.
- U.S. Department of Agriculture, National Resources Conservation Service (USDA). 2010c. Water and Climate Center (WCC) WETS Table San Diego County, California. Accessed on line at <http://www.wcc.nrcs.usda.gov/cgibin/getwetco.pl?state=ca>
- U.S. Fish and Wildlife Service and California Department of Fish and Game (USFWS and CDFG). 2010. Sunrise Powerlink Transmission Project Compliance Documents, Imperial and San Diego Counties, California (FWS/CDFG-SDG/IMP-08BO423-11TA0116). December 2, 2010.
- U.S. Fish and Wildlife Service (USFWS). 2010. Biological and Conference Opinion on the Construction and Long-term Operation and Maintenance Program for the Sunrise Powerlink Project, Imperial and San Diego Counties, California (FWS-08B04233-11F0047).
- WRA, Inc. 2010a. Preliminary Jurisdictional Determination Report. Prepared for SDG&E.
- WRA, Inc. 2010b. Conceptual Habitat Mitigation and Monitoring Plan. Prepared for SDG&E.

Appendix A

All CRAM Scores Collected for the Sunrise Powerlink Project

Appendix B
Detailed Mitigation Implementation Cost Estimate to Support Financial Assurances

Appendix B: Detailed Mitigation Implementation Cost Estimate to Support Financial Assurances

Implementation, Maintenance, and Monitoring Costs				Total Cost	20% Contingency Cost per Item
Implementation Costs					
1.0	Mobilization	1.1	Mobilization	\$5,875	\$1,175
				Subtotal	\$5,875
2.0	Removal of Non-native, Invasive Plant Species	2.1	Removal of Non-native, Invasive Plant Species	\$119,125	\$23,825
				Subtotal	\$119,125
Maintenance Costs					
3.0	Interim Maintenance (1-5 Years)	3.1	Adaptive management - weed removal	\$9,608	\$1,922
		3.2	Trash removal	\$615	\$123
				Subtotal	\$10,223
Monitoring Costs					
4.0	Monitoring (1-5 Years)	4.1	Monitoring	\$9,260	N/A
		4.2	Wildlife Biologist Monitoring	\$11,186	N/A
				Subtotal	\$20,446
				Sum of all Subtotals	\$27,045
Ongoing Management of Entire Mitigation Property					
				Annual Cost	25% Contingency/ Admin Cost per Item
1.0	Facilities Maintenance/Access Control	1.1	Vehicle Barrier	\$70	\$18
		1.2	Gates	\$500	\$125
		1.3	Sign	\$30	\$8
				Subtotal	\$600
2.0	Biological Monitoring	2.1	Land Manager	\$1,994	\$499
		2.2	Plant Ecologist	\$790	\$198
		2.3	Herpetologist	\$936	\$234
		2.4	Mammalogist	\$1,440	\$360
		2.5	Surveyors	\$1,290	\$323
				Subtotal	\$6,450
3.0	Habitat/Land Management	3.1	Exotic Plant Control - difficult spp.	\$1,260	\$315
		3.2	Exotic Plant Control - other spp.	\$1,800	\$450
		3.3	Erosion Control - materials	\$1,200	\$300
		3.4	Erosion Control/Road Maintenance - labor	\$450	\$113
		3.5	Trash Removal	\$200	\$50
		3.6	Habitat Remediation	\$600	\$150

		3.7	Habitat Management - all tasks	\$800	\$200
			Subtotal	\$6,310	\$1,578
4.0	Plan/Reporting	4.1	Land Manager-reporting/coordination	\$1,990	\$498
		4.2	Land Manager -plan updates	\$1,000	\$250
		4.3	GIS Specialist	\$450	\$113
			Subtotal	\$3,440	\$860
			Sum of all Subtotals	\$16,800	\$4,200
			MANAGEMENT TOTAL	\$1,000,000	

* Total assumes 3% annual inflation, 3% annual reinvestment, and 2% annual actual return.

Appendix C

Legal Description of the Desert Cahuilla HMMP Mitigation Parcel

LEGAL DESCRIPTION OF THE HMMP MITIGATION PARCEL

All of Section 6, Township 10 South, Range 9 East, San Bernardino Base and Meridian, in the County of Imperial, State of California, according to the Official Plat thereof.

