Type of Report:

Conceptual Resource Management Plan

Project Common Name:

Cielo de Lusardi; Rancho Cielo

Project Numbers:

PDS2005-3100-5456 (TM)

PDS2011-3300-11-031 (MUP)

Lead Agency:

County of San Diego
PLANNING AND DEVELOPMENT SERVICES
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1.0 INTRODUCTION

The proposed Rancho Cielo Madura Major Subdivision TM 5456 RPL 2 (PDS2005-3100-5456 TM) open space is located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, north-west of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos. Primary access to the open space is from within the Rancho Cielo Estates private entry off of Del Dios Highway (Figures 1 and 2 of the Biological Assessment Report; BLUE, 2012) and consists of three (3) parcels totaling approximately 192.6 acres (Figure 10 of the of the Biological Assessment Report; BLUE, 2012). The project includes the dedication of an Open Space/Conservation Easement over 192.6 acres of the open space (hereafter referred to as the "Preserve"), including biologically sensitive resources.

This conceptual Resources Management Plan (RMP) was created to manage the proposed open space Preserve created by the approval of the Consolidated TM 5456 RPL2; Rancho Cielo SPA. This RMP specifically identifies activities needed to conserve both the diversity and function of the ecosystem within the preserve through the preservation, provide adaptive management of sensitive vegetation communities, and provide remedial measures, if needed, to maintain the quality of habitat in the future. The stewardship level of monitoring and maintenance of the site is also designed to conserve potential wildlife movement corridors and species that potentially occur on site and are legally protected by the federal and state Endangered Species Acts.

Stewardship, as opposed to active management, has been accepted for this open space area due to the extreme topography within the open space, as well as the mature stands of dense habitat (historically, prior to the 2007 fire) and a lack of existing trails. In addition, fencing around the entire perimeter of the open space easement area is not required because it would promote new trails into the open space. Fences are to be placed on the perimeter of the graded pads of the residential lots (and the responsibility of the lot owner) and open space notification signs would be placed at the open space easement boundary in areas where access is possible.

1.1 Purpose of Biological Resource Management Plan

The purpose of this conceptual RMP is to provide stewardship to the open space and guide the management of vegetation communities/habitats, plant and animal species within the proposed Preserve. This RMP serves as a descriptive inventory of vegetation communities/habitats, plant and animal species that occur within the onsite Preserve. This RMP establishes the baseline conditions from which adaptive management will be determined and success will be measured. Additionally, this BRMP provides an overview of the operation, maintenance, administrative, and personnel requirements necessary to implement management goals and serves as a budget planning aid.

The details of this conceptual plan may be modified when the Final RMP is prepared and submitted to the County for approval. The County will review the Final RMP to ensure that it meets the specified Purpose and Objectives**.**

1.1.1 Conditions and/or Mitigation Measures that Require RMP

In order to minimize project-related impacts to sensitive biological resources, the County of San Diego (hereafter "County") has conditioned the project to require the preparation and implementation of stewardship of the open space as defined in this Biological Resource Management Plan. This requirement is expressed in the County's "Report Format and Content Requirements: Biological Resources", which states, "a Resource Management Plan (RMP) shall be required when a project proposes open space totaling 50 acres or more…Projects shall be conditioned to submit the RMP for approval prior to any grading, clearing, or other development of the site" (PDS, 2007). Furthermore, the Biological Assessment Survey Report for TM 5456 RPL 2 states, "a Resource Management Plan (RMP) shall be prepared for the project to provide for the long-term stewardship of the proposed open space preserve as is required in the Lake Hodges Segment of the MSCP which has established hardline preserve boundaries" (Biological Assessment Report; BLUE, 2012). The purpose of this RMP is to define specific measures to ensure the long-term viability of the Preserve through monitoring and maintenance activities designed to protect the Preserve in perpetuity. This document satisfies that requirement.

1.1.2 Agency Review and Coordination

The County of San Diego shall be the lead Agency; Wildlife Agency Review and Coordination is required.

1.2 Implementation

Implementation of this plan will be triggered upon reliance of the County issued grading permit for any portion or phase of the then approved project.

1.2.1 Responsible Parties and Designation of Resource Manager

<u>Responsible Parties</u>

The following organizations and individuals will be involved in the fulfillment of this RMP:

<u>Applicant/Landowner/HOA:</u> Lavender Hill Ranch LLC. and Cielo 182 LLC., the current landowners, shall be responsible for granting a perpetual (open space/conservation easement) over the Preserve to the County (and/or the CDFW as a grantee and/or third-party beneficiary). See Section 815 of the California Civil Code.

The Applicant/Landowner/HOA obtaining the first Final Map or a grading permit for any portion or phase of the project shall be financially responsible for the initiation and implementation of the RMP.

Fee title to the open space property shall be held by the underlying private landowners or the HOA.

<u>County of San Diego:</u> A conservation or open space easement will be held by the County of San Diego. If title to the land is transferred to the County or other public conservation entity, no easement is necessary.

The County Planning and Development Services (PDS), has the regulatory responsibility for the RMP. The County may transfer this responsibility to a different County department, such as the DPR or DPW, or to another conservation agency (e.g. DFG), if deemed appropriate. PDS shall approve the selection of the Resource Manager (RM) and shall review the RM's annual reports to assure compliance with this RMP.

PDS shall designate one of its staff members as the RMP Administrator. The RM shall report directly to the RMP Administrator on all issues, concerns, and questions, unless otherwise directed in writing by the RMP Administrator. The PDS RMP Administrator is the single point of contact for the RM, Easement Holder (if different from County), and Applicant/Land Owner/HOA.

Resource Manager: Michael Jefferson of BLUE Consulting Group (who prepared this document) is seeking approval to be the RM responsible for the implementation of this RMP and to carry out the specified requirements of the RMP.

The RM shall be responsible for maintaining the integrity of the natural resources in the project Preserve. The RM shall be the single point of contact for PDS.

Wildlife Agencies: The Wildlife Agencies must approve the Final RMP and will be sent copies of the annual reports.

Designation of Resource Manager

The County shall only accept one of the following as the RM:

- Conservancy Group
- Natural resources land manager
- Professional natural resources consultant
- Professional RM
- County DPR
- County DPW
- Federal or State Wildlife Agency (USFWS, CDFW)
- Federal Land Manager, such as Bureau of Land Management
- County Land Managers, including but not limited to DPR, Watershed Management, or DPW

The RM shall be approved in writing by the Director of the PDS, the Director of the DPW, or the Director of the DPR. Any change in the designated RM shall also be approved in writing by the appropriate director.

The RM shall have the following qualifications:

- The RM shall have at least one staff member who possesses a B.S., B.A., or higher degree in ecology, zoology, botany, or biology or an MOU with a qualified person with such a degree. This individual should have a minimum of five years of experience in resource management biology in San Diego County.

- Fiscal stability, including preparation of an operational budget (using an appropriate analysis technique) for the management of this RMP.
- Demonstrated experience with similar projects or in projects requiring similar skills in San Diego County.
- The ability to carry out habitat monitoring or mitigation activities.
- The RM's primary responsibility shall be to maintain the integrity of the conserved habitats in the Preserve.

In order to fulfill that responsibility, the RM shall:

- Be familiar with this RMP and all supporting documentation.
- Be responsible for all matters noted in this RMP that are required of the RM.
- Maintain all documents transferred by the Land Owner and his contractors (as noted above) and be knowledgeable of the resources and their locations addressed in these reports. Be responsive to any community concerns or problems regarding the Preserve.
- Document all field visits, notify the RMP Administrator in a timely manner of any concerns or problems, and identify potential solutions.

BLUE Consulting Group is seeking approval as the RM responsible for implementation of the specified requirements of this RMP.

<u>Applicant/Land Owner/HOA Responsibilities</u>

The Land Owner shall perform the following tasks in conjunction with approval of PDS2005-3100-5456 and dedication of the open space/conservation easement to the County (and CDFW):

- Pay all recording and related costs
- Complete an initial clean-up of the Preserve, removing debris and all other items as deemed necessary by (and to the satisfaction of) the RM. The initial site clean-up activities shall be done in such a manner so as to not adversely impact biological (or cultural resources) within the Preserve.
- As required, install permanent signs, and where access (fire) is required ensure a lockable gate is located between the Preserve and the development area of the project site.
- Provide a permanent access easement and rights from the HOA for the County and the RM to the Preserve, to the satisfaction of the RM.
- Supply the RM with copies of all relevant reports prepared for the project (e.g., biology reports, cultural reports, soils reports, landscape plans, revegetation plans, etc.)
- Survey and stake the perimeter of the Preserve and provide the digital data (way/perimeter points) to the RM

The Land Owner shall implement the following measures to protect the Preserve from the development area of the site and all activities associated with project implementation:

- No staging of equipment or stockpiling of materials shall be allowed in or within 50 feet of the limits of the Preserve.

- Employment of a County-approved biologist to supervise activities associated with construction of the fence delineating the boundary between the development area and the Preserve. The biologist shall ensure that such activities do not impact additional areas of sensitive resources.

Prevention of the introduction of invasive exotics

The County's Landscape Guidelines prohibit the purchase and planting of any invasive plant species, such as Tamarisk *(Tamarix* sp.*)*, Pampas Grass *(Cortaderia* sp.*)*, and others. Invasive plants shall not be planted in areas within the Preserve. Any project landscape planting palette shall be reviewed by the County prior to the issuance of any permits for the project. Any invasives or potential invasives found on the landscape palette shall be deleted from the project plans.

All areas of the Preserve that are adjacent to the development area shall be protected in accordance with Watershed Protection Ordinance, in order to reduce potential secondary impacts to habitats within the Preserve. To that end, the RM or designee shall regularly inspect the Preserve boundary and target BMP's for adequacy in preventing pollutants from entering the Preserve. The Resource Manger shall meet onsite with the project engineer to verify the location of target BMPs for both the construction and operational phases. For the construction phase intended to reduce sediment or erosion from escaping the construction site, the RM will be concerned with the operation of facilities that direct flow (water and or sediment) into the Preserve and the proper removal of the facilities at the end of construction. The Resource Manger will contact the project engineer to report BMP deficiencies during construction. For the operational phase intended to manage stormwater from the occupied home sites, the Resource Manger will be concerned with the permanent detention basins, vegetated swales, etc. and that they do not become a source of exotic invasives, excess water, increased sediment loads or sources of trash. The Resource Manger will first contact the homeowner and if the facility is not improved, the second contact will be the Stormwater Hotline at (888) 846-0800. Any BMP deficiencies shall also be recorded in the report.

Should construction activities result in the deposit of any debris within the Preserve, it shall be removed and cleaned up to the satisfaction of the RM and the RMP Administrator. Furthermore, any additional harm caused by construction activities to the Preserve shall be immediately corrected. This may involve weed eradication, habitat rehabilitation, and/or revegetation, if deemed necessary by the RM and RMP Administrator to restore the Preserve to its pre-construction condition. In the instance of significant or particularly egregious construction impacts, offsite mitigation shall be provided in addition to remediation within the Preserve.

Because a biological monitor is required in the conditions of approval, the RM shall meet with and coordinate prior to and post construction activities to provide and exchange information related to site conditions.

1.2.2 Financial Responsibility and Mechanism

The Applicant/Landowner/HOA obtaining the first Final Map or a grading permit for any portion or phase of the project shall be financially responsible for the initiation and implementation of the RMP.

A one-time, non-wasting endowment shall be posted, which is tied to the open space, to be used by the RM for biological monitoring or the Applicant/Landowner/HOA for stewardship to implement this RMP in perpetuity. The endowment shall be based on a Property Analysis Record (PAR) created for that purpose. The PAR-based endowment shall be maintained by a third-party 501(3)(c) corporation. A PAR has been prepared by for this open space and is provided in Attachment A of this document.

The funding/endowment shall be guaranteed in perpetuity.

1.2.3 Cost Estimate/Budget

See PAR which provides details supporting the cost estimate.

1.2.4 Reporting Requirements

As required, an Annual Report shall be submitted to the PDS (and the Wildlife Agencies), along with funds to cover County staff review time, in accordance with the County's Fee Ordinance. The Annual Report shall discuss the completed and potential future stewardship activities (fencing and sign maintenance, trash and invasive plant removal if needed).

Every fifth (5) year, the Annual Report shall include the results of the completed and potential future stewardship activities as well as the results of the completed onsite biological surveys. These quinquennial (every 5 years) Annual Reports shall discuss the completed surveys' management and monitoring, as well as management and monitoring anticipated in the upcoming years. The report shall provide a concise but complete summary of management and monitoring methods, identify any new management issues, and address the success or failure of management approaches (based on monitoring). The report shall include a summary of changes from baseline or the previous survey conditions/results for species and vegetation communities and address any monitoring and management limitations, including weather. The report shall also address any adaptive management (changes) resulting from previous monitoring results and provide a methodology for measuring the success of adaptive management. In addition, the report shall document the condition of the Preserve and provide specific recommendations, as necessary, to remediate any problems. If any habitats or sensitive species' populations appear to be declining, the report shall outline a plan for the recovery of the resource(s).

Site photographs from fixed photo-documentation points shall be provided in the quinquennial report. These shall clearly depict the height and cover of the native vegetation, condition of the fences and signs, and any problems not needing an emergency response. The report shall summarize remediation required during the previous reporting period and make specific recommendations for future maintenance and

monitoring. The report shall include copies of CNDDB forms submitted to the CDFW for any new sensitive species observations or significant changes to species occurrences or habitats previously reported. The report shall also include copies of invasive plant species forms submitted to the CDFW and the PDS, if applicable.

If during the quinquennial biological surveys no California coastal gnatcatchers are observed, a USFWS protocol gnatcatcher survey shall be required the following year. The results of this protocol survey, if required, are to be prepared and submitted to the County and agencies with the annual Stewardship report.

1.2.5 Signed Agreement

Because this RMP is associated with a discretionary project, the County will require a signed Agreement between the Applicant/Landowner/HOA and the County to be provided upon County acceptance of the final RMP. The Agreement will state that the Applicant/Landowner/HOA agrees to implement the RMP, which includes a financing mechanism that provides perpetual funding through the payment of a onetime endowment to pay the costs of all RMP management activities. The Agreement shall provide a mechanism for the funds to transfer to the County in the event of the failure of the RM to meet the goals of the RMP. The Agreement shall also provide that, prior to approval of a Final Map for the project, the Applicant/Landowner/HOA shall demonstrate that all RMP funding has been provided or the funding mechanism has been established.

1.2.6 Limitations and Constraints

No ongoing hazards/remediation, vector control requirements, trail concerns, or flood control activities are proposed or expected to occur within the OS.

2.0 OPEN SPACE PROPERTY DESCRIPTION

The created open space, totaling approximately 192.6 acres, is located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, north- west of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos.

2.1 Legal Description

See Final Map; to be prepared with the open space easement documents.

2.2 Environmental Setting

• ***Site access;*** Primary access to the property is from within the Rancho Cielo Estates private entry off of Del Dios Highway. Once inside, access to the western side of the property is off of Via Dora, access to the northern portion of the property (in the center; multifamily development) is off of Cerro Del Sol and to

the eastern portion of the property, access is off of Connemara Drive (Figures 1 and 2 of the Biological Assessment Report; BLUE, 2012); Thomas Brothers Coordinates: Page 1149, Grid C/6

• ***Pertinent geological, soil, climatic, topographic, fire and hydrologic factors;*** The site predominately consists of south facing hillsides, the elevation ranges from 200 feet above mean sea level (AMSL) in the southwest corner of the site (immediately north of Del Dios Highway) to 1180 feet AMSL on the north eastern hilltop. There are intermittent non-vegetated non wetland waters in the main north-south canyons. Numerous smaller tributary drainages lead into these primary jurisdictional channels, but are generally upland vegetated swales. There are two historic USGS blue line channels that run through the property, but due to upstream development there is little to no significant hydrologic factors onsite.

The entire site is mapped as San Miguel-Exchequer rocky silt loams, 9 to 70 percent slopes (U.S. Department of Agriculture 1973). San Miguel-Exchequer rocky silt loams, 9 to 70 percent, are a soil complex that consists of about 50 percent San Miguel soil, 40 percent Exchequer soil, and 10 percent rock outcrop. These soils are well drained, are slowly to moderately permeable, and have medium to rapid runoff. Neither soil is a hydric soil. The San Miguel soil has a light brown silt loam surface layer over a yellow brown to strong clay subsoil that extends to about 23 inches thick. The Exchequer soil has a yellowish red silt loam surface layer above the hard rock parent material. These soils are characterized by areas with accumulation of clays and areas with shallow erosional soils over hard rock. As a result, there are numerous rocky outcrops totaling approximately 17.78 acres throughout the site.

The project site is mapped as being located within an area of very high fuel threat as identified by CalFire. The fire history of the site and surrounding area (approximately 2 mile radius) was reviewed. The source of the fire history information is CalFire and San Diego Geographic Information Source (SanGIS) Data Warehouse. The assessment includes most fires greater than 10 acres in size, however not all historic fires may be documented. A total of 12 documented fires have burned in the project site area between the years 1919 and 2010. The site has burnt four times during that period, in 1919, 1943, the Paint Fire of 1990 and most recently in the Witch Fire of 2007. The 1919 fire and the Paint Fire have almost the same footprint.

• ***MSCP context;*** This area is within the center of San Diego County and within the context of San Diego County's Multiple Species Conservation Program (MSCP). The combined properties making up the current TM 5456 RPL2 open space , totaling approximately 192.6 acres, are located in the central portion of the Lake Hodges Segment of the San Diego County Subarea Plan, within the Rancho Cielo SPA, immediately north of the Del Dios Highway, east of Rancho Santa Fe, and south of San Marcos.

2.3 Land Use

• ***Current land uses on the property;*** undeveloped with historic graded fire roads and dirt trails

• ***Land uses on adjacent properties;*** The Rancho Cielo Specific Planning Area is partially graded out and partially vacant, although a large majority of the area has recorded Final Maps or approved Tentative

Maps. Improvements such as home pads, roads and utilities are being constructed throughout the Rancho Cielo Specific Plan Area. Del Dios Highway and the San Dieguito River are located to the south of the site and Lake Hodges is located to the south east. Preserved MSCP land is directly south and east of the project, developed land is to the west and north of the site.

• ***Locations of trails, approximate widths, and acceptable or existing users (i.e., hiking, mountain biking, equestrian, off-road users);*** The existing trails are generally less than five feet wide and are within the area proposed to be developed. No non-emergency users within the open space will be permitted; existing trails or not.

• ***Easements issued to others within or across the property, and any easements over adjacent properties for ingress/egress to the property;*** No easements issued to others within or across the open space portion of the property. This easement prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. Granting of this open space authorizes the County and its agents to periodically access the land to perform management and monitoring activities for the purposes of species and habitat conservation.

There is an eastern easement over an adjacent property for ingress/egress to the proposed developed portion of the property.

• ***Fuel management activities that are to be done in the plan area as required by the project's Fire Protection Plan.*** For full measures see the approved Fire Protection Plan (FPP; RC Consulting, 2012). The proposed project is located within an un-served County "island", but within the Sphere of Influence of the Rancho Santa Fe Fire Protection District. The applicant is initiating annexation to the District, which must be completed prior to Final Map Approval. The Rancho San Diego Fire District requires that the development be built as a "Shelter-in-Place Community" and comply with the Fire District's Ordinances if more stringent then the County or State Fire Codes.

A 200 foot deep fuel management zone is required; broken up into two zones. Zone 1 is the first 50' adjacent to the buildable area on the parcel and 30 feet along roadways. This area will be composed of landscaped low fuel plants and/or hardscape. Fuel management within this zone shall consist of landscape plantings that are maintained so that they will not create fire hazards near structures. Zone 2 is the next 150' of required fuel management. This zone may be maintained the same as Zone 1 or as described here. Native vegetation may occur within this zone provided that it is thinned to ensure that the vegetation does not occupy more than 50% of the area. The thinning shall be performed such that the native vegetation retained is composed of small patches with spacing in between. Thinning shall prioritize the removal of the plants on the Undesirable Plant list. Some native shrubs such as manzanita can be pruned and thinned to reduce fuel load and be aesthetically pleasing.

• ***Stormwater/Hydromodification Management Plans Information.*** No stormwater or hydromodification is proposed within the open space. For full measures see the approved *Stormwater/Hydromodification Management Plan* (SWHMP; Excel Engineering; 12, 2012).

3.0 BIOLOGICAL RESOURCES DESCRIPTION

Because the proposed open space property is large and located within an extensive tract of mountainous undeveloped open space that includes Lake Hodges and the Del Dios Gorge corridor and linkage to large tracts of undeveloped habitat to the east and west, it currently supports and is traversed by large mammals including bobcats, mule deer and mountain lion(s). As such, the proposed open space has a high biological function and value as part of the MSCP.

The proposed project will not interfere with the existing corridor as all proposed development has been clustered together with existing development leaving the bulk of the property, approximately 71% or 192.6 acres of the properties 270.29 acres, preserved as open space and contiguous to the large areas of habitat in the area.

3.1 Habitat Types/Vegetation Communities

During the biological surveys, a total of six vegetation communities were mapped on-site: Diegan coastal sage scrub, southern mixed chaparral, willow scrub, disturbed habitat, developed area, and disturbed habitat. In addition, Rock Outcrops were numerous throughout the property and have been noted. These land cover types are described below and Figure 5 of the Biological Assessment Report (BLUE, 2012) depicts their location.

While the signs of the most recent 2007 witch fire have diminished over time, the burned understory has been replaced by significant populations of non-native grass species which have been introduced throughout the property by the historically graded dirt roads and the non-native grasses that dominate them (those areas identified as 'disturbed habitat'). Those areas originally identified as disturbed chaparral and coastal sage scrub maintain a disturbed status for this reason. Due to the fact that the existing chaparral vegetation as well as the dominant sensitive plant species on-site, wart-stem ceanothus (Ceanothus verrucosus), is a slow growing species, the areas originally mapped as disturbed chaparral, chaparral, eucalyptus and disturbed habitat retain the same area as originally mapped. Habitat-types present onsite are described below.

MSCP PRESERVE HABITAT WITHIN DEDICATED OPEN SPACE

Plant Community	On-Site MSCP OS Acres
Diegan coastal sage scrub*	79.45
Southern mixed chaparral*	91.37
Willow Scrub	0.91
Jurisdictional /RPO unvegetated Non Wetland Waters*	1.16
Non-Native Grasslands*	15.77
Eucalyptus Woodland	0.0
Disturbed habitat	3.74
Developed Area	0.31
TOTAL	192.6

Diegan Coastal Sage Scrub; Disturbed (79.45 acres; Tier II, Holland Code 32500)

Coastal sage scrub is a plant community comprised of low-growing, aromatic, drought-deciduous soft-woody shrubs that have an average height of approximately three to four feet. The plant community is typically dominated by facultatively drought deciduous species such as California sagebrush *(Artemisia californica),* California buckwheat *(Eriogonum fasciculatum),* laurel sumac *(Malosma laurina),* and white Sage, *(Salvia apiana).* The community typically is found on low moisture-availability sites with steep, xeric slopes or clay rich soils that are slow to release stored water. These sites often include drier south- and west-facing slopes and occasionally north-facing slopes. Diegan coastal sage scrub is found in coastal areas from Los Angeles County south into Baja California (Holland 1986).

Onsite, this plant community is classified as disturbed as it contains elements of both non-native grassland and coastal sage scrub. Grasses and other non-native species are dominant, but shrubs typically found in coastal sage scrub provide cover. California buckwheat is the most common shrub in this community.

Southern mixed chaparral (91.37 acres, Tier III, Holland Code 37120)

Southern mixed chaparral is a subtype of southern mixed chaparral that occurs on mafic (rich in magnesium and iron) soils. Southern mixed chaparral is a vegetation community typically dominated by broad-leaved sclerophyllous shrubs or small trees and characteristically occupies protected north-facing and canyon slopes or ravines where more mesic conditions are present. The vegetation is usually dense, with little or no understory cover, but may include patches of bare soil. This community typically is found in sites that are moister than that supporting chamise chaparral. Many species in this community are adapted to repeated fires by their ability to stump sprout. Southern mixed chaparral is typically found in coastal foothills of San Diego County and northern Baja California, Mexico, usually at elevations below 3,000 feet (Holland 1986).

Prior to the fire in 2007, southern mixed chaparral dominated the property, where the dense vegetation on the north-facing and steep south facing slopes was eight to ten feet tall. Currently, in these areas that are recovering from the 2007 witch fire, dominant species include chamise *(Adenostoma fasciculata),*

wart-stemmed lilac (*Ceanothus verrucosus*), mission manzanita *(Xylococcus bicolor), hairy* ceanothus *(Ceanothus oliganthus),* and bushrue *(Cneoridium dumosum).* The observed Southern mixed chaparral on the south-facing slopes was dominated by these species but included yellow bush penstemon *(Keckiella antirrhinoides)* and more elements of Diegan coastal sage scrub, particularly black sage and California buckwheat. Other shrubs present in small numbers and/or clustered together include Ramona lilac (*Ceanothus tomentosus),* mission manzanita (*Xylococcus bicolor*), and a small number of Nuttall's scrub oak (*Quercus dumosa*). In general, this community is recovering with greater vigor than the adjacent coastal sage scrub.

Non-native Grassland (15.77 acres, Tier III,Holland Code 42200)

This habitat type is found in the south east portion of the site. This habitat is dominated by annual non-native grasses such as wild oats (*Avena* sp.) Foxtail chess (*Bromus madritensis*), and Bermuda grass (*Cynodon dactykinn*). Additionally there are many broadleaved and other exotic plant species intermixed in the non-native grassland. These include mustards (*Brassica* sp.) and tocalote (*Centaurea melitensis*).

Eucalyptus Woodland (2.3 acres, Tier IV, Holland Code 11100)

This habitat is dominated by non-native eucalyptus trees. This habitat was planted by the owner. It is comprised of mature eucalyptus trees (*Eucalyptus* sp) sustained by the ephemeral water that flows through the areas. There is little to no understory associated with this habitat due to the thick layer of leaf litter that builds up within the woodland.

Disturbed Habitat (3.74 acres, Tier IV, Holland Code 11300)

Disturbed habitat is found throughout the site in the form of bare dirt paths and graded dirt access roads. This disturbed habitat supports occasional weedy species such as Long-beaked Stork's-bill (*Erodium botrys*), Red-stem Stork's-bill (*Erodium cicutarium*), Dove Weed (*Eremocarpus setigerus*), and others. Disturbed Habitat is a non-sensitive habitat-type in San Diego County as defined by the County of San Diego Guidelines for Determining Significance. The Disturbed Habitat onsite has little to no biological resource value.

Developed (0.31 acre, Tier IV, Holland Code 12000)

This habitat onsite is composed of the graded pads and associated paved areas.

Willow Scrub (0.91 acre, Tier I, Holland Code 63310)

This habitat is typically a depauperate, tall, herbaceous riparian scrub strongly dominated by *Baccharis salicifolia*. This early seral community is maintained by frequent flooding or intermittent stream channels with fairly coarse substrate and moderate depth to the water table. Species typically observed include *Baccharis salicifolia, Carex barbarae, Salix exigua*, *S. hindsiana, S. lasiolepis,* and *Urtica holosericea.*

*T*his designation is appropriate for the two pockets of hydrophytic vegetation totaling approximately 0.9 acres which supporting; mulefat, willows, poison oak, and oak *sp*. These areas were observed during the protocol wetland delineation and have been determined to be County RPO, ACOE and CDFW jurisdictional habitat.

Non-Wetland Jurisdictional Waters of the U.S. (1.16 acre; Tier I)

Two blue line tributaries run through the western (Madura) portion of the property. The location of areas considered jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. These jurisdictional waters were delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression.

A number of areas located on the eastern portion of the property supporting potential County RPO waters were observed and studied in detail. It was determined that theses potential County RPO waters are in fact erosion cuts which do not meet the criteria to also be classified as wetlands which is based on the observance of strong indicators of seasonal flows or ponding, in this case lack the presence of an ordinary high water mark. Therefore, these erosion cuts which support no hydrophytic vegetation, but an understory of non-native upland species of grasses are not considered to be within the jurisdiction of County RPO, USACOE or the CDFW.

Rock Outcrop (17. 8 acres)

Rock outcrop is more of a geologic feature than vegetation, but outcrops often have a unique suite of plant and animal species. Vegetation within the rock outcrops is restricted to small pockets, narrow bands, cut canyons, or a thin layer of soil between and on top of the rock. The rock outcrops identified are of all the types listed above and due to the area and diversity of rock onsite, all are generally ideal habitat for all species. Furthermore, it appears that the steep rock walled canyons (such as the one running adjacent and parallel to Via Dora) were not as severely burned, or were jumped over altogether during the last fire (2007). The vegetation within the steep walled canyons and wall faces consequently support significantly more mature stands of quality vegetation.

The several large rock outcrops, within the surrounding plant communities, cover approximately 17.8 acres. Plant species present include Bigelow's mossfern (*Selaginella bigelovii*), ashy spike-moss (*Selaginella cinerascens*), dot-seed plantain (P*lantago erecta*), and chalk lettuce (*Dudleya pulverlenta*). Numerous den and burrow holes were observed in these areas. The 17.78 acres identified as supporting rock outcrops is not part of the habitat acreage calculation as the area is accounted for as what habitat type the outcrop overlays/underlay's the area.

3.1.1 Flora

A total of 83 plant species were identified within the survey area (Attachment 4 of the Biological Assessment Report; BLUE 2012). Of this total, 63 (76 percent) are species native to San Diego County.

3.1.2 Fauna

Typically, mature coastal sage scrub and chaparral is occupied by numerous insects, reptiles, birds, and rodents and other mammals, although none of these are restricted to these vegetation communities.

The numbers of all are reduced, for varying durations, by fire. While still recovering from the 2007 fire, the current quality of the habitat is generally very high, but with low density and cover.

Twenty two species of animals were detected on and adjacent to the property during the surveys. A complete list of the wildlife species detected is provided in (Attachment 5 of the Biological Assessment Report; BLUE 2012). Sensitive species potentially occurring on-site are discussed in the Sensitive Biological Resources section of the Biological Assessment report.

Amphibians

Most amphibians require moisture for at least a portion of their lifecycle, with many requiring a permanent water source for habitat and reproduction. Terrestrial amphibians have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season.

Within the willow scrub within channels #1 and #4, California tree frog (*Pseudacris cadaverina*) was heard. No sensitive amphibians were detected on-site during the surveys. The USGS blue line drainages on-site are seasonal flows, and may provide breeding habitat for some amphibians during the spring. Due to the type and quality of the extant amphibian habitat, no rare or sensitive amphibians were observed, and are not expected to occur.

Reptiles

The diversity and abundance of reptile species varies with habitat type. Many reptiles are restricted to certain plant communities and soil types although some of these species will also forage in adjacent communities. Other species are more ubiquitous, using a variety of vegetation types for foraging and shelter. A southern pacific rattlesnake *(Crotalus viridis helleri)* was observed on and along a dirt road leading up to the top peak of the central property. Common reptiles such as western fence lizard *(Sceloporus occidentalis)* and side-blotched lizard *(Uta stansburiana)* were observed onsite on the site.

Birds

The diversity of bird species varies with respect to the character, quality, and diversity of plant communities present on a site. The diversity of bird species varies with respect to the character, quality, and diversity of plant communities present on a site. Chaparral and coastal sage scrub typically supports a fairly high diversity of bird species. Some of the birds observed include: coastal California gnatcatcher, Southern California rufous-crowned sparrow, California quail (*Callipepla californica*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), and California towhee (*Pipilo crissalis*). Black phoebe (*Sayornis nigricans*) and mourning dove (*Zenaida macroura*) were observed in the disturbed and non-native grass areas. Red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo linetatus elegans*) were among the raptors observed foraging over the site. For a complete listing, see Attachment 2 of the Biological Assessment; BLUE 2012).

Mammals

Naturally vegetated areas provide cover and foraging opportunities for a variety of mammal species. Disturbed areas provide limited opportunities for mammals. Most mammal species are nocturnal and are difficult to detect during daytime surveys. A total of seven mammal species were observed and/or detected during the surveys. These species include: striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor),* California ground squirrel *(Spermophilus beecheyi),* cottontail rabbit *(Sylvilagus audubonii),* and coyote *(Canis latrans).*

3.2 Sensitive Plant Species

State and federal agencies regulate sensitive species and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of any proposed development on a property. For purposes of this report, species will be considered sensitive if they are: (1) listed or proposed for listing by local, state or federal agencies as threatened or endangered; (2) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Skinner and Pavlik 1994); or (3) considered fully protected, sensitive, rare, endangered, or threatened by the State of California (2011) and California Natural Diversity Data Base (CNDDB; State of California 2011), or other local conservation organizations or specialists. California fully protected is a designation adopted by the State of California prior to the creation of the State Endangered Species Act and is intended as protection from harm or harassment.

Noteworthy plant species are considered to be those which are on List 3 (more information about the plant's distribution and rarity needed) and List 4 (plants of limited distribution) of the CNPS Inventory. Sensitive habitat types are those identified by the CNDDB (State of California, 2011), Holland (1986) and/or those considered sensitive by other resource agencies.

Determination of the potential occurrence for listed, sensitive or noteworthy species are based upon known ranges and habitat preferences for the species (Zeiner et al. 1988a, 1988b, 1990; Skinner and Pavlik 1994; Reiser 1994); species occurrence records from the NDDB (State of California, 2011); and species occurrence records from other sites in the vicinity of the project site. Plant species have variable blooming seasons and may only be identifiable at a certain time of year. Plants documented from the area have been assessed for their relative potential to occur within the habitats on the site.

The CNDDB search revealed 1 federally- or state-listed species or Species of Concern on-site or adjacent to the site (off-site). All directed rare plant surveys were completed as required by the County; including *Acanthomintha ilicifolia* and *Baccharis vannessae*. None of these species were observed during the directed surveys. Three sensitive plant species were observed on the site and the locations of these plants are depicted in Figure 6 of the Environmental Assessment Report (BLUE, 2012). Table 2 lists those species that were observed or are potentially expected to occur onsite.

A. Observed

Wart-stemmed ceanothus (*Ceanothus verrucosus).* Wart-stemmed ceanothus is a MSCP covered species County List B plant and a California Rare Plant Rank 2B species. This large evergreen shrub occurs in San Diego county and northern Baja California, Mexico (Reiser 1994). Wart-stemmed ceanothus is typically found on North facing slopes as a component of southern mixed chaparral or southern maritime chaparral plant communities (Holland 1986). Wart-stemmed ceanothus is in the buckthorn, or Rhamnaceae family. This plant produces clusters of small, white, lilac-like flowers from January to April. The small thick leaves and corky "warts" on the stem are characteristic of the species (Munz, 1994). This plant is threatened by loss of habitat to development (Skinner & Pavlik 1994).

While the fire of 2007 significantly damaged the population of Wart-stemmed ceanothus onsite, it is clearly coming back from the burn remnants and recruits. While it is difficult to tell currently it is one of the dominant shrubs in the southern mixed chaparral habitat on site, particularly on the steeper southern and north facing slopes of the property. In those areas where the area is not as steep, Ramona lilac (Wooly-leaf Mountain Lilac) was the dominant shrub. The densest stands of the population were virtually impenetrable prior to the fires due to the steepness of the terrain they inhabit. Due to the fire and the large number of individuals onsite (greater than approximately 10,000 over 137.93 acres) an estimation of impacts to individuals was required. The density of individuals is not uniformly dispersed, and a significant percentage of the population is located on the steep slopes of the property. Approximately 15% of the population is within the project footprint.

Nuttall's scrub oak (*Quercus dumosa*). Nuttall's scrub oak is a County List A plant and a California Rare Plant Rank 1B species. This plant is a large, evergreen shrub that grows in coastal areas of Santa Barbara, Orange, and San Diego Counties and northern Baja California, Mexico (Roberts 1995). Nuttall's scrub oak is in the oak family, Fagaceae. This plant is typically found on north-facing slopes in chaparral and coastal scrub habitats. It produces clusters of tiny yellow- white flowers in late winter and early spring (Munz 1974). This scrub oak is threatened by development of the coastal areas of southern California (Skinner and Pavlik 1994). Nuttall's scrub oak is represented by a few individuals in the southern mixed chaparral on the site.

California adolphia (*Adolphia californica*). This xeric shrub is a County List B plant and a California Rare Plant Rank 2 species that occurs in Diegan coastal sage scrub, often associated with California buckwheat and California sagebrush. While looked for in the historic locations, the historically observed California adolphia was not observed onsite. The California adolphia was first observed by RECON in their biological reporting and while the area burned, it can be assumed that adolphia continues to be present in the vicinity of the two locations on-site, within the Diegan coastal sage scrub, but it has not been relocated within the project footprint.

B. Not Observed

Several other sensitive plant species are known to occur in the vicinity of the project site, but were not observed during sensitive plant surveys. Table 2 summarizes the status, habitats, and likelihood of occurrence for these species. The majority of these species, such as shrubs or large cactus, would have been easily observed on the site during sensitive plant surveys. Because they were not observed, they are considered to have a low potential for occurrence or are not expected to occur. Other species are considered to have a low potential for occurrence because the site lacks the appropriate substrate. If the appropriate clay soils were onsite, spring surveys would be required to determine if the variegated dudleya (*Dudleya variegata*), a narrow endemic annual species, is present on the site.

As required, directed biological surveys for the County identified "Sensitive Species" (County scoping letter; 11-1-10) were completed for two the narrow endemic plant species, San Diego thornmint (*Acanthomintha ilicifolia*) which is an annual that grows on friable clay soils that are not present on the site; and Encinitas baccharis (*Baccharis vannessae*). Encinitas baccharis was searched for in the chaparral on-site, but not found. Due to the numerous negative result surveys completed onsite over the years, and the lack of adjacent populations or individuals in the near vicinity it is not expected that these species occur onsite.

3.3 Sensitive Wildlife Species

Directed biological surveys for the County identified "Sensitive Species" (County scoping letter; 11-1-10) were completed onsite. For those species requiring a protocol survey, the appropriate protocol(s) were observed and complied with at all times as discussed in the methodology section. Tables 3a and 3b lists these species, their conservation status, and potential for occurrence on the property. Table 4 lists the Sensitivity Codes. A total of three County of San Diego Sensitive Animals from Group 1 and three County Group 2 animal species were observed onsite.

A. Observed

Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting. These tall trees are often associated with adjacent open grasslands used as foraging areas for raptors. Due to declining habitat and the associated declining numbers of these species on the whole, raptor species, as a group, have been designated as California Species of Special Concern by the CDFW. These species are protected, especially during their critical nesting and wintering stages.

Turkey Vulture (*Cathartes aura*). County of San Diego Sensitive Animal List, Group 1 species. Turkey vultures are rarely seen on or near the ground unless they are feeding. Turkey vultures *only* feed on carcasses. A turkey vulture was observed soaring above the property.

Southern California rufous-crowned sparrow *(Aimophila ruficeps canescens).* County of San Diego Sensitive Animal List, Group 1 species. The southern California rufous-crowned sparrow is a state species of special

concern. This subspecies of rufous-crowned sparrow is a resident and ranges throughout southern California from Los Angeles County to Baja California, Mexico, along the Transverse and Peninsular Ranges (Collins 1997). Southern California rufous-crowned sparrows are found in chaparral and coastal sage scrub habitats and occasionally in grasslands adjacent to these habitats. Southern California rufous-crowned sparrows were observed throughout the property during the surveys. It appears to be a healthy population with between 30 and 50 individuals identified onsite within the recovering habitat.

California gnatcatcher *(Polioptila californica californica).* County of San Diego Sensitive Animal List, Group 1 species. The coastal California gnatcatcher (CAGN) is a Multiple Species Conservation Program (MSCP) covered species, a federally listed threatened species, and a CDFW species of special concern. The coastal California gnatcatcher is a resident species restricted to the coastal slopes of southern California, from Ventura County southward through Los Angeles County, Orange, Riverside, and San Diego Counties into Baja California, Mexico (Atwood 1980; Jones and Ramirez 1995). The coastal California gnatcatcher typically occurs in coastal sage scrub, although this bird also uses chaparral, grassland, and riparian woodland habitats where they occur adjacent to coastal sage scrub. Populations of this species have declined as a result of both urban and agricultural development (Unitt 1984; Atwood 1990). Onsite, there were sightings of CAGN on four separate days (of the six protocol surveys completed) and the survey indicated the presence of two pairs and one single individual which was believed to be a dispersing juvenile.

Barn Owl (*Tyto alba*). County of San Diego Sensitive Animal List, Group 2 species. The common barn owl is an uncommon but widely distributed species requiring thick vegetation or buildings for daytime nesting. This owl was observed within the eucalyptus woodland.

Mule deer (*Odocoileus hemionus*). County of San Diego Sensitive Animal List, Group 2 species. Mule deer are indigenous to western North America and are a dark gray-brown in color. It has a white tail with a black tip that it carries in the drooped position. Mule deer prefer to eat high amounts of fresh grass and populations tend to move up or down with those of their preferred foods. Mule deer rarely travel far from water or forage, and tend to bed down within easy walking distance of both. Onsite, the mule deer population appears to be a thriving with the number of direct observations and sign through the property. In addition, a mule deer buck carcass (Figure 6 of the Biological Assessment Report; BLUE, 2012) was observed in the south-west portion of the property. From the look of the kill, it is assumed to be a resident mountain lion.

Mountain Lion (*Puma concolor).* County of San Diego Sensitive Animal List, Group 2 species. The Mountain Lion is a large, slender cat with a smallish head and noticeably long tail. Its fur is a light, tawny brown color which can appear gray or almost black, depending on light conditions. Mountain Lions generally are found in remote mountains, canyonlands, or hilly areas with good cover. Mountain Lions are relatively uncommon, secretive animals. They are carnivores that prey on a variety of animals; some favorites include deer and wild hogs. Other prey animals included in the Mountain Lion's diet are rabbits, jackrabbits, and rodents. Some lions occasionally kill livestock or dogs. No mountain lion was directly

observed, but a large mule deer kill and prints in the area indicate that a lion is present onsite and within the area in general.

B. Not Observed

Belding's orange-throated whiptail *(Cnemidophorus hyperythrus beldingi).* The Belding's orange- throated whiptail is a CDFW species of special concern. This species ranges from southwestern San Bernardino County to the tip of Baja California, Mexico, in areas of low, scattered brush and grass with loose sandy loam soils. It can be found in open coastal sage scrub, chaparral, washes, stream sides, and other sandy areas with rocks, patches of brush, and rocky hillsides (Stebbins 1985). The orange-throated whiptail feeds primarily on subterranean termites and harvester ants. It is active during the spring and summer months and hibernates during the fall and winter. Adult orange-throated whiptails generally hibernate from late July or early August until late April. The immature whiptail has a shorter inactivity period, usually hibernating from December through March. Hibernation sites are on soft, well-drained slopes with southern exposure and little or no vegetation cover, and road cuts tend to be suitable. The property contains vegetation and soils that would provide suitable habitat for Belding's orange-throated whiptail. There is a moderate potential for the species to occur on-site.

San Diego black-tailed jack rabbit (*Lepus californicus bennettii*). The San Diego black-tailed jack rabbit (*Lepus californicus bennettii*), occurs only on the coastal side of the southern California mountains where suitable jackrabbit habitat is less common (Stephenson and Calcarone 1999). This subspecies has been recorded from northern Baja California through San Diego, Orange, Los Angeles, and Ventura Counties, as well as on Mt. Pinos. The black-tailed jackrabbit is a habitat generalist occurring in open areas or semi-open country, typically in grasslands, agricultural fields or sparse coastal scrub (Bond 1977). Vaughan (1954) found San Diego black-tailed jackrabbit in "thin stands" of coastal sage scrub and on the margins of citrus groves in the lower foothills of the San Gabriel Mountains; however, it is generally not found in chaparral or woodland habitats.

Golden eagle (*Aquila chrysaetos*). Golden eagle is ranging resident in the area, however it was not observed during any of the surveys. The reported nest locations are all more than 10,000 feet from the property boundaries. Golden eagles and others raptors have not been observed nesting onsite and would not be expected to nest on-site. This is because appropriate nesting habitat is not present (cliff faces or mature open trees). Several eucalyptus trees are present onsite, but they are not appropriately large and open canopied. In addition, the quality of raptor foraging habitat would be considered low to moderate due to the site's steepness and closed canopy.

Hermes copper butterfly (Hermelycaena [Lycaena] hermes). The Hermes copper butterfly (*Hermelycaena [Lycaena] hermes*) is an imperiled species endemic to San Diego County and northern Baja California, west of the Peninsular mountain ranges. Hermes copper has been recognized as unique and imperiled for decades, and is dependent on patches of its spiny redberry (*Rhamnus crocea*) host plant for survival.

In 1984, the butterfly was dubbed a Category 2 candidate under the Endangered Species Act, a designation once given to species for which listing "might be warranted," but for which there was supposedly insufficient data to justify a listing proposal. In 1996, the Category 2 list was abolished. In 2003, 19 of the remaining Hermes copper populations were destroyed by fires that burned about 39 percent of the butterfly's habitat. This habitat is comprised of the larval host plant Spiny redberry (*Rhamnus crocea)*. This evergreen shrub is typically three to six feet in height. Spiny redberry typically occurs in chaparral, with common flora associates being Toyon and Hollyleaf cherry. It may also be associated with coastal sage scrub, chaparral, mixed evergreen forest, southern oak woodland, northern oak woodland, foothill woodland, yellow pine forest.

Surveys for appropriate habitat were conducted per County guidelines and the site was determined to be unoccupied. An area of approximate 0.66 acres of appropriate habitat containing both spiny redberry and California buckwheat, or within 15 feet, was observed in the mapped location (Figure 6 of the Biological Assessment Report; BLUE, 2012). Due to the site's steep terrain, not all areas could be walked. However, additional Hermes habitat onsite is not expected due to the post fire condition of the vegetation. Due to the fact that the habitat on and offsite in the area was burned by the fires in 1990 and 2007, the observed patch of appropriate habitat is isolated and there would be no source population to colonize it. No equivalency analysis is needed for this species because the habitat is too isolated for colonization by Hermes copper in the future considering its behavior and natural history.

3.4 RPO Wetlands/Jurisdictional Waters

Numerous ephemeral drainages were evaluated for potential RPO and jurisdictional status on the Rancho Cielo Madura property. Drainages were evaluated for U.S. Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW), and County of San Diego Resource Protection Ordinance (RPO) jurisdictional status. All but two of the channels had no material to dig "pits" as is typical for protocol wetland delineations; data sheets for the pits dug are attached (Attachment 6 of the Biological Assessment Report; BLUE 2012).

Within the property a total of 2.1 acres of jurisdictional area was observed. As depicted in Figure 7 of the Environmental Assessment Report; BLUE, 2012, the wetland delineation determined that twelve unvegetated non-wetland ephemeral waters and their tributaries are jurisdictional. Two of the jurisdictional (#1 and #6) are identified as USGS blue line channels.

Within the stretches of unvegetated non-wetland ephemeral waters in both channels #1 and #6 (blue-line channels) are individual pockets of willow scrub habitat. These willow scrub areas likely persist as they are within more prominent drainage channels (USGS blue line) which convey greater flows of storm event water and are located on natural benches underpinned by the solid bedrock in the area. Within these two blue line channels, #1 and # 6, upstream of the wetland vegetated (willow scrub) bench, erosion forces appear to over time deposited and accumulated soil on the bench(s) and within that substrate to collect and hold moisture in which the observed hydrophytic vegetation has persisted delineated as USACOE/CDFS ephemeral jurisdictional un-vegetated non-wetland waters as well as the

two small isolated patches of jurisdictional wetland habitat (willow scrub) are limited for a number of reasons. In terms of wetland functions, which refers to biophysical benefits such as: groundwater recharge and discharge, flood control, flow alteration, sediment stabilization, erosion control, toxicant retention, nutrient removal and cycling, and wildlife habitat for diversity and abundance; the current system of tributaries supports a marginal wetland function. While the proximity of the onsite ephemeral flows' outlets are conveyed into a major river, the San Dieguito River immediately offsite to the south (across Del Dios Highway), the lack of water (even ephemeral flows) preclude the growth of hydrophytic vegetation which precludes appropriate habitat for wetland dependant species. Even in those two areas that do support riparian species and habitat, the areas are limited in size, species variability and are generally isolated from the larger areas of riparian habitat to the south.

Furthermore, due to the rock substrate within these areas, most ephemeral flows travel through narrow canyons, or topographic clefts which support no soil substrate as the flows is over bedrock. As a result, the potential biophysical benefits are greatly reduced for these ephemeral drainages. In terms of value, due to the lack of existing or future potential commercial enterprise, recreation and waste assimilation, and non-market values such as aesthetics, uniqueness and heritage it can be determined that the value of the onsite non-wetland waters is severely limited. In specific occasions, it can sometimes be argued that impacts to the unvegetated non-wetland waters create aesthetic impacts; for this project, this is not the case as the channels are typically overshadowed and blocked from view by the stands of chaparral and coastal sage adjacent to the cut and rocky substrate. As these channels are representative of the typical non-wetland ephemeral drainages throughout the area, these 8 channels, including the two are USGS blue lines do not represent or support unique or heritage features.

On-Site Preserve Wetlands

The wetland habitat onsite can be described in terms of disturbance, species diversity, and connectivity to off-site habitat.

RPO/JURISDICTIONAL AREAS
WITHIN THE ONSITE PRESERVE

	ACOE	CDFW	County RPO
Un-Vegetated Non Wetland Waters (areas 1-12)	1.16	1.16	0.0
Willow Scrub (areas 13-14)	.91	.91	.91
TOTAL	2.07	2.07	.91

Non-Wetland Jurisdictional Waters of the U.S. (1.16 acre)

A total of 12 jurisdictional unvegetated, non wetland waters (identified as channels #1-#12) and their minor tributaries were delineated onsite. Two of these channels are USGS blue line tributaries (channels #1 and #6; see Figure 2 of the Biological Assessment Report (BLUE, 2012) which run through the western portion of the property (Madura 182). The location of areas considered to be jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. These

jurisdictional waters were delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression. The estimated total length of ephemeral tributaries on-site is approximately 20,824 feet (Figure 7 of the Biological Assessment Report; BLUE, 2012). The average width of theses drainage courses is approximately 2.5 feet wide with a total area of approximately 1.16 acres. These areas were observed during the protocol wetland delineation and have been determined to be within ACOE and CDFW jurisdiction, but are not RPO wetlands.

Non-Wetland Ephemeral Channels (1,135 linear feet, 0.06 acre)

A total of 12 non-wetland ephemeral unvegetated channels (identified as channels #1-#12) were delineated onsite. Two of these channels are USGS blue line tributaries (channels #1 and #6; see Figure 2 of the Biological Assessment Report; BLUE, 2012) which run through the western portion of the property (Madura 182).

The location of areas considered to be jurisdictional waters that do not meet the criteria to also be classified as wetlands is based on the observance of strong indicators of seasonal flows or ponding and the presence of an ordinary high water mark. Each of these jurisdictional waters was delineated by the lateral and upstream/downstream extent of the ordinary high water mark of the particular drainage or depression. As stated, all of the identified channels are similar in that none of these ephemeral drainage cuts maintained wetland and/or hydrophytic species, hydric soils or a significant contribution of positive wetland values and functions to the downstream primary drainage offsite.

A number of unvegetated erosion channels were observed onsite that do not meet the criteria to be classified as ACOE/CDFW jurisdictional waters or County RPO wetlands. These areas are located in the north eastern portion of the property which was the most severely burned portion of the property during the 2007 fires (Figure 7 of the Biological Assessment Report; BLUE, 2012). From aerials taken after the 2007 fire compared to the aerials prior to the fires it is clear how the created graded fire breaks and dirt roads which were created to save the existing structures in the area also created un-natural topsoil removal and erosion damage down slope along he sides of the roads/breaks as well as down slope in the natural clefts which were likely (as in adjacent and similar areas) vegetated by upland species. In addition, while there was the observance of strong indicators of flow, the lack of the presence of an ordinary high water mark, the fact that the flows do not connect to the jurisdictional tributaries to the south and that they support no hydrophytic species or the functions and values of a wetland supports the non-jurisdictional status.

Finally, it is clear how the development to the north, during the grading phase of the project, collected and channelized the water accumulated on their property and drained it off in a single focused location as opposed to the low flow sheet flow prior to the development. Down slope of this location are the observed locations of non jurisdictional erosion damage.

Willow Scrub (0.9 acres, Holland Code 63310)

This habitat is typically a herbaceous riparian scrub strongly dominated by willow shrub and small tree species. This early seral community is maintained by frequent flooding or intermittent stream channels

with fairly coarse substrate and moderate depth to the water table. Species typically observed include *Salix exigua*, *S. hindsiana, S. lasiolepis, Baccharis salicifolia, Carex barbarae,* and *Urtica holosericea.*

This designation is appropriate for the two pockets of hydrophytic vegetation (identified as wetland areas 13 and 14 on Figure 7 of the Biological Assessment Report; BLUE, 2012) totaling approximately 0.9 acres which supporting; mulefat, willows, poison oak, and oak *sp*. The 0.9 acres are comprised of a 0.07 acre patch located within Channel #13 and the 0.84 acres patch located within channel #14 (Figure 5 of the Biological Assessment Report; BLUE, 2012). These areas were observed during the general surveys and protocol wetland delineation and have been determined to be ACOE and CDFW jurisdictional habitat.

Large numbers of a thriving population of mule deer was observed onsite as well as the carcass of a mule deer that appears to have been a mountain lion kill in the south west corner of the property (Biological Assessment Report, 12-2012; BLUE Consulting Group).

4.0 CULTURAL RESOURCES DESCRIPTION

There are no cultural resources reported within the proposed open space. No specific management or monitoring is required.

5.0 BIOLOGICAL RESOURCE MANAGEMENT and STEWARDSHIP

5.1 Goals

To manage the land for the benefit of sensitive species, MSCP covered species, and existing natural communities, without substantive efforts to alter or restrict the natural course of habitat development and dynamics.

5.2 Biological Management and Stewardship (Maintenance) Tasks

Each year, an annual maintenance site visit shall be completed and reported; every fifth year, biological surveys shall be completed in addition to the annual maintenance and those results will be included in that year's Annual Report. See Table 1 (attached).

i. Exotic plant species as defined as those on the California Invasive Plant Council Inventory shall be removed from high value wetlands on an as-needed basis, and at a minimum, shall be assessed every five years.
ii. General biological surveys and vegetative mapping shall be conducted every five years and the data inventories and maps updated.
iii. Sensitive plant population boundaries shall be surveyed and mapped every five years and the data inventories updated.
iv. Sensitive animal populations shall be surveyed and mapped every five years and the data inventories updated.

v. Sensitive habitats and sensitive plant and animal locations shall be monitored every five years for disturbance.
vi. Trash and invasive plant removal shall be identified and completed annually.
vii. Fencing and signs shall be monitored annually and replaced as needed.
viii. Annual Reporting starting with the year the plan is implemented shall be submitted to the County and agencies demonstrating that appropriate stewardship, habitat monitoring and management has occurred.

Typically, the Applicant/Land Owner/HOA will direct the landscaping maintenance crew to inspect the open space every year, with every subsequent fifth year requiring the listed biological surveys and reporting:

- Year 1: Biological surveys, stewardship, reporting
- Year 2: Stewardship, reporting
- Year 3: Stewardship, reporting
- Year 4: Stewardship, reporting
- Year 5: Stewardship, reporting
- Year 6: Biological surveys, stewardship, reporting

Under the RM's direction, the Applicant/Land Owner/HOA shall direct a landscaping maintenance company to conduct an annual site visits to provide maintenance activities identified by the RM (as specified in this RMP) and any additional non-biological stewardship the RM or the Applicant/Land Owner/HOA determines to be needed (e.g., identify current or potential fence issues, clear trash and repair or replace vandalized signs).

As previously stated, the RM shall conduct a full biological monitoring survey every five years in the early to mid spring in order to conduct the qualitative surveys and identify the potential biological activities needed to sustain the habitat.

A database of the biological resources on the property, including sensitive plant and animal species, will be established by conducting an initial survey (baseline survey) of wildlife and vegetation, the latter using the California Native Plant Society's 2nd edition of *A Manual of California Vegetation* (MCV)(Sawyer and Keeler-Wolf, 2009) and Holland's Biological Habitat References (1986) vegetation classification systems.

The RM shall submit the results of the baseline surveys and all subsequent Annual Reporting go to the Wildlife Agencies, and the County. This database will be located at the offices of the HOA, and maintained each survey season. All of the floral and faunal data gathered from the site visits will be added to the database as it is collected. This database will be the basis for the prepared biological monitoring and management results report will be finalized by February 28 of every year for the previous year's monitoring and maintenance. Photos to document habitat conditions will be taken in easement area from established control points once per year during the biological vegetative survey.

Proper management of the easement area will require ongoing collection and analysis of data for specific species and habitats. This data will provide an inventory of essential information to evaluate population

levels of species and will provide habitat maintenance priorities in order to maintain healthy, viable populations. Documentation of all other relevant observations, such as signs of disturbance will be included in these assessments.

The collected qualitative data will be used to determine general variations on the plant and animal communities on site, as they relate to percent cover and observed sign of birds, mammals, and reptiles on site. Subsequent qualitative monitoring will be compared to the data derived from earlier monitoring in order to determine trends in biodiversity and vegetation communities. These data will be used to assess if any maintenance measures are necessary to maintain the easement area in its natural state or to assess whether these changes are caused by environmental conditions, such as a drought year. This will enable the approved RM to utilize proactive and adaptive management measures in the management of the easement area.

5.2.1 Biological Qualitative Monitoring

Evaluation of habitat health and identifying and correcting problem areas is necessary for ensuring successful vegetation sustainability and is part of an adaptive management program to be implemented as part of this long term management. Qualitative monitoring will be conducted by the project biologist to examine biological trends. The biologist will implement remedial actions, if necessary.

A list of wildlife species observed in the open space will be compiled during each qualitative monitoring visit. A description of wildlife use will be included with each report (see below).

Every five years, a quinquennium, qualitative monitoring will be performed to measure the general development of the habitat. This will allow for study of the gradual temporal environmental changes on site, which will guide the current and future management of the easement area.

Each biological site visit will include taking a minimum of 4 photographs from the 'to be identified' permanent photo documentation points to record the status of the area.

If, prior to the initiation of this RMP it has been five or more years since the last biological survey, the first vegetation survey completed as described above will be the baseline survey. This baseline survey will be the barometer of the preserved habitat on site in perpetuity. Once this baseline has been completed, all subsequent surveys will be compared to those baseline results, and management activities will conducted accordingly.

The RM's habitat vegetation monitoring will also include an assessment of the implementation of the requirements in the brush management activities by the landscaping maintenance company and how it affects the biological value of the easement area. The RM shall provide in writing to the Applicant/Land Owner/HOA and landscaping maintenance company results of this assessment within a month after each of the five-year biological monitoring site visits. If the RM observes that the brush management activities are being conducted incorrectly (e.g., or in a manner that diminishes the biological value of the biological

resources within the easement area), the written communication will provide specific direction for the landscaping maintenance company on how to correct the brush management activities.

Exotic Plant Assessment. During the biological site visit, the RM will identify, and estimate the approximate and relative percentage of, exotic weeds on site relative to the baseline survey completed at the onset of the implementation of this RMP. The RM shall provide in writing to the Applicant/Land Owner/HOA and landscaping maintenance company results of the exotic species assessment within a month after the annual biological monitoring site visit; the results will inform the landscaping maintenance company whether the thresholds have been met and exactly which (species and location on a map) exotic plant infestations require removal.

5.2.2 Biological Avian Surveys

Due to the size of the open space easement area, the point count methods will be used. This spring bird inventory survey will be conducted as a part of the five-year biological visit during the spring for optimal inventory – a repeatable and quantifiable method used to determine changes in wildlife populations. This method identifies potential numbers within each individual species, sex, habitat, substrate, nesting activity, and any other significant observations including mapped locations of sensitive species and observations/signs of all other wildlife on site.

Recordation of all noteworthy observations of ecological interest including observations of sensitive species and excessive predations upon them will occur during all site visits to the easement area. Special emphasis and focused attention will be placed on locating coastal California gnatcatchers and other sensitive and listed endangered and threatened species. This information will be entered into a database and resource map of the easement area.

If no gnatcatchers are observed onsite during the general biological surveys (completed every five years), protocol gnatcatcher surveys are required the following year to determine their presence/absence onsite within the open space. The results of this protocol survey are to be completed and submitted to the County and agencies.

5.2.3 Biological Mammals, Reptiles, and Amphibians Surveys

Focused surveys and trapping for small mammals, reptiles, and amphibians will not be conducted unless listed and/or proposed listed species are observed onsite.

During all biological site visits, all observations and signs (i.e., scat, tracks, and burrows) of wildlife will be recorded, with emphasis on listed and sensitive animal species**.**

Recordation of all noteworthy observations of ecological interest including observations of sensitive species and excessive predations upon them will occur during all site visits to the easement area. This information will be entered into a database and resource map of the easement area.

5.3 Biological General Site Assessment

The quinquennial biological site visits and annual site monitoring will also consist of stewardship, exotic plant assessment, and disturbance assessment. . Written communications (identified below) shall be made to identify the actions to be taken and shall be copied in the Annual Report.

Disturbance Assessment. During both the biological survey(s) and the annual trash identification/removal site visit, the RM and/or Applicant/Land Owner/HOA contractor will inspect for and record signs of trespassing, dumping, vandalism, off-road vehicle use, homeowner encroachment, and/or other disturbances by humans will occur during all site visits. After the biological surveys, the RM shall provide in writing to the Applicant/Land Owner/HOA any disturbance assessment and a list of remedial measures completed. In the event that the Applicant/Land Owner/HOA landscaping contractor observes unauthorized activities (e.g., general trespassing, transients, or transient encampments) within the easement area, the Applicant/Land Owner/HOA will note the location of the unauthorized activities and report any such activities to the appropriate law enforcement agency. In the event of habitat alteration or human disturbances, the Applicant/Land Owner/HOA will contact the RM who will evaluate the damage so as to appropriately direct the maintenance company regarding the measures needed to restore the damaged resource at the responsible party's expense.

Trash Accumulation. During the annual maintenance site visit by the Applicant/Land Owner/HOA landscaping contractor, all trash within the OS shall be removed. During the quinquennial biological surveys, the RM will note and report to the Applicant/Land Owner/HOA the location of the trash for removal. Trash consists of all man-made materials, equipment, or debris dumped, thrown, washed, blown into, or left within the easement area.

5.4 Adaptive Management

The RM is responsible for interpreting the results of site monitoring to determine the ongoing success of the RMP. If it is necessary to modify the plan between regularly scheduled updates, plan changes shall be submitted to the County and agencies for approval as required.

5.5 Annual Maintenance, Operations, and Administration Tasks

For a tabular summary, see Table 1 and attached PAR.

A. Maintenance Site Visits (Non-Biological Surveys)

Utilizing funds from the endowment interest, the HOA contracted landscaping maintenance company shall conduct the maintenance activities in the easement area annually, the timing of which is provided in Table 1. In general, it is expected that the tasks included in the maintenance site visits include, but are not

limited to, completing the tasks as required by the RM (e.g., per the Resource Manger's written direction based on his/her observations during the biological site visit)and this conceptual RMP.

Due to the lack of access, no existing trails through the OS and the extremely challenging steep terrain human use is not expected to occur. Therefore, significant efforts on maintenance activities (such as trash removal and exotic species removal) and management is not expected or required.

B. Maintenance Activities

The Applicant/Land Owner/HOA designated landscaping maintenance company shall complete the required maintenance work as outlined here and as directed by the RM. In general, maintenance activities will be directed towards the following issues: trash removal, exotic species removal and control of unauthorized activities.

Maintenance activities will include measures to reduce edge effects and minimize disturbance, particularly during the nesting period of the sensitive bird species occurring on site, between February 15 and September 15. A minimum of one permanent metal signs per single family lot will be placed along the fence line demarcating the easement area to notify people that entry into the easement area by humans and domesticated animals is prohibited. These proactive activities should minimize the amount of edge effects and disturbances within the easement area.

Remedial Measures. The Applicant/Land Owner/HOA designated landscaping maintenance company shall implement remedial measures as directed by the RM (based on the RM's Disturbance Assessment) and as needed in a timely manner to repair, reduce, or eliminate current and future disturbances. This may involve the placement, reparation, and/or replacement of signs, access control, and barriers. In the event that the landscaping maintenance company observes unauthorized activities (e.g., general trespassing, transients, or transient encampments) within the easement area, the landscaping maintenance company will note the location of the unauthorized activities and report any such activities to the appropriate law enforcement agency (and inform the RM of the activities), if deemed necessary.

Trash Removal. The Applicant/Land Owner/HOA designated landscaping maintenance company shall remove trash annually on an as-needed basis, based on the direction of the RM and its own observations, starting immediately after initial clean-up and removal of trash. Debris shall be collected from within the easement area and properly disposed of as needed annually. Trash consists of all man-made materials, equipment, or debris dumped, thrown, washed, blown into, or left in the easement area.

C. Exotic Species Control

The Applicant/Land Owner/HOA designated landscaping maintenance company shall conduct the annual identification and extermination or removal of exotic vegetation annually as well as if/when:

- Percent cover of the exotic species (Table 2) has increased approximately 5% over the established baseline;
- The exotic species present are listed on the Zero Tolerance Species lists - Table 3A herein, the CIPC' List A-1 an A-2 (Appendix A), and/or the California Invasive Plant Council's Moderate Tolerance Species list; and/or Table 2

Weeding activities will continue until such a time that it is determined that the non-native or weedy species removed are, at a minimum, at the same percentage of cover as when the baseline survey was completed, as determined by the RM.

Invasive Plant Control. Weed control measures shall include hand removal, cutting or mowing, and/or the use of herbicides (Roundup in the uplands and Rodeo in the potentially wet areas) by a certified applicator given a yearly supply of herbicide, tools, and equipment. Hand removal of weeds is the most desirable method of control and will be used whenever feasible. Removal of exotic vegetation will be conducted seasonally, prior to the curing of seeds and seed heads in order to reduce newly established exotics. Herbicide application will be used on the most invasive of the plant species. Zero Tolerance Species will be removed and/or treated upon identification or mapped and removed soon thereafter. These and other invasive species will be controlled in the easement area by the implementation of this CONCEPTUAL BRMP and will be coordinated with the control programs in adjacent open space and preserve areas.

Invasive Animal Control. Native species are often at a disadvantage after exotic species or non-native predators and parasites are introduced such as the brown-headed cowbird (*Molothrus ater*). In such cases, specific management measures are needed to control exotic species and non-native predators. Due to the lack of observed native wildlife species on site, control of exotic fauna is not expected because their negative impact on existing native wildlife would be negligible.

In addition, measures will be taken to reduce the potential for habitat degradation through brush management (see Appendix), and management measures will be taken to maintain or improve habitat quality and vegetation structure.

Table 2 provides a list of unwanted weeds in San Diego County that potentially occur within the easement area. This list is ongoing and subject to change due to site specifics, new introductions of exotics, etc.

TABLE 2
Exotic Species Tolerance Log

A. ZERO TOLERANCE SPECIES		
Scientific Name	**Common Name**	**Disturbed Habitat**
Acacia sp.	Acacia	All
Ailanthus altissima	Tree of heaven	Riparian/All
Arundo donax	Giant reed	Riparian/All
Carduus pycnocephala	Italian thistle	All
Carpobrotus edulis	Iceplant	Coastal/Riparian

Cortaderia selloana/C. jubata	Pampas grass	Coastal/All
Cynara cardunculus	Artichoke thistle	All
Eucalyptus spp.	Eucalyptus	Riparian/Upland/All
Foeniculum vulgare	Sweet fennel	All
Myoporus laetum	Myoporum	All
Nicotiana glauca	Tree tobacco	All
Pennisetum setaceum	Fountain grass	Grassland/All
Ricinus communis	Castor bean	Riparian/All
Schinus molle/S. terebinthifolius	Pepper Tree (Peruvian/Brazilian)	Riparian/All
Tamarix spp.	Tamarisk, Salt cedar	Riparian

B. MODERATE TOLERANCE SPECIES (5% above baseline)		
Scientific Name	**Common Name**	**Disturbed Habitat**
Avena barbata	Slender wild oat	All
Brassica spp*., Hirschfeldia incana*	Mustard	All
Bromus madritensis ssp. *rubens/B. hordaeceous/B. diandrus*	Brome grasses (Red brome, soft chess, ripgut)	All
Centaurea calcitrapa	Purple star thistle	All
Centaurea melitensis	Tocalote	CSS/All
Chrysanthemum coronarium	Garland chrysanthemum	All
Cirsium vulgare	Bull thistle	All
Lactuca serriola	Prickly lettuce	All
Picris echioides	Bristly ox-tongue	All
Rumex crispus	Curly dock	Riparian
Salsola tragus	Russian thistle	All

D. Capital Improvements

Installation and maintenance of signs, and other facilities located within the easement area will occur as deemed appropriate by the HOA and approved RM.

In the event that major damage occurs to the property (e.g., ORV damage), the approved RM shall consult with the County and Wildlife Agencies to identify remedial measures and tasks to be performed by the approved RM and a source of funding to restore the biological resources will be sought. A time line to complete the tasks shall be established and an adjustment to the annual budget shall be made in order to address the pending issue(s). The approved RM will pursue all legal remedies as they pertain to encroachment and illegal degradation of habitat.

E. Reporting

The RM will prepare the required report annually by February 28 of any year for the previous year's monitoring and maintenance activities. Copies will be kept in the permanent files of the approved RM and provided to the County of San Diego Planning Department, USFWS, and CDFW. The typical Annual Report (for years 1-4) will contain the results of the stewardship activities; fencing and sign maintenance as well as the trash and invasive plant removal (if required). The quinquennial report (prepared every fifth year) shall include the results of the stewardship activities as well as the biological monitoring results; this shall include the following information:

a. identification of stewardship priorities for the preceding year that were and were not completed, including but not limited to:*****
    1. activities related to the habitat, including their location; and
    2. if post-fire, a description of the condition of the habitat and species within the OS
b. the sample sites and data collected in terms of personnel involved, frequency, timing, and duration;*****
c. photo-documentation of monitored locations, if any;
d. a discussion of the data analysis and results, including:
    1. a synthesis/integration/comparison of the completed year's (every 5) monitoring and maintenance results with those of previous years as applicable (e.g., analyzing apparent trends, etc.);
    2. the extent and overall health of the various habitats present (including assessments of invasive weeds) within the easement area;
    3. any changes to the health or distribution of sensitive plant and animal species observed (provided on a map);
    4. the most updated vegetation and sensitive species map`(s); and
    5. any observed changes resulting from natural or man-made causes.
e. identification of significant problems or successes in the easement area that may alter the monitoring and maintenance to date, such as the following:
    1. whether the stewardship activities or analytic methods used to date are satisfactorily addressing the conceptual RMP's management goals (e.g., are the measurement methods sensitive enough?) and whether activities or analytic methods need revision;
    2. whether the data indicate that a vegetation community is declining or degrading at a rate that an immediate, possibly unanticipated action, is required;
    3. whether the data indicate an earlier than expected positive response of a vegetation community to a management action such that continued surveys are unnecessary or becomes a lower priority;
    4. suggested stewardship priorities for the coming calendar years.
f. a summary of observations made during the maintenance site visits;
g. any stewardship issues/tasks (including public outreach efforts, and other than those already identified) addressed during the last year, and tasks identified for the next year;*****

h. an evaluation of the prior year's stewardship activities relative to achieving or progressing toward the conceptual RMP's stewardship goals, including an assessment whether the brush management goals of the FPP and as well as the conceptual RMP goals are being met;
i. suggested changes/revisions to the stewardship activities based on the information provided in response to the list above, including an outline of appropriate remedial measures if habitat or sensitive species issues are noted;*
j. a financial accounting including funds expended for the easement area monitoring and maintenance in the previous calendar years, endowment fund data, annual Consumer Price Index (CPI) adjustments to principal, interest earned, annual expenses (as accrued) and reimbursements, and the running balance;
k. an financial accounting including endowment fund data, annual Consumer Price Index (CPI) adjustments to principal, interest earned, annual expenses (as accrued) and reimbursements in the previous calendar year, and the running balance;
l. suggested revisions, if any, to the coming year's budget based on the information provided on the preceding items on this list; and
m. a list of names, titles, and companies who prepared the content of the Annual Report and participated in the monitoring and maintenance activities.

* Items "a", "b", "g" and "i" will be in tabular form and include cumulative list of monitoring and maintenance issues, the date of the initial observation of the issues, the recommendation(s) made in response to the observation, the actions/remedial measures taken in response to the recommendations, the dates the actions/remedial measures were taken, and the result of the actions/remedial measures (e.g., how effective were that at addressing the management issues).

F. Responsible Parties

The contact for this conceptual RMP will be the approved RM. The Grantee is the County of San Diego and the California Department of Fish and Wildlife (CDFW).

The endowment shall provide funds to the HOA to hire a RM to implement and pay for the tasks described in this conceptual RMP. A landscaping maintenance company will be required to implement the maintenance activities as identified by the RM and this conceptual RMP. The OS landscape habitat maintenance company must be approved by the RM.

The RM's responsibilities are strictly limited to the scope of required biological services defined in this conceptual RMP. The approved RM can contract any additional work that is not discussed in this conceptual RMP on an hourly basis as approved/contracted by the endowment. In the event that the approved RM and/or landscaping maintenance company are/is unable to implement the monitoring and maintenance described in this conceptual RMP the easement area for whatever reason, the HOA is responsible for hiring another biological land management entity and/or landscaping maintenance company to maintain and monitor the easement area. Any new RM must be approved by the San Diego County Director of Public Development Services (PDS) and CDFW shall be required.

An agreement between the County and the HOA shall be made to ensure that the elements of the RMP and implemented and the HOA shall be required to hire another RM if the RMP is not followed.

5.6 Public Use Tasks

See Table 1.
No public uses will be permitted within the open space. All public access will be blocked and signage will be posted.

5.7 Fire Management Tasks

No fire or fuel management is to occur within the open space preserve. There is a Fuel Management Zone (FMZ) and Limited Building Zone (LBZ) surrounding the development footprint which abuts the open space preserve. The FMZ maintenance requirements are summarized below for reference (RC Consulting; FPP, 2012).

<u>Fuel Management Zone: Annual Maintenance of the 200 foot deep FMZ</u>

Zone 1

Conduct annual or more frequent if necessary maintenance to reduce fuel volumes, remove dead and detached material, and maintain in healthy succulent condition;
Maintain irrigation in a working condition;

Mature trees greater than 18' shall be limbed up to a minimum of 6' above the ground;
No tree limbs within 10' of chimneys or dead limbs overhanging structures;
Trees adjacent to or overhanging roadways, driveways, or other emergency access paths shall be maintained with a minimum height clearance of 13' 6".

Zone 2

Conduct annual or more frequent if necessary maintenance to reduce fuel volumes, remove dead and detached material, and maintain in healthy succulent condition;
Annually – Remove plants on the invasive plant list that may have become established.

Vegetation maintenance within the FMZ is not the responsibility of the RM, but shall be the responsibility of Home Owners Association, it successors or assignees, or owner as designated with the County Tax Assessor.

6.0 RESOURCE MANAGEMENT PLAN SUMMARY and BUDGET

See Table 1.

Table 1
Estimate for Biological Resources Management Tasks

Check if applies	Tasks	Frequency (per year)	Hours required per year
BIOLOGICAL TASKS			
*	Baseline inventory of resources (if original inventory is over 5 years old)	One time	20__ hours
*	Update biological mapping	Once every _5__ yrs	19__ hours
*	Update aerial photography	Once every _5__ yrs	1___ hours
*	Removal of invasive species	Once every _1__ yrs	6___ hours
___	Predator control	Monthly/Quarterly/ Annually	___ hours
___	Habitat Restoration / Installation	Installation	___ hours
___	Habitat Restoration / Monitoring and Management	Monthly/ Quarterly	___ hours
___	Poaching control	Monthly/ Quarterly	___ hours
*	Species Surveys (protocol CAGN as required)	Once every _5__ yrs	20__ hours
___	Species management (include a separate line for each specific task)	(add frequency)	___ hours
___	Noise management, if required	(add frequency)	___ hours
___	For lands within the MSCP and outside PAMA, consult Table 3-5 of the MSCP Plan for required biological resource monitoring	(add frequency)	___ hours
	Other		___ hours
OPERATIONS, MAINTENANCE AND ADMINISTRATION TASKS			
*	Establish and maintain database and analysis of data	Once every _5__ yrs	5__ hours
*	Write and submit annual report to County	Once every _1__ yr	8__ hours
*	Submit review fees for County review of annual report	Once every _1__ yr	700_ Dollars
*	Review and if necessary, update management plan	Once every _5__ yrs	5_ hours
*	Construct permanent signs	One time	20_ signs
*	Replace signs	20 signs, every 15 yrs	20_ signs
___	Construct permanent fencing/gates	One time	___ feet
*	Check permanent signs (20)	Annual	1__ hours
*	Remove trash and debris	Annual	2__ hours

Check if applies	Tasks	Frequency (per year)	Hours required per year
*	Coordinate with DEH and Sheriff	(as required)	1__ hours
___	Maintain access road	(add frequency)	___ miles/yr
___	Install stormwater BMPs	One time	___ hours
___	Maintain stormwater BMPs	(add frequency)	___ hours
___	Restore Built Structure	One time	___ hours
___	Maintain Built Structure	(add frequency)	___ Hrs/yr
___	Maintain regular office hours	(add frequency)	___ hours
___	Inspect and service heavy equipment and vehicles	(add frequency)	___ hours
___	Inspect and repair buildings, residences and structures	(add frequency)	___ hours
___	Inspect and maintain fuel tanks	(add frequency)	___ hours
___	Coordinate with utility providers and easement holders	(add frequency)	___ hours
___	Manage hydrology (as required)	(add frequency)	___ hours
___	Coordinate with law enforcement and emergency services (e.g., fire)	(add frequency)	___ hours
___	Coordinate with adjacent land managers	(add frequency)	___ hours
___	Remove graffiti and repair vandalism	(add frequency)	___ hours
*	Emergency site inspection contingency	annual	5__ hours

PUBLIC USE TASKS

___	Construct trail(s)		___ miles
___	Monitor, maintain/repair trails	(add frequency)	___ miles/yr
___	Control public access	(add frequency)	___ hours
___	Provide Ranger patrol	(add frequency)	___ hours
___	Provide visitor/interpretive services	(add frequency)	___ hours
___	Manage fishing and/or hunting program (if one is allowed)	(add frequency)	___ hours
___	Provide Neighbor Education - Community Partnership	(add frequency)	___ hours
___	Prepare and reproduce trail maps and interpretative materials.	(add frequency)	___ hours
*	If HOA is funding management, provide annual presentation to HOA	every five years	2.5__ hours
___	Coordinate volunteer services	(add frequency)	___ hours
___	Provide emergency services access/ response planning	(add frequency)	___ hours
___	Other	(add frequency)	

Check if applies	Tasks	Frequency (per year)	Hours required per year
FIRE MANAGEMENT TASKS			
___	Protect areas with high biological importance	(add frequency)	___ hours
___	Hand-clear vegetation	(add frequency)	___ hours
	Mow vegetation	(add frequency)	___ hours
POST-FIRE TASKS			
___	Control post-fire erosion	(add frequency)	__ _ hours
___	Remove post-fire sediment	(add frequency)	__ _ hours
___	Reseed after fire	(add frequency)	__ _ hours
___	Replant after fire	(add frequency)	__ _ hours
___	Irrigation	(add frequency)	__ _ hours
___	Monitoring/Reporting	(add frequency)	__ _ hours

ANNUAL SUMMARY:
39.5 annual hours (averaged out to include the additional quinquennial year surveys and reporting)
$700.00 in County Fees for document review
60 annual miles

Additional (not typically recurring)
20 hours for initial baseline surveys
20 signs

7.0 REFERENCES

BLUE Consulting Group. December-2012. (revised). Biological Assessment Report for TM 5456 RPL2

BLUE Consulting Group. December-2012. PAR for TM 5456 RPL2 Open Space

California State Department of Fish and Wildlife (CDFW)

2012a Special Plants List. Natural Diversity Data Base. Department of Fish and Wildlife.

2012b State and Federally Listed Endangered and Threatened Animals of California. Department of Fish and Wildlife.

2012c Special Animals, Natural Diversity Data Base. Department of Fish and Wildlife.

CNPS 2001. *Inventory of Rare and Endangered Vascular Plants of California* (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society, Sacramento, CA x + 388pp.

Excel Engineering. February 2013. Stormwater/Hydromodification Management Plan (SWHMP)

Holland, R.F. October 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Non-game Heritage Program, California Department of Fish and Wildlife.

RC Consulting. August, 2012. Fire Protection Plan (FPP) for Cielo De Lusardi TM 5456 RPL2

Sawyer, J.O. and T. Keeler-Wolf. 2009. *A Manual of California Vegetation.* California Native Plant Society. Sacramento, California.

Attachment A

California Exotic Pest Plant List A

To be finalized and attached with Final RMP

Attachment B
Legal Description of Open Space Easements
To be finalized and attached with Final RMP

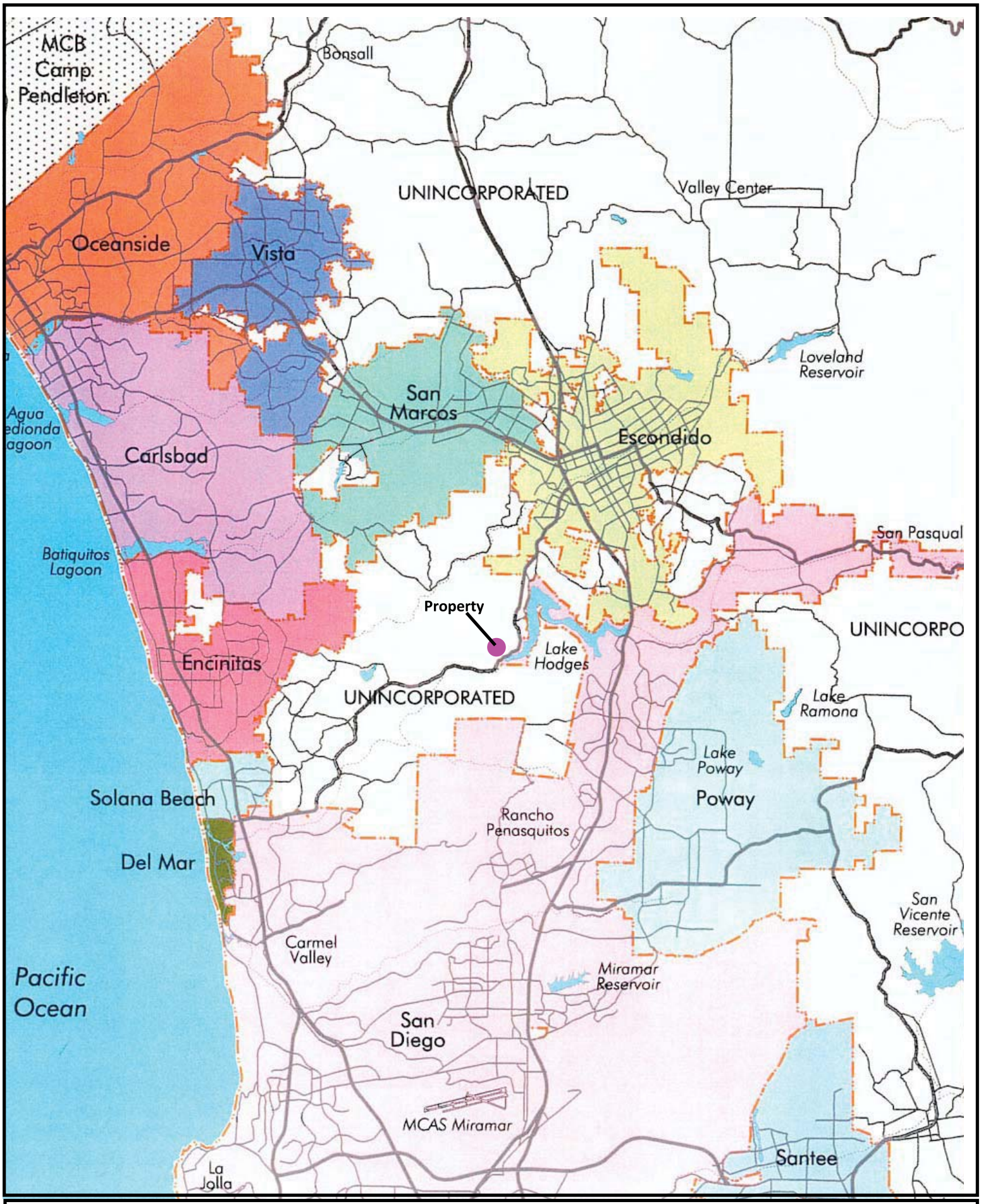
Attachment C Fire
Protection Plan
To be finalized and attached with Final RMP

Attachment D
Grant of Conservation Easement
To be finalized and attached with Final RMP

Attachment E

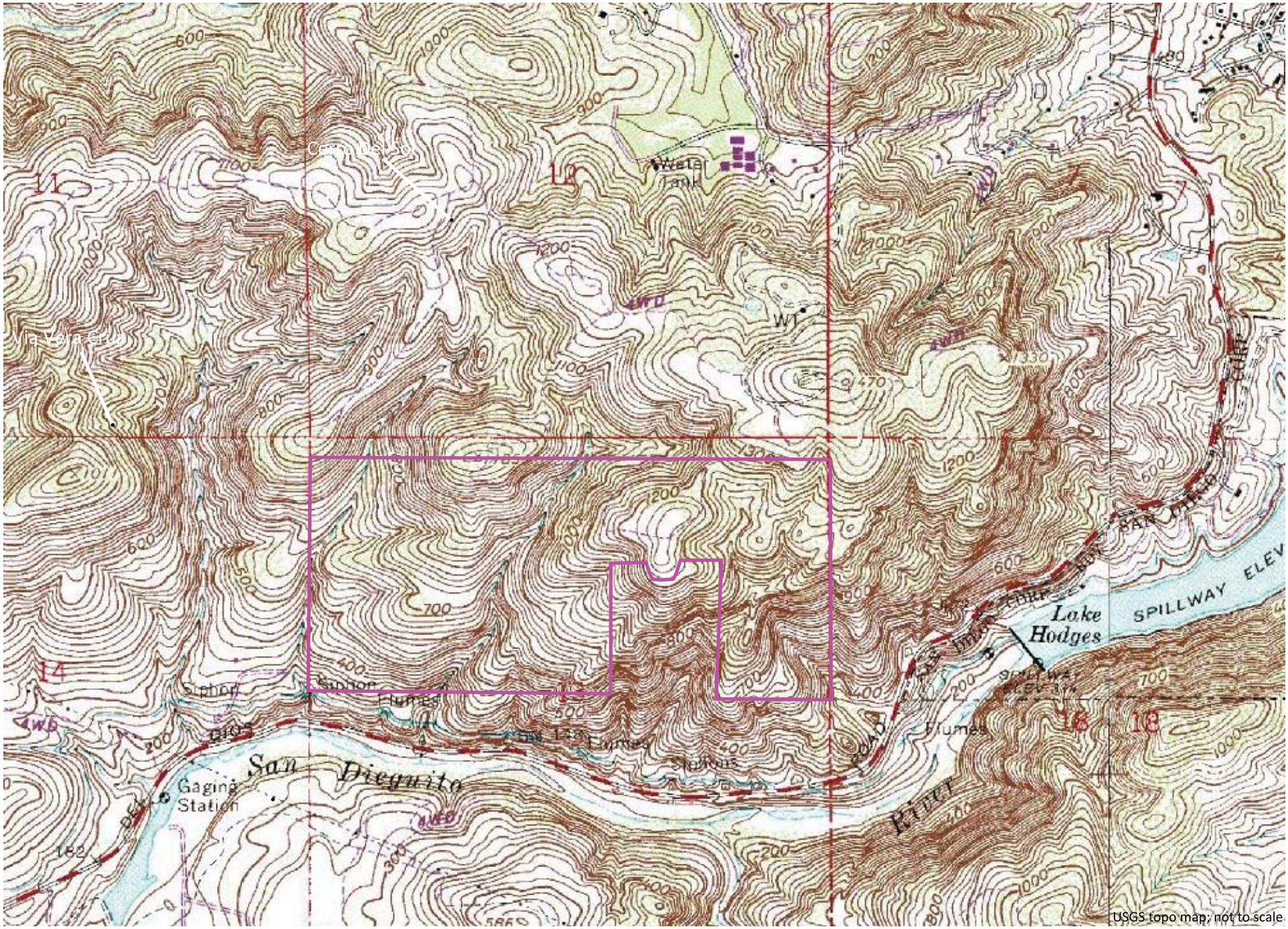
Property Assessment Report (PAR)

To be finalized and attached with Final RMP



Property

FIGURE 1
Regional Location



Property
TM 5456 RPL 2; 270.29 acres

FIGURE 2

Property
USGS topo map

BLUE

N

0 300 Feet

Property
Proposed Impact Footprint
Proposed On-Site Open Space

Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland
Disturbed Habitat
Developed Area

RPO/Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub

Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia (historic)

Rufous crowned sparrow
Deer Carcass

CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

FIGURE 3a

TM 5456
Proposed Open Space (western half)

N

0 300 Feet

Property
Proposed Impact Footprint
Proposed On-Site Open Space

Rock Outcrops
Southern Mixed Chaparral
Coastal Sage Scrub; Disturbed
Non-Native Grasslands
Eucaluptus Woodland
Disturbed Habitat
Developed Area

RPO/Jurisdictional Unvegetated Non-Wetland Waters
Willow Scrub

Redberry
Wart-Stemmed Ceanothous - concentrated on steep slopes
Nuttall's Scrub Oak
California adolphia (historic)

Rufous crowned sparrow
Deer Carcass

CAGN 6-30 Obs.
CAGN 7-22 Obs.
CAGN 7-21 Obs.
CAGN 8-8 Obs.

FIGURE 3b

TM 5456
Proposed Open Space
(eastern half)