



**RC BIOLOGICAL CONSULTING, Inc.**  
**PO Box 1568, Lemon Grove, CA 91946-1568**  
**phone: (619) 463-1072 fax: (619) 463-0859**  
**email: info@rcbio.com**

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Mr. Greg Danskin  
1543 Robyn Road  
Escondido, CA 92025

October 10, 2009

RE: Revised Biological Resources Report for the Spirit of Joy Lutheran Church,  
APN's 283-054-03, 07, 08 & 11

Dear Mr. Danskin,

RC Biological Consulting, Inc. has performed fieldwork for the Spirit of Joy Lutheran Church on Old Highland Valley Road in the County of San Diego. The following letter summarizes the results of the surveys, including existing biological resources, proposed impacts and mitigation in accordance with the County of San Diego Guidelines For Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2007). The following report has been revised to address the comments in the County letter dated May 22, 2008.

### **Summary**

The proposed project is a Major Use Permit for a community church on 8 gross acres, APN's 283-054-03, 07, 08 and 11. The project area is located in the central portion San Diego County within the Community of Ramona. The project area is northwest of State Route 67 (SR 67), northeast of Highland Valley Road and southwest of Old Highland Valley Road. Access will be provided by private driveway from Old Highland Valley Road to the proposed community church. Water will be provided by the Ramona Municipal Water District. The project proposes to connect to the public sewer system. The project site is currently a vacant lot. The only offsite improvement that will be performed by the project is a temporary hammer head at the intersection of Highland Valley Court and Old Highland Valley Road. The remainder of the offsite improvements will be performed by TM 5344. The project site is located within the Draft North County Multiple Species Conservation Program (NCMSCP).

This report provides information regarding existing conditions, and performs an impact analysis based on the current site design. This report also identifies mitigation measures to reduce impacts to below a level of significance.

General biological surveys and a wetland delineation were performed onsite. The biological resources onsite include two habitat types: non-native grassland and developed. Biological resources that are afforded some level of protection under the California Environmental Quality Act (CEQA) would include the non-native grassland.

No sensitive state or federally listed plant species were observed onsite. One state sensitive and County Group 1 species, the white-shouldered kite (*Elanus caeruleus*) was observed flying over the project site. Three sensitive wildlife species have a high potential to occur and seven have a moderate potential to occur. No sensitive plant species were observed onsite. All sensitive plants with the potential to occur have a low potential to occur due to the lack of appropriate soils and habitat.

Impacts to non-native grassland and developed habitat onsite may occur as a result of the proposed project. Impacts to developed habitat would not be considered significant and would not require mitigation. Impacts to non-native grassland would be considered locally important. Mitigation for impacts to the non-native grassland are proposed at a 0.5:1 ratio and will be mitigated at an approved location offsite. Potential impacts to sensitive wildlife species with a high or moderate potential to occur onsite will be mitigated by the habitat-based mitigation. Implementation of these mitigation measures will prevent the project from contributing to significantly cumulative impacts to the resources involved.

### **Introduction, Project Description, Location, and Setting**

The proposed project is a Major Use Permit for a community church on 8 gross acres, APN's 283-054-03, 07, 08 and 11. The project area is located in the central portion San Diego County within the Community of Ramona. The project area is northwest of State Route 67 (SR 67), northeast of Highland Valley road and southwest of Old Highland Valley Road. Access will be provided by private driveway from Old Highland Valley Road to the proposed community church. Water will be provided by the Ramona Municipal Water District. The project proposes to connect to the public sewer system. The project site is currently a vacant lot. The only offsite improvement that will be performed by the project is a temporary hammer head at the intersection of Highland Valley Court and Old Highland Valley Road. The remainder of the offsite improvements will be performed by TM 5344. The project site is located within the Draft North County Multiple Species Conservation Program (NCMSCP).

The site is located in an agricultural area with rural commercial and residential development interspersed (Figure 2). It is located approximately 3 miles east of Mount Woodson and approximately 1 mile south of Santa Maria Creek. The project area abuts the intersection of SR 76 and Highland Valley Road to the north.

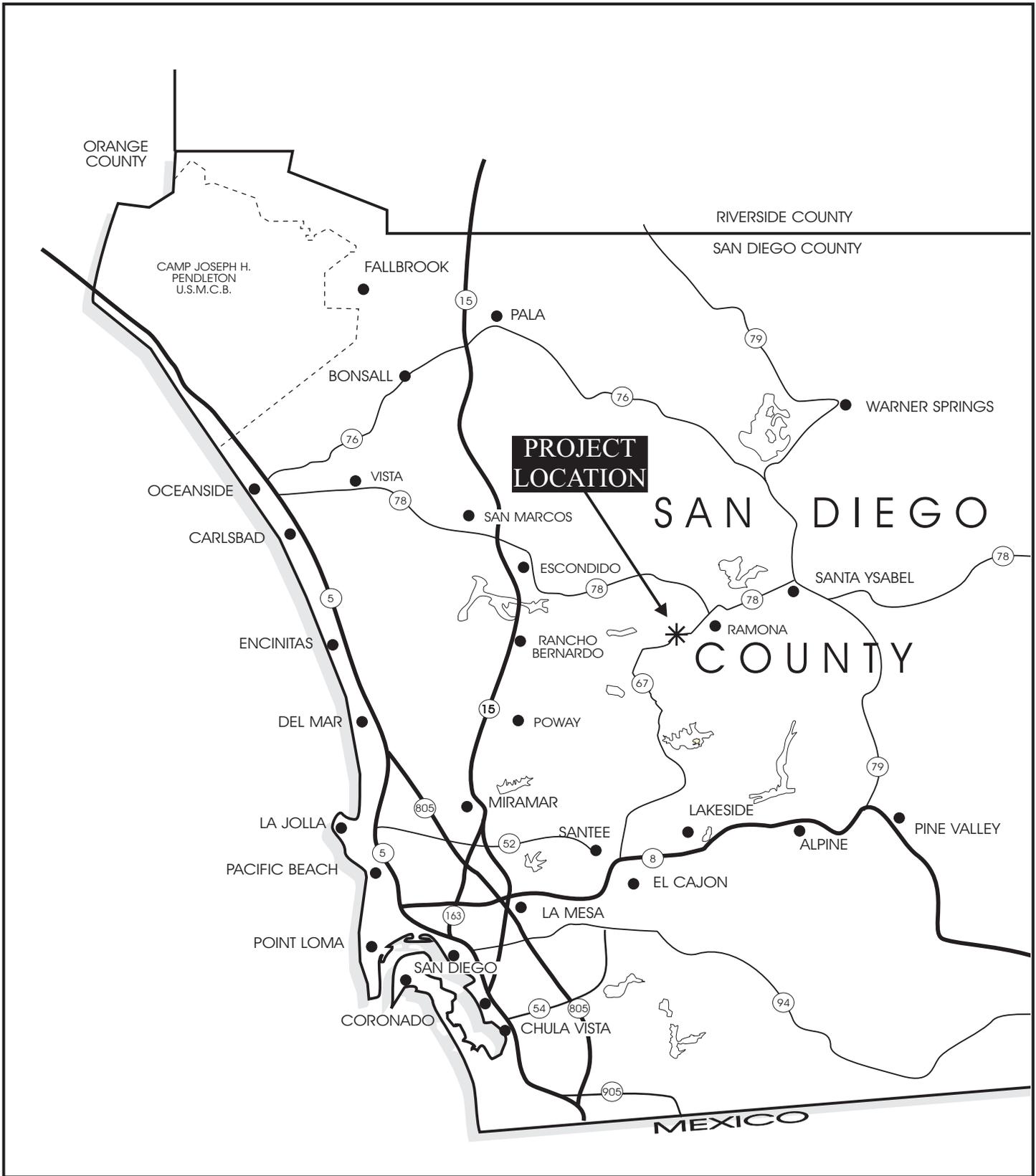
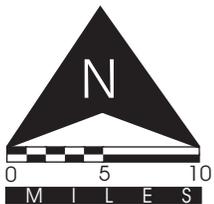


Figure 1  
Regional Location Map



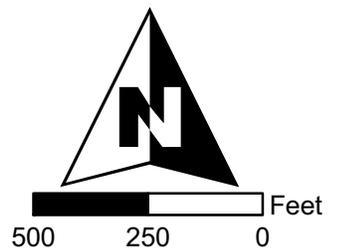


Source: <http://www.terraserver.com> (4/1/2007)



Project Boundary

**Figure 2**  
**Aerial Photograph**  
**Spirit of Joy**  
**APN 283-054-03, 07, 08 & 11**



The project is located in Section 29 of the San Pasqual USGS 7.5' Quadrangle, Range 1 East, Township 13 South (Figure 3). The project is gently sloping to the north and northwest. Elevations onsite range from approximately 1427 feet above mean sea level in the southwest, to approximately 1410 feet above mean sea level at the north. The property is located in the southwestern portion of Santa Maria Valley. The site contains rock outcrops, a stockpile, an artificial wetland and a drainage swale. The property is currently undeveloped.

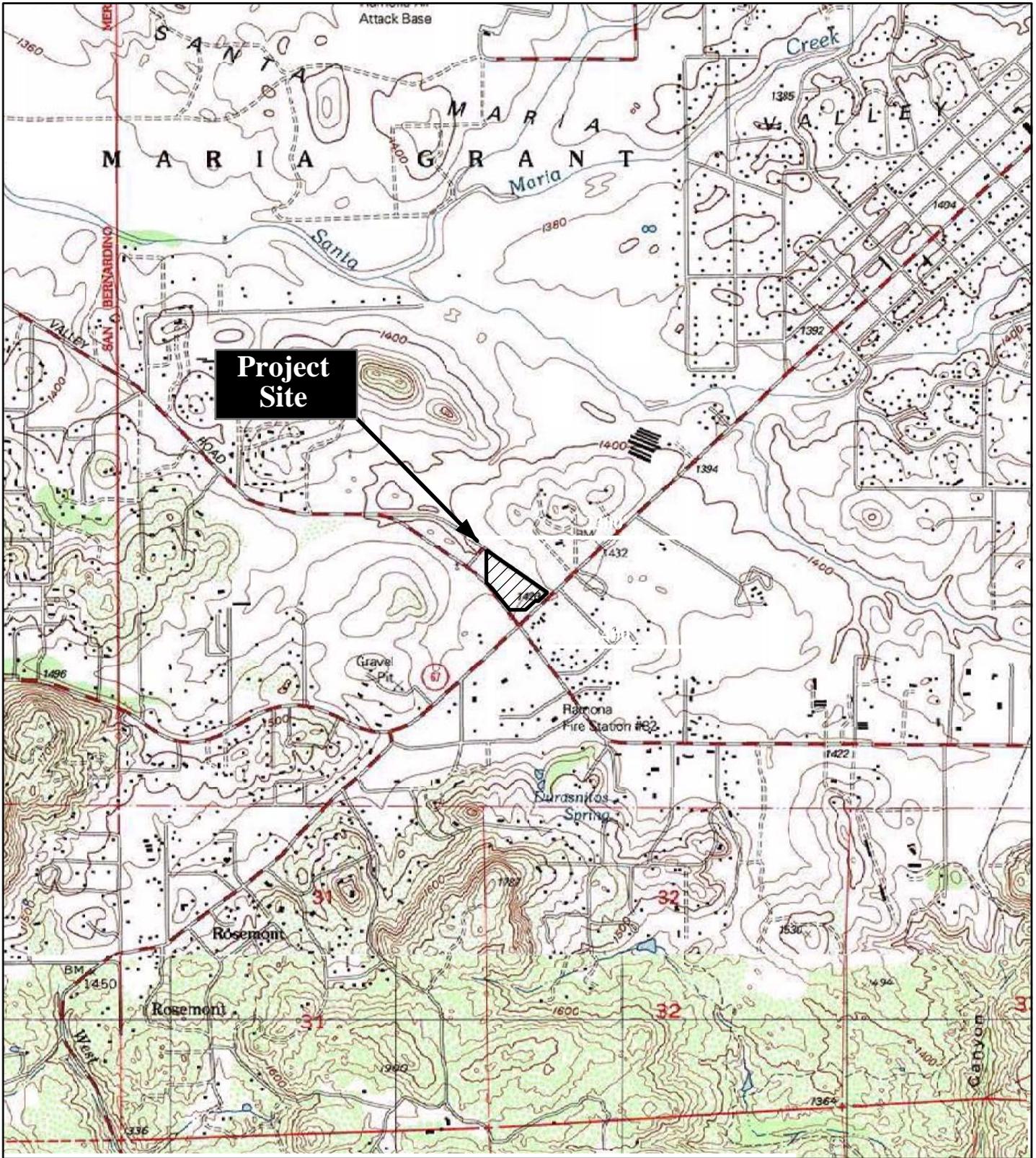
The soils on the property consist of the Bonsall-Fallbrook Series and the Vista Series. Most of the project area contains Bonsall-Fallbrook sandy loam while only a small area of Vista rocky coarse sandy loam is present along the upland area along the old alignment of Highland Valley Road near granitic outcrops. Bonsall-Fallbrook sandy loams occur on slopes from 2 to 5 percent and consist of moderately well drained, shallow to moderately deep sandy loams that have a heavy clay loam subsoil (Bowman 1973). Vista rocky coarse sandy loam occurs on slopes from 5 to 15 percent (Bowman 1973). It is well-drained, moderately deep and deep coarse sandy loam derived from granodiorite or quartz diorite.

### Site Survey

The site was surveyed on foot and habitat mapped (Figure 4). Mapping was performed following the Guidelines For Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2007). Wildlife species were identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the surveys and species of interest were mapped. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources onsite. Surveys performed on the Spirit of Joy property are summarized in Table 1.

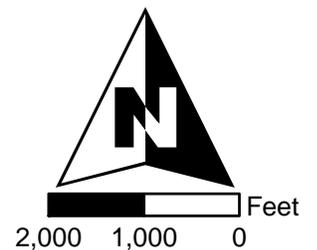
<b>Date</b>	<b>Time</b>	<b>Survey</b>	<b>Temperature (°F)</b>	<b>Sky</b>	<b>Wind (mph)</b>	<b>Observers</b>
9/03/03	08:50- 09:50	General biology & habitat assessment	76°	Hazy	0	RC
1/16/08	10:00- 12:30	General biology, habitat assessment & wetland delineation	58°-64°	Clear	0-5	AD

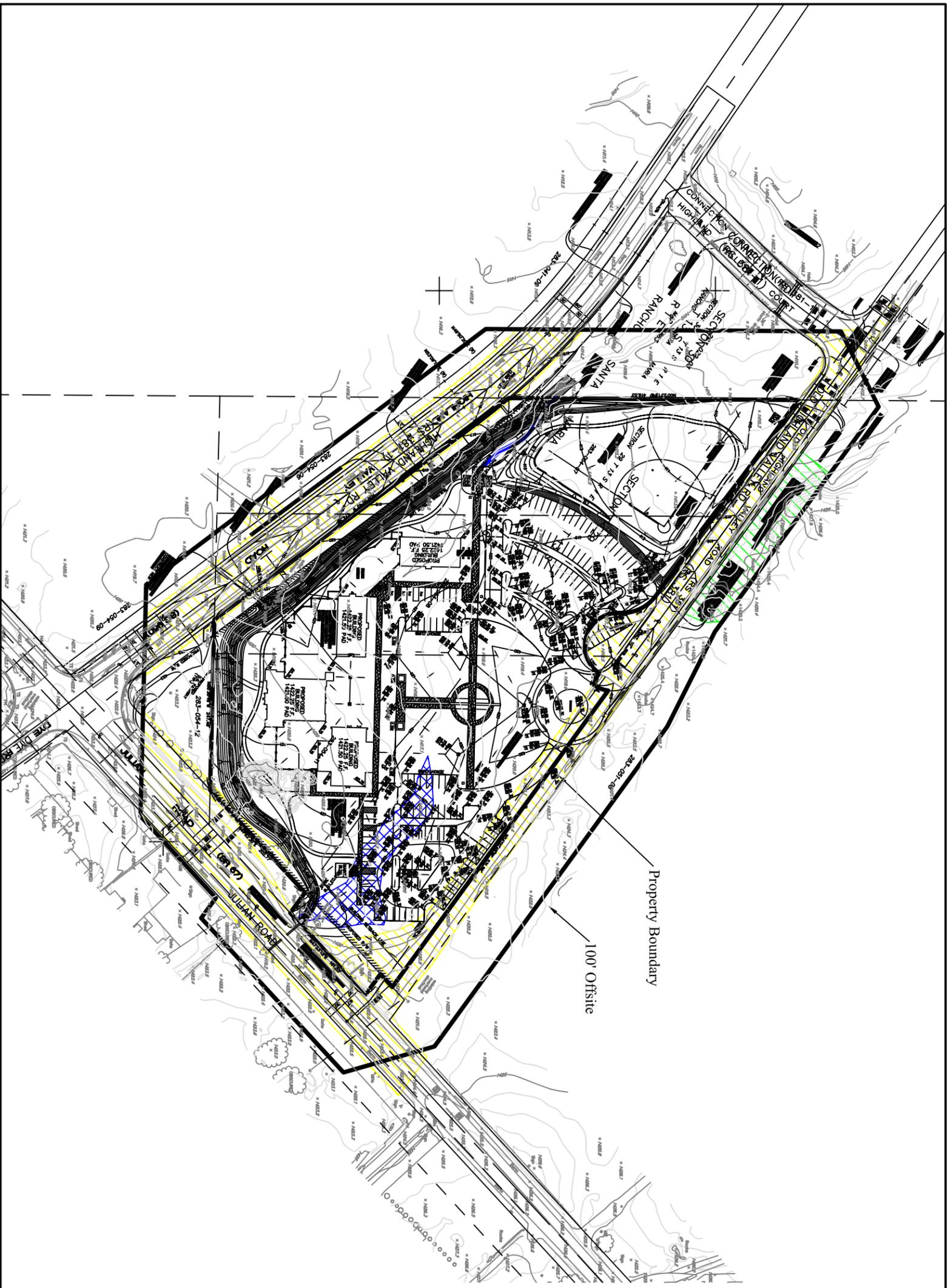
AD=Andrew Drummond, RC=Robin Church



Source: USGS 7.5' San Pasqual Quadrangle

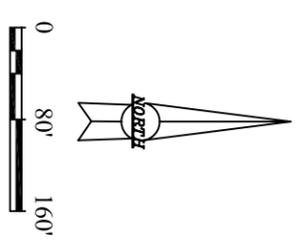
**Figure 3**  
**Project Location**  
**Spirit of Joy**  
**APN 283-054-03, 07, 08 & 11**





**Legend:**

-  Coastal Sage Scrub (Offsite)  
Habitat Code: 32520
-  Non-Native Grassland (7.5 acres)  
Habitat Code: 42200
-  Developed (0.5 acres)  
Habitat Code: 12000
-  RWQCB & CDFG Jurisdictional  
Artificial Wetland (0.3 acre within  
Non-Native Grassland habitat)
-  ACOE & RWQCB Jurisdictional  
Drainage (155 linear feet)



**RC**

Biological Consulting, Inc.

**Biological Resources Map for the Spirit of Joy Property**

**APN: 283-054-03, 07, 08 & 11**

**October 2009**

**Figure 4**

Nomenclature for this report conforms to Hickman (1993), for plants, Holland (1986) and Oberbauer (2005) for plant communities and habitat types, American Ornithological Union (AOU 1998 and 2000) for birds, Jennings (1983) and Stebbins (2003) for reptiles and amphibians, Jones (1992) for mammals, and Powell (1979) for insects.

### **Biological Resources Present**

The biological resources onsite include two habitat types: non-native grassland and developed. A total of fourteen wildlife species were identified onsite. These included four insects, seven birds and three mammal species. In addition an artificial wetland and a drainage swale occur onsite.

### **Habitats and Vegetation Communities**

Following is a summary of the existing habitats and vegetation communities on the site. This section includes information the habitat types, the vegetation that was identified in each habitat in acres, the dominant species present and the habitat quality. Species abundance, composition and diversity are discussed in terms of vegetative structure and wildlife, as well as the habitat sensitivity level and regional and local importance of conserving each habitat type.

Habitat descriptions are based on the County of San Diego's Biological Mapping Requirements (included within the Report Format and Content Requirements) (County 2007) and Terrestrial Vegetation Communities in San Diego County based in Holland's Descriptions (Oberbauer 2005), however, it has been shown that habitats on the project sites in San Diego County are often not pristine and rarely fit into one description. Therefore the best-fit definition based on the County's current descriptions and dominant plant species has been applied.

### **Habitats**

The site currently supports two habitat types: non-native grassland and developed (Figure 4). A complete list of plant species observed onsite is included in Appendix A and a complete list of wildlife species observed is included as Appendix B.

#### **Non-Native Grassland (Habitat Code 42200)**

The non-native grassland habitat onsite is dominated by typical non-native grasses and weed species such as foxtail chess (*Bromus madritensis* ssp. *rubens*), Bermuda grass (*Cynodon dactylon*), tumbleweed (*Salsola tragus*), western ragweed (*Ambrosia psilostachya*) and annual herb species such as filaree (*Erodium* sp.). Wildlife observed within this habitat were common and included a California white butterfly (*Pontia sisymbrii*), fox sparrow (*Passerella iliaca*), western meadowlark (*Sturnella neglecta*) and California ground squirrel (*Spermophilus beecheyi nudipes*). American crow's (*Corvus brachyrhynchos*) and a red-tailed hawk (*Buteo jamaicensis*) were observed flying over

the project site. An artificial wetland and a drainage swale occur within the non-native grassland habitat onsite. These were included in this habitat because the dominant vegetation is non-native grass species. The regional value of the non-native grassland onsite moderate due to the potential use as raptor foraging habitat.

#### Developed (Habitat Code 12000)

The developed area onsite is associated with existing fire clearing for the roads surrounding the property that extend onto the property in the east and west. The developed area also occurs in the southeast where some trees have been ornamentally planted to shield the property from SR 67. Some of the trees planted include Peruvian pepper tree (*Schinus molle*), California black oak (*Quercus kelloggii*) and western sycamore (*Platanus racemosa*). No wildlife species were observed within the developed habitat onsite. The regional value of developed habitat is low. The developed habitat onsite does not support sensitive species.

#### **Special Status Species**

Following is a summary of all sensitive species with potential to occur on the site or on land immediately adjacent to the site. Sensitive or special interest plant and wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by non-native species, or a combination of all of these factors.

The following were used in the determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS) (USFWS 2007); California Department of Fish and Game (CDFG) (CDFG 2006 and 2007), County Sensitive Plant and Wildlife list, California Native Plant Society (CNPS 2007), and the California Natural Diversity Database.

#### **Sensitive Plants**

Eight sensitive plant species have the potential to on the project site. Of the eight sensitive plants assessed, all eight have a low potential to occur because they would either have been observable during the time of surveys or the project site does not contain suitable habitat and/or soils. Sensitive plant species with the potential to occur onsite are discussed in Appendix C.

#### **Sensitive Wildlife**

No threatened or endangered wildlife species were observed onsite. A County Group 1 sensitive wildlife species was observed flying over the project site, white-shouldered kite (*Elanus caeruleus*). This species is discussed below.

### White-Shouldered Kite (*Elanus caeruleus*)

The white-shouldered kite is listed as a California Species of Concern and is fully protected by California Department of Fish and Game. In addition it is a County Group 1 species. It is a yearlong resident in coastal and valley lowlands, usually near agricultural areas. They inhabit herbaceous and open stages of most habitats in cismontane California. The species forages in open grasslands, meadows, farmlands, wetlands, and freeway center divides. They glide and hover less than 100 feet above the ground in search of prey. They use trees and grasslands for cover. The white-shouldered kite nests in tops of tall tree stands near open foraging areas (Zeiner et al 1990).

### **Sensitive Wildlife with Potential to Occur**

Thirty-three sensitive wildlife species have the potential to occur onsite (Appendix D). Three have a high potential to occur and seven have a moderate potential to occur. The species with a high potential to occur include Cooper's hawk (*Accipiter cooperi*), Ferruginous hawk (*Buteo regalis*) and horned lark (*Eremophila alpestris actia*). The species with a moderate potential to occur include western spadefoot toad (*Scaphiopus hammondi*), orange-throated whiptail (*Aspidoscelis hyperythrus beldingi*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), golden eagle (*Aquila chrysaetos canadensis*), northern harrier (*Circus cyaneus hudsonius*) and turkey vulture (*Cathartes aura*).

All of the species with a high or moderate potential to occur onsite are federal and/or state species of concern, except for the turkey vulture which is a County sensitive species. Two federally listed species, San Diego fairy shrimp (*Branchinecta sandiegoensis*), and Stephen's kangaroo rat (*Dipodomys stephensi*) have a low potential to occur onsite. The federally listed species are discussed below.

### San Diego fairy shrimp (*Branchinecta sandiegoensis*)

Status: Federally listed as Endangered.

The San Diego fairy shrimp breeds in vernal pools. It takes only two weeks to go from egg to reproductive adult. They are among the most characteristic of the vernal pool invertebrates. The young shrimp swim upside down in the pools, filter feeding on algae and zooplankton, using their many legs. As they reach maturity, the female develops prominent ovisacs while the males' second antennae become modified for clasping the female during mating. Females lay 100-300 eggs or more. When laid, the eggs fall to the soil surface where they develop to the gastrula (early embryo) stage, then become dormant until the next wet season. The San Diego fairy shrimp was listed as federally endangered in 1997. A Recovery Plan was finalized 1998 that emphasizes that vernal pools are not independent of one another but rather a part of a vernal pool complex and that individual pools should be treated as subpopulations. No vernal pools were observed on the Spirit of Joy property, therefore there is a low potential for San Diego fairy shrimp to occur.

### Stephens' Kangaroo Rat (*Dipodomys stephensi*)

Status: Federally listed as Endangered, State Threatened

The Stephens' kangaroo rat (SKR) is a medium-sized kangaroo rat (11-12" [2.7-3.0 cm] in length). Like all kangaroo rats, they have long hind legs, small front legs and feet with a white underside. This species has dark cinnamon brown fur and a black and white tail. SKR are found in the San Jacinto Valley and nearby foothill grasslands. These rats need sparsely vegetated habitats (like sage brush and grass patches) on sandy or gravelly soils. They need soil that is soft enough to dig their nesting burrows. SKR have also been known to occupy abandoned pocket gopher burrows. This kangaroo rat mainly feeds on seed from annual grasses and forbs. They are also thought to feed on fruits, leaves, stems, buds, and even insects. SKR formerly ranged in and around the San Jacinto Valley. They have been recorded in 8 general areas from southwestern San Bernardino County, into western Riverside County and northwestern San Diego County (in the city of Vista). SKR has a low potential to occur onsite. This species was documented approximately 1.3 miles to the north (CDFG 2007b). A habitat assessment was performed by Ecological Ventures biologist Bob Faught, in August 2003. The results were provided by phone conversation. Mr. Faught stated that the site did not contain any sign of the species.

Additionally the burrowing owl has a low potential to occur onsite. This species is discussed below.

### Burrowing Owl (*Athene cunicularia hypugea*)

The burrowing owl is a County Group 1 species and a California Species of Concern. The burrowing owl is associated with open dry grasslands, agricultural and rangelands which are associated with burrowing animals. Although ground squirrels were observed onsite which burrows burrowing owls often occupy, no sign of the mounding platform that they build was observed nor were any burrowing owls observed. That coupled with the fact that site is edge effected by two busy roads make it a low potential for the burrowing owl to occupy the site.

### **Jurisdictional Wetlands and Waterways**

An artificial wetland occurs in the southeastern project area and a drainage swale occurs in the northwest project area. A formal Army Corps of Engineers wetland delineation was performed and each feature was mapped (Figure 4). The data forms are included in Appendix E. No wildlife species were observed in either the artificial wetland or the drainage swale feature.

San Diego County had received average to above average rainfall for the season to date at the time of the delineation. A storm event occurred between January 5<sup>th</sup> and 7<sup>th</sup> providing 2.54 inches of rain in Ramona (Appendix F). This event occurred nine days prior to the wetland delineation.

The artificial wetland is approximately 0.3 acre and is supported by storm water and urban runoff from the south. An existing 18 inch storm drain collects water from the south side of SR 67 and conveys it to the north side of the road where it then enters the property at the location of the artificial wetland. The result of the storm water and urban runoff being collected and conveyed via the storm drain is that the site receives increased volume and velocity at the point it is released onto the property creating an artificial situation. A review of aerial photography and historic weather information further supports this conclusion. Figure 5, was taken November 1<sup>st</sup>, 2000 illustrates that the grassland onsite and in the surrounding area is primarily dead with the exception of the area immediately adjacent to the storm drain outlet. The weather data for September and October (Appendix F) indicate that rainfall occurred in both months. While not a significant amount of rain, the runoff being condensed and channeled by the storm drain could have resulted in enough moisture for the plants to germinate.

The artificial wetland contained areas of open water at the time of survey but did not contain hydric soils and was dominated by upland plants including non-native grasses and western ragweed. Curly dock (*Rumex crispus*), a plant that can tolerate prolonged periods of inundation, was also observed within the artificial wetland (Appendix E).

The drainage swale contained upland plants and lacked a defined bed and bank (Photographs Appendix E). The soil onsite is not mapped as a hydric soil, however redoximorphic features were observed in the soil in the north most 155 linear feet of the drainage swale indicating prolonged periods of saturation (Appendix E) (Figure 4). Although a storm event had provided 2.54 inches of rain nine days prior to the delineation, no standing water was present in the soils pits. During periods of high rainfall the swale would receive water from storm water and urban runoff from both the culvert that drains into the artificial wetland and a second culvert that carries water from the west side of Highland Valley Road. The culverts would increase the flow and velocity of water and release it in at a condensed location which would result in alteration of the natural hydrologic patterns onsite. These culverts have likely been in place since the roads were built many years ago. The redoximorphic features at the soil pit locations are likely the result of the culverts changing what would otherwise be overland sheet flow into channelized flow concentrating it in the drainage swale. The altered hydrology over a significant number of years could result in the development of redoximorphic features within the soil.

The artificial wetland and drainage swale would be considered jurisdictional under one or more of the following agencies: Army Corps of Engineers, California Regional Water Quality Control Board, and California Department of Fish. These jurisdictions are discussed below and the regulations are discussed in detail in Appendix G.

### **Army Corps of Engineers (ACOE) – Clean Water Act**

ACOE Waters of the U.S. occur onsite and are mapped on Figure 4. The drainage swale would be considered Waters of the U.S. due to its capacity to carry storm water and urban

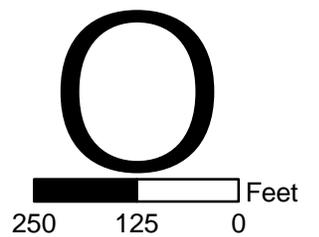


Source: <http://www.terraserver.com> (11/1/2000)



Project Boundary

**Figure 5**  
**Aerial Photograph**  
**Spirit of Joy**  
**APN 283-054-03, 07, 08 & 11**



run-off to Traditional Navigable Waters and presence of hydric soils. The artificial wetland onsite would not be considered jurisdictional as either Waters of the U.S. or a federal wetland, since it is supported by storm water runoff, lacks hydric soils, lacks a dominance of hydrophytic plants and is isolated from Traditional Navigable Waters (Figure 4). These conclusions are supported by the summary of the wetland delineation presented in the previous paragraphs and data sheets included in Appendix E. As a result of the SWANCC decision in 2001 the ACOE no longer has jurisdiction over isolated waters.

### **Regional Water Quality Control Board (RWQCB) - 401 Certification**

The RWQCB regulates “any surface water or groundwater, including saline waters, within the boundaries of the state.” The limits of the Regional Water Quality Control Board would cover both the drainage swale and the artificial wetland onsite (Figure 4).

### **California Department of Fish and Game (CDFG) - Streambed Alteration Program**

The limits of CDFG jurisdiction are defined in the code as the bed, channel, or bank of any river, stream or lake designated by the department in which there is at any time existing fish or wildlife resource or from which these resources derive benefit. The CDFG would take may take jurisdiction over the artificial wetland onsite. The CDFG would not take jurisdiction over the drainage swale onsite because it lacks a bed and bank and does not have the potential to support aquatic wildlife or riparian vegetation (Figure 4).

### **Resource Protection Ordinance (RPO)**

Neither the artificial wetland nor drainage swale onsite would qualify as RPO wetlands. The delineation was performed after a recent significant rain event, it is likely that the hydrology observed within the artificial wetland was the result of condensed overland sheetflow due to the culvert south of the artificial wetland. The artificial wetland did not contain a predominance of hydrophytic vegetation. The soils within the artificial wetland were not hydric (Appendix E).

The area identified as artificial wetlands would not be regulated by the Resource Protection Ordinance because it is solely due to the culvert, a man made structure. Additionally, the area has negligible biological function as a wetland due to the lack of hydrophytic vegetation, hydric soils and wetland associated wildlife species. The artificial is isolated from other wetland systems and did not contain any wetland dependent sensitive species.

The drainage swale did not have a predominance of hydrophytic vegetation. The soil pits within the drainage swale did not have standing water, the definition of undrained. The soil contained some reducing features indicating that the swale may hold water for some brief period, however the soil was not saturated nor was there standing water in the pit at the time of the survey. Additionally the swale does not contain water long enough during

the growing season to prevent the growth of upland plant species whereas if it consisted of undrained soil upland plant species would not be able to grow. The swale does not contain “undrained” soils. Lastly, the swale was not composed of non-soil. As a result the drainage swale would not qualify as RPO wetland.

## **Other Unique Features/Resources**

### **Wildlife Corridors and Linkages**

The proposed project is surrounded by development on the south and east (Figure 2). The project is bounded by an unnamed private road to the northwest, Old Highland Valley Road to the northeast, Highland Valley road to the southwest, and SR 67 to the south and east. Agricultural lands occur west, north and northeast of the project site (Figure 2). Commercial development occurs to the southeast of the project site. As a result of the location of the proposed project being bounded by SR 67 to the south and the east, there is no connectivity to the south or the east for terrestrial wildlife. As a result of the agricultural area to the west, north and northeast, the dense vegetative cover preferred by large mammals does not occur within the project vicinity. The nearest terrestrially based local wildlife corridor, Santa Maria Creek, is located approximately one mile to the north of the project site. The vegetative cover associated with Santa Maria Creek may be suitable for large mammals, however the agricultural lands between Santa Maria Creek and the project site would not provide adequate protection for large mammals. The site has not been identified within the connectivity analysis for the NCMSCP as being within a linkage. The non-native grassland habitat onsite could support raptor foraging, but the Spirit of Joy property contains no terrestrial wildlife corridors or linkages.

The site does not support habitat for species that rely on nurseries such as bats.

### **Raptor Nesting**

The site contains a few young trees in the southeastern portion of the property. Eucalyptus and oak trees can support raptor nesting. Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting associated with adjacent open grasslands to forage. Due to declining habitat and the associated declining numbers of these species on the whole, many raptor species have been designated as California Species of Special Concern by the CDFG. These species are protected, especially during their critical nesting and wintering stages. Raptors are protected under the CDFG California Raptor Protection Act (Title 14, Section 670). No individual raptors or raptor nests were observed within the trees onsite.

### **Rock Outcrops**

Rock outcrops are considered a unique microhabitat by the county. Rock outcrops occur onsite. Rock outcrops add diversity to the vegetation communities by providing a discrete ecological niche for species not found elsewhere in the surrounding habitat.

Rock outcrops also provide cover and potential nesting cavities for several wildlife species. Some reptile species are attracted to the sun-warmed surfaces of the rocks, and birds use boulders as perches and vantage points.

### **Regionally Sensitive Resources - Ramona Grasslands**

The Ramona Grasslands area is located in the Santa Maria Valley mostly to the north of north of Santa Maria Creek. The Ramona Grasslands do not have an officially defined boundary, but encompass approximately 9,000 acres of undeveloped pastures. The area extends across the valley floor and is generally flat to gently sloping with numerous rock outcroppings. The general topography consists of low rises (10 to 20 feet) around these outcrops of granitic boulders separated by swales and flats. The Ramona Grasslands consist mainly of undeveloped pastures that support cattle and are dominated by non-native grass species. Grazing activities continue in some areas.

The Ramona Grasslands are considered an important ecosystem in the region, supporting raptor populations as well as two federally listed endangered species: Stephens' kangaroo rat and San Diego fairy shrimp. In addition, two California Special Concern Species, the western burrowing owl (*Athene cunicularia hypugaea*) and golden eagle (*Aquila chrysaetos canadensis*) occupy the grasslands, among other raptor species. The proposed project is located outside of the County of San Diego Ramona Grasslands Special Study area (Figures 6 & 7).

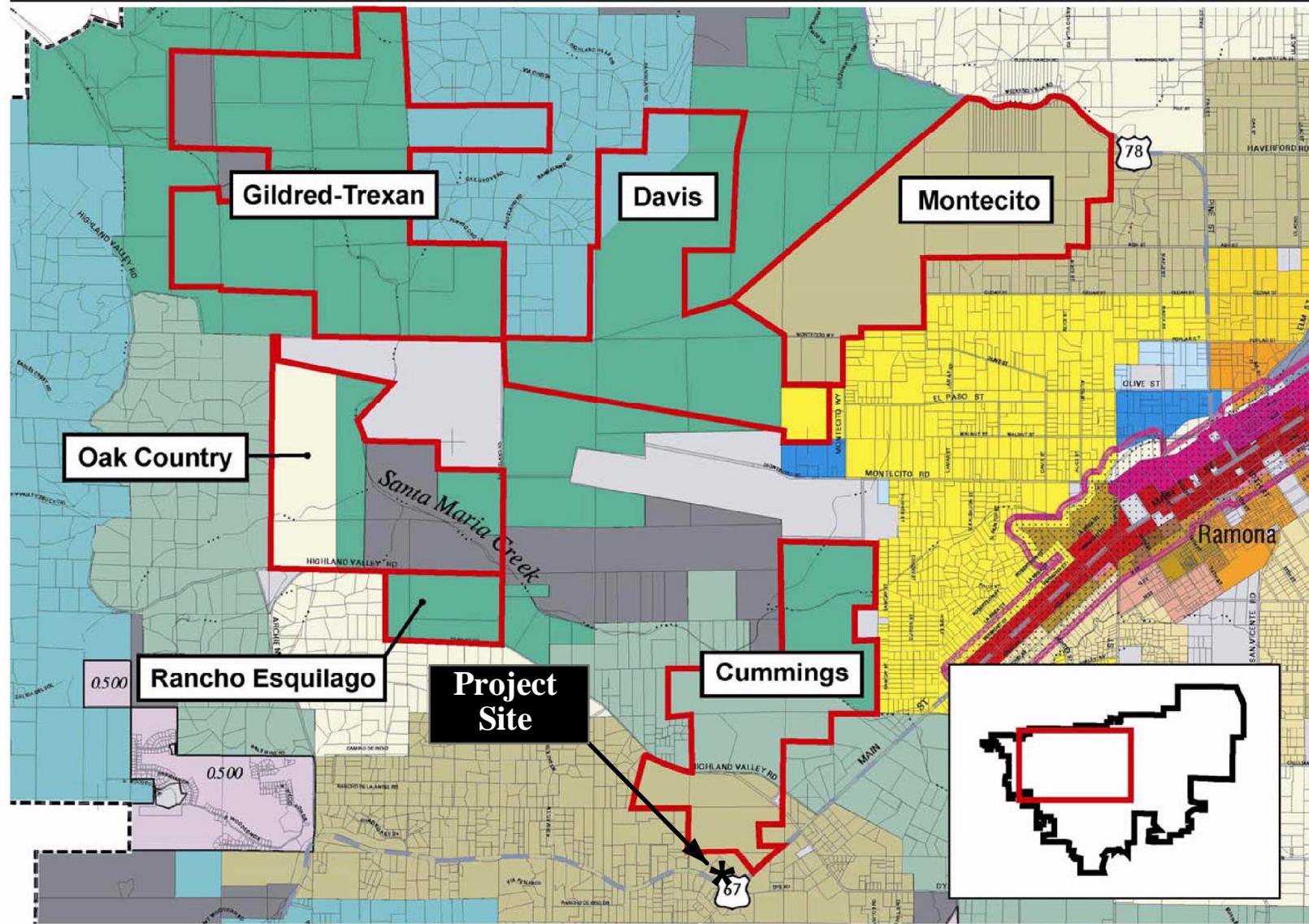
### **Significance of Project Impacts and Proposed Mitigation**

Following is a summary of impacts to biological resources. Applicable and feasible mitigation measures, as required, are proposed that will reduce impacts to less than significant in conformance with the County of San Diego Guidelines for Determining Significance for Biological Resources (County 2007).

The proposed project is a Major Use Permit for a community church on 8.0 gross acres, APN's 283-054-03, 07, 08 & 11. As part of the project, development including building pads, roadways, and utilities would be graded. The only offsite improvement that will be performed by the project is a temporary hammer head at the intersection of Highland Valley Court and Old Highland Valley Road.

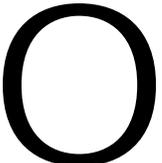
Table 2 identifies the potential impacts as a result of the proposed project. Impacts to non-native grassland will be mitigated offsite at a 0.5:1 ratio in conformance with the Guidelines For Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2007). Mitigation is not required for impacts to developed habitat. Fuel modification will be contained within the project site. Offsite impacts for road improvements are proposed in TM 5344, the Cumming Ranch project. The construction of the temporary hammerhead will primarily impact developed land. However, a small amount of non-native grassland will be impacted also and is included in the impacts in Table 2. Biological resources are depicted in Figure 4.

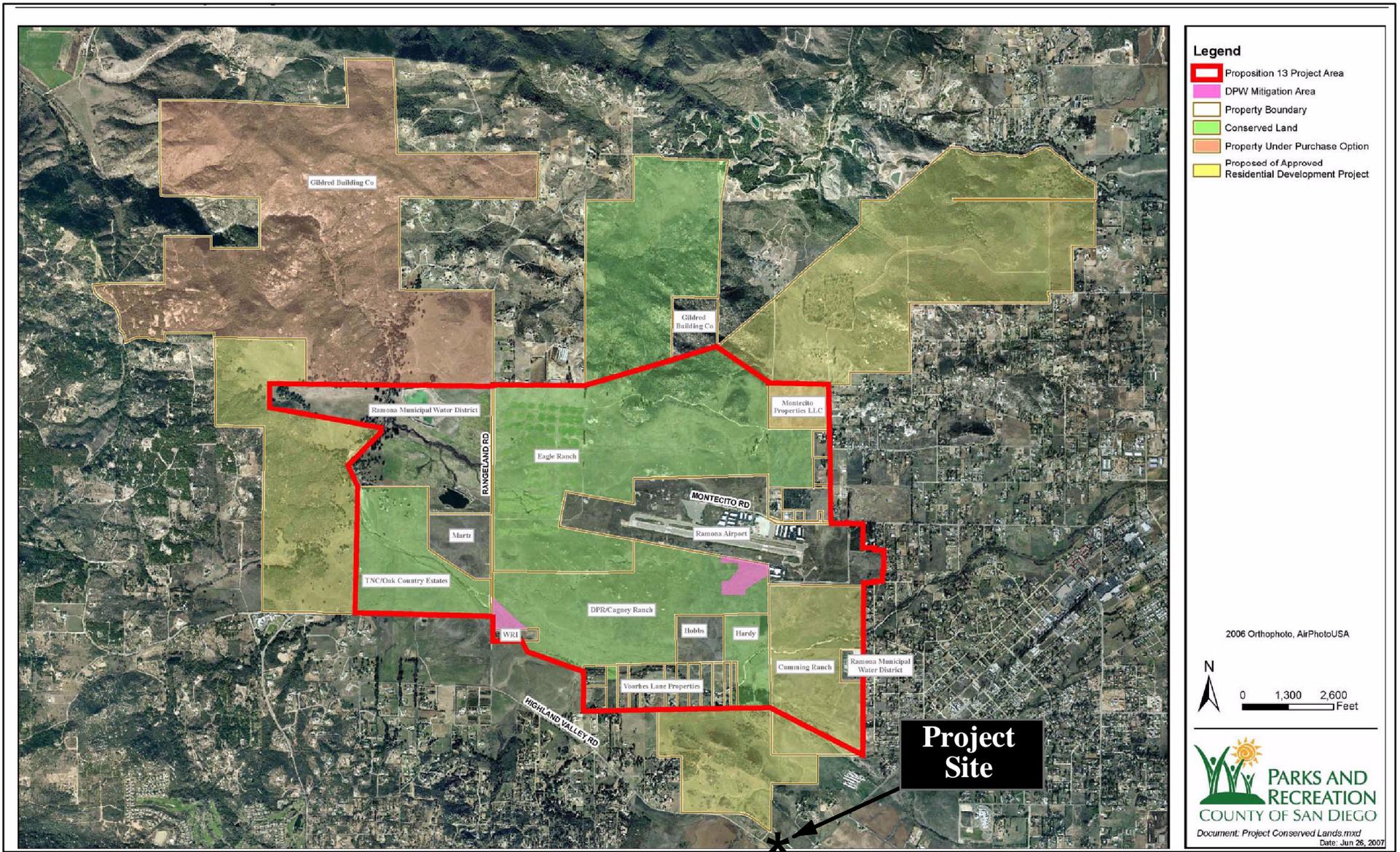
# Ramona Grasslands



Source: [http://www.co.sandiego.ca.us/cnty/cntydepts/landuse/planning/GP2020/pubs/pc\\_feb05/ramona\\_grasslands.pdf](http://www.co.sandiego.ca.us/cnty/cntydepts/landuse/planning/GP2020/pubs/pc_feb05/ramona_grasslands.pdf)

**Figure 6**  
**Ramona Grasslands Special Study Area**  
**Spirit of Joy**  
**APN 283-054-03, 07, 08 & 11**

  
No Scale



Source: County 2007. County of San Diego Department of Parks and Recreation, Area Specific Management Directives for Ramona Grasslands Preserve San Diego County, page 53, June 2007.

**Figure 7**  
**Ramona Grasslands Preserve Area**  
**Specific Management Directives**  
**Spirit of Joy**  
**APN 283-054-03, 07, 08 & 11**

**O**  
**No Scale**

Table 2, identifies the habitats and potential impacts onsite. The artificial wetland and drainage swale impacts are encompassed within the non-native grasslands since that is the habitat in which they occur, and they contain the similar species composition.

<b>Table 2 Potential Impacts</b>						
<b>Habitat/ Vegetation Community</b>	<b>Existing (acres)</b>	<b>Impacts (acres)</b>	<b>Mitigation Ratio</b>	<b>Mitigation Required (acres)</b>	<b>Preserved Onsite (acres)</b>	<b>Offsite Mitigation (acres)</b>
Non-Native Grassland	7.5	7.6*	0.5:1	3.8	0	3.8
Developed	0.5	0.5	N/A	N/A	N/A	N/A
<b>Total</b>	<b>8.0</b>	<b>8.1</b>	<b>N/A</b>	<b>3.8</b>	<b>0</b>	<b>3.8</b>

\* Includes impacts associated with temporary hammerhead offsite.

### **Significance of Project Impacts**

This section addresses potential direct, indirect, and cumulative impacts to biological resources that would result from implementation of the proposed project, and provides analyses of significance for each potential impact in conformance with the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2007).

**Direct Impacts** are immediate impacts resulting from the permanent removal of habitat.

**Indirect Impacts** result from changes in land use adjacent to natural habitat and primarily result from adverse “edge effects;” either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with urban development. During construction of the project, short-term indirect impacts include dust and noise which could temporarily disrupt habitat and species vitality or construction related soil erosion and run-off. Long-term indirect impacts may include intrusions by humans and domestic pets, noise, lighting, invasion by exotic plant and wildlife species, use of toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrological changes (e.g., groundwater level and quality).

**Cumulative Impacts** refer to incremental individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor, but collectively significant as they occur over a period of time.

### **Thresholds of Significance**

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent

loss of an important resource, such as a population of a rare plant or wildlife. Impacts may be important locally because they result in an adverse alteration of existing site conditions, but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether or not that impact can be mitigated to a level below significant. Generally, there are three levels of adverse impacts associated with biological resources: significant, locally important, and not significant. These levels of impacts were applied to the project site and are used below in the discussion of specific potential impacts.

Direct impacts to the developed habitat onsite would not be considered significant. Direct impacts to the non-native grassland habitat would be considered locally important. No direct impacts will occur to sensitive plant or wildlife species. Mitigation is required for the direct impacts to sensitive habitats. These impacts are discussed below.

### Non-Native Grassland

Impacts to non-native grassland onsite would be considered locally important. These impacts would require mitigation at a 0.5:1 ratio in accordance with the Guidelines for Determining Significance and Survey, Report Format, Content and Mapping Requirements (County 2007). The project site does not warrant the higher 1:1 mitigation ratio in the Guidelines for impacts to the Ramona Grasslands because no sensitive plant or animal species were identified onsite (with the exception of the observation of a white-tailed kite flying over the site), and the site is on the periphery of the primary focus of the Grassland Preserve area and located within development to the south, west and east.

### Developed

Impacts to developed habitat onsite would not be considered significant. This area is associated with fire clearing for the roads surrounding the property that extend onto the property in the east and west. The developed area also occurs in the southeast where some trees have been ornamentally planted to shield the property from SR 67.

### Jurisdictional Wetlands

Impacts to the drainage swale and artificial wetland onsite are being mitigated through the non-native grassland mitigation, the habitat that they contain. However, the project proposes the construction of an approximately 1058 foot long and 6 foot wide storm water channel to convey the storm water and urban runoff that currently creates the artificial wetland and is conveyed by the drainage swale. Provided that this is an earth lined channel and/lined with a pervious surface the created channel will provide the same functions and values as the drainage swale, storm water conveyance and filtration.

Impacts to the jurisdictional features onsite will require permits from ACOE, RWQCB and CDFG as applicable. At the time the permits are obtained the agencies may require additional mitigation then is proposed with this report.

## **Indirect Impacts**

No significant impacts are anticipated to occur as a result of the proposed project. The project site is not continuous with native habitats as a result of being surrounded by developed roads. The project will not have indirect impacts to offsite vernal pools as a result of the construction of the 1,058 foot storm drain channel due to the fact the water is exiting the site at the same location that it currently does and due to Storm Water Regulations the water will be not be allowed to leave the site with an increased flow or velocity from the existing condition.

## **Cumulative Impacts**

The following cumulative impacts analysis was performed by REC and Helix Environmental for the (Draft) Environmental Impact Report for the Montecito Ranch Subdivision, GPA 04-013, R04-22 P04-045. The information was provided by Helix Environmental. Due to the location of the Montecito Ranch project to the north of the Spirit of Joy project (Figure 6) within the valley it was determined that it considered an appropriate geographic area for the cumulative impacts analysis for habitats and species of concern on the Montecito Ranch project and the Spirit of Joy Property.

Projects that were reviewed in association with the cumulative biological resources impacts analysis include the Ramona Airport Improvement Project, Boundary Avenue School, Olive Peirce Middle School and Ramona High School reconstruction and expansion, Leulf Ranch, Stonecrest, Borysecwicz, Salvation Army Divisional Camp, Monte Vista Oaks, Rancho Esquilago, Oak Country Estates, Rancho Canada, A Touch from Above, Rancho San Vicente, Black Canyon, MDS Development Corporation/DECA Group Project, A Natural High, Inc., Rainbird Road, Sunset Vista, Elliot TM, Lakeside Ventures TM, Nickel Creek, McCandles TPM, Means TPM, KVAAS TPM, Saffian TPM, Wakeman TPM, Fenton Ranch, Koury TPM, Spitsbergen, McDonald TPM, Herold TPM, Alamo Storage, Ramona Library, Olive Street Storage, Sgobassi, Dahl, and Huber.

Permanent impacts to sensitive habitats associated with the proposed project include non-native grassland. The area for analysis was focused primarily on the Ramona Grasslands. The Ramona Grasslands area is located in the Santa Maria Valley mostly to the north of north of Santa Maria Creek. The Ramona Grasslands do not have an officially defined boundary, but encompass approximately 9,000 acres of undeveloped pastures. The area extends across the valley floor and is generally flat to gently sloping with numerous rock outcroppings.

Implementation of the recent and foreseeable projects discussed above would result in a permanent loss of 509.38 acres of non-native grassland in addition to the impacts to 7.6 acres of non-native grassland proposed to be impacted by the Spirit of Joy project.

The collective loss of 516.5 acres (representing approximately eight percent) of the non-native grassland regionally would not be considered cumulatively substantial, as impacts

to this vegetation community in Ramona are primarily occurring within in-fill parcels surrounded by development such as the Spirit of Joy project, or along the fringes of large contiguous patches of this habitat community. Development of small patches of vegetation along the fringes of these habitat communities results in minimization of edge effects and the preservation of large, contiguous patches of habitat. Additionally approximately 1,800 acres of habitat within the Ramona grasslands has been purchased by the Nature Conservancy and conserved.

No natural wetlands occur onsite. The artificial wetland is the result of the storm drain outlet. However the artificial wetland and/or drainage swale may be jurisdictional as discussed earlier. The creation of the approximately 1,058 foot storm channel will mitigate the impacts resulting from the loss of the artificial wetland and swale by conveying and filtering the water. The water will be discharged in to the swale north of the project site therefore preventing impacts to down stream wetland resources.

The project does not propose to impacts sensitive plants therefore Spirit of joy would not contribute to a significant cumulative impact.

One sensitive raptor species, white-tailed kite was observed flying over the project site. The cumulative impact area for sensitive wildlife species, including raptors, is comprised of the Central Foothills Humid Temperate Ecological Region and Ramona Grasslands. Implementation of cumulative projects would result in the permanent loss of eight percent of non-native grassland in the Ramona area, which provides for potential raptor foraging habitat. However, this loss is not considered significant, as impacts would be located primarily along the fringes of large patches of habitat, which allows for avoidance and preservation of large contiguous patches of habitat. Therefore, cumulative impacts to raptors are considered less than significant.

The project does not contain regional or local wildlife corridors therefore the project will not contribute to a significantly cumulative impact.

## **Mitigation**

Under CEQA, mitigation is required for all significant biological impacts. Jurisdictions often require mitigation for locally important impacts to prevent cumulatively significant impacts from occurring.

## **Direct Impacts**

Direct impacts will occur to non-native grassland resulting in locally important impacts. Approximately 7.6 acres of non-native grassland habitat will be impacted as a result of the proposed project. Mitigation will occur at a 0.5:1 ratio through the offsite preservation of 3.8 acres of non-native grassland or other suitable habitat. The implementation of this mitigation will prevent the project from contributing to cumulatively significant impacts.

## Conclusion

Implementation of the proposed mitigation measures will prevent the project from contributing to cumulatively significant impacts.

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### **Preparer and Persons/Organizations Contacted**

This report has been prepared by Robin Church.



Robin Church, County Approved Biologist

**APPENDIX A**  
**PLANTS OBSERVED**

**APPENDIX A  
PLANT SPECIES OBSERVED ON THE SPIRIT OF JOY PROPERTY  
APN'S 283-054-03, 07, 08 & 11**

Family Name	Species Name	Common Name	Habitat
<b>CONIFERS</b>			
Pinaceae	<i>Pinus sp.</i>	Pine	NNG
<b>ANGIOSPERMS: DICOTS</b>			
Anacardiaceae	* <i>Schinus molle</i>	Peruvian Pepper Tree	DEV
Asteraceae	<i>Ambrosia psilostachya</i>	Western Ragweed	NNG
Asteraceae	<i>Aster chilensis</i>	Chile Aster	NNG
Asteraceae	<i>Cirsium scariosum</i>	Bird's-nest Thistle, Elk Thistle	NNG
Asteraceae	<i>Conyza canadensis</i>	Horseweed	NNG
Asteraceae	<i>Deinandra fasciculata</i>	Fascicled Tarweed	NNG
Asteraceae	<i>Gnaphalium canescens</i> ssp. <i>microcephalum</i>	White Everlasting	NNG
Asteraceae	<i>Wyethia ovata</i>	Southern Mule's Ear	NNG
Brassicaceae	* <i>Brassica nigra</i>	Black Mustard	NNG
Brassicaceae	<i>Guillenia lasiophylla</i>	California Mustard	NNG
Caryophyllaceae	* <i>Stellaria media</i>	Common Chickweed	NNG
Chenopodiaceae	* <i>Salsola tragus</i>	Russian-thistle, Tumbleweed	NNG
Euphorbiaceae	<i>Eremocarpus setigerus</i>	Doveweed	NNG
Fabaceae	<i>Astragalus sp.</i>	vetch	NNG
Fabaceae	<i>Lotus strigosus</i>		NNG
Fagaceae	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast Live Oak, Encina	DEV
Fagaceae	<i>Quercus kelloggii</i>	California Black Oak	DEV
Geraniaceae	* <i>Erodium sp.</i>	Filaree	NNG
Lamiaceae	<i>Trichostema lanceolatum</i>	Vinegar Weed	NNG
Platanaceae	<i>Platanus racemosa</i>	Western Sycamore	DEV
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	California Buckwheat	NNG
Polygonaceae	* <i>Rumex crispus</i>	Curly Dock	NNG
Salicaceae	<i>Salix laevigata</i>	Red Willow	NNG
Tamaricaceae	* <i>Tamarix sp.</i>	Tamarisk, Salt-cedar	NNG
<b>ANGIOSPERMS: MONOCOTS</b>			
Poaceae	* <i>Bromus madritensis</i> ssp. <i>rubens</i>	Foxtail Chess	NNG
Poaceae	* <i>Cynodon dactylon</i>	Bermuda Grass	NNG

\* = Non-native Plant Species, DEV=Developed, NNG=Non-Native Grassland

## **APPENDIX B**

### **WILDLIFE SPECIES OBSERVED**

**APPENDIX B**

**WILDLIFE SPECIES OBSERVED ON THE SPIRIT OF JOY PROPERTY**

**APN'S 283-054-03, 07, 08 & 11**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat Observed *</b>	<b># Observed (estimate)</b>
<b>Insects</b>			
California white	<i>Pontia sisymbrii</i>	NNG	1
Spiders		NNG	Many
Red ant	<i>Formica</i> sp.	NNG	Many
Unidentified blue		NNG	1
<b>Birds</b>			
American crow	<i>Corvus brachyrhynchos</i>	OH	4
Fox sparrow	<i>Passerella iliaca</i>	NNG	1
Mourning dove	<i>Zenaida macroura</i>	OH	1
Red-tailed hawk	<i>Buteo jamaicensis</i>	OH	1
Western meadowlark	<i>Sturnella neglecta</i>	NNG	1
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	NNG	1
White-tailed kite	<i>Elanus caeruleus</i>	OH	1
<b>Mammals</b>			
California ground squirrel	<i>Spermophilus beecheyi</i>	NNG	3
Coyote	<i>Canis latrans clepticus</i>	NNG	Tracks
Desert cottontail rabbit	<i>Sylvilagus audubonii</i>	NNG	Scat

NNG-Non-Native Grassland, OH-Overhead

**APPENDIX C**

**SENSITIVE PLANT SPECIES  
WITH THE POTENTIAL TO OCCUR**

**APPENDIX C**  
**SENSITIVE SPECIES OBSERVED OR WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY**  
**(USGS SAN PASQUAL QUAD)**

Scientific Name and Common Name	Sensitivity Codes				Habitat Preference/ Requirements	Verified On-Site Yes/No (Direct/Indirect Evidence)	Potential to Occur On-Site (Observed L/M/H/U)	Factual Basis for Determination of Occurrence Potential
	CNPS	County	State	Federal				
<i>ACANTHOMINTHA ILICIFOLIA</i> "San Diego thorn-mint"	1B.1	A, NE	SE	FT	Chaparral, coastal scrub, valley & foothill grassland, vernal pools, 10-960 meters	No	Low	The project site lacks appropriate soils for this species.
<i>BRODIAEA ORCUTTII</i> "Orcutt's brodiaea"	1B.1	A	None	SOC	Closed cone coniferous forests, chaparral, cismontane woodlands, meadows/seeps, valley & foothill grasslands, vernal pools/mesic, clay and sometimes serpentine, 30-1692 meters	No	Low	The project site lacks vernal pools.
<i>CENTROMADIA PARRYI SSP. AUSTRALIS</i> "southern tarplant"	1B.1	A	None	SOC	Marshes & swamps (margins), valley & foothill grasslands (vernally mesic), vernal pools, 1-425 meters	No	Low	The project site lacks vernal pools.
<i>GILIA CARUIFOLIA</i> "caraway-leaved gilia"	4.3	D	None	None	Chaparral, lower montane coniferous forest/sandy, openings, 1400-2300, Blooms May-August	No	Low	The project site lacks appropriate habitat and is below the elevation range for this species.
<i>HARPAGONELLA PALMERI</i> "Palmer's grapplinghook"	4.2	D	None	SOC	Chaparral, Coastal sage scrub, valley & foothill grassland, clay, 20-955 meters, Blooms March-May	No	Low	The project site lacks appropriate soils for this species.
<i>HOLOCARPHA VIRGATA SSP. ELONGATA</i> "graceful tarplant"	4.2	D	CE	SOC	Chaparral, cismontane woodland, coastal scrub, valley & foothill grassland, 60-1100 meters, Blooms May-November	No	Low	This species would have been observable during site visits.
<i>HORDEUM INTERCEDENS</i> "vernal barley"	3.2	C	None	None	Coastal dunes, coastal scrub, valley & foothill grassland (saline flats & depressions), vernal pools, 5-1000 meters, Blooms March-June	No	Low	The project site lacks vernal pools.
<i>NAVARRETIA FOSSALIS</i> "spreading navarretia"	1B.1	A	None	FT	Chenopod scrub, marshes & swamps (assorted fresh water), playas, vernal pools, 30-1300 meters, Bloom April-June	No	Low	The project site lacks vernal pools.

**SENSITIVITY CODES**

**FEDERAL SPECIES DESIGNATIONS (USFWS 2001)**

Category  
**FE**- Federal Endangered Species  
**FT**- Federal Threatened Species  
**FPE**- Taxa proposed to be listed as Endangered  
**FPT**- Taxa proposed to be listed as Threatened  
**SOC**- Species of Concern (former Candidate Species)

**STATE SPECIES DESIGNATIONS (CDFG 2000)**

Category  
**SE**- State listed as Endangered  
**CT**- State listed as Threatened  
**CR**- State listed as Rare  
**SCE**- State Candidate for listing as Endangered  
**SCT**- State Candidate for listing as Threatened  
**CSC**- CDFG "Species of Special Concern"  
**CE**- California endemic

**CALIFORNIA NATIVE PLANT SOCIETY DESIGNATIONS (CNPS 2007 online)**

The CNPS Lists

List 1- Plants of highest priority  
List 1A- Plants presumed extinct in California  
List 1B- Plants rare, threatened or endangered in California and elsewhere  
List 2- Plants rare, threatened or endangered in California, but more common elsewhere  
List 3- Plants about which we need more information (A Review List)  
List 4- Plants of limited distribution (A Watch List)

Threat Code Extensions

.1 - Seriously endangered in California  
.2 - Fairly endangered in California  
.3 - Not very endangered in California

**COUNTY OF SAN DIEGO DESIGNATIONS (COUNTY 2006)**

The County Lists

List A- Plants rare, threatened or endangered in California and elsewhere  
List B- Plants rare, threatened or endangered in California but more common elsewhere  
List C- Plants which may be quite rare, but need more information to determine their true rarity status  
List D- Plants of limited distribution and are uncommon, but not presently rare or endangered



**APPENDIX D**

**SENSITIVE WILDLIFE SPECIES  
WITH THE POTENTIAL TO OCCUR**

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
<b>INVERTEBRATES</b>						
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	Group 1	CSC	FE	Vernal pools; 0-3000ft.	Low	Vernal pools do not occur on the project site.
<b>INSECTS</b>						
Monarch butterfly <i>Danaus plexippus</i>	Group 2			Wintering sites composed of grassland, oak woodlands and montaine meadows; host plant milkweed ( <i>Asclepias</i> sp.). 500 to over 3000ft.	Low	The project site lacks milkweed.
<b>AMPHIBIANS</b>						
Western spadefoot toad <i>Scaphiopus hammondi</i>	Group 2	CSC	SOC	Grassland situations can occasionally occur in valley-foothill hardwood woodlands. Populations may persist a few years in orchard-vineyard habitats; 0-3000ft.	Moderate	The project site contains suitable habitat for this species.
<b>REPTILES</b>						
Orange-throated whiptail <i>Aspidoscelis hyperythrus beldingi</i>	Group 2	CSC Protected		Can be found in coastal sage scrub, mixed chaparral, grassland, riparian, and chamise chaparral habitats. Open hillsides with brush and rock, well drained soils; 0-1000ft.	Moderate	Appropriate habitat occurs onsite.
San Diego banded gecko <i>Coleonyx variegatus abbotti</i>	Group 1			This species is uncommon in coastal scrub and chaparral mostly occurring in granite or rocky out crops in this habitat (Zeiner <i>et. al.</i> 1988).	Low	The project site lacks appropriate habitat for this species.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
San Diego Horned Lizard <i>Phrynosoma coronatum blainvillei</i>	Group 2	CSC	SOC	Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grass habitats; needs open areas for basking, ants and other insect prey. 0-8000ft.	Moderate	Appropriate habitat occurs onsite.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	Group 2	CSC	SOC	Coastal sage scrub, grassland, riparian and coastal desert dunes. Found in sandy loam and areas of accumulated leaf litter beneath shrubs and trees in moist micro-habitats; 0 to 5000 ft.	Low	The project site lacks appropriate habitat for this species.
<b>MAMMALS</b>						
American badger <i>Taxidea taxus</i>	Group 2	CSC		This species is most abundant in drier open stages of most shrub, forest, and herbaceous habitats; 0 to over 3000ft.	Low	Burrows are readily visible and none were detected onsite.
Big free-tailed bat <i>Nyctinomops macrotis</i>	Group 2	CSC		This species is found in a variety of plant associations including desert scrub, various woodlands and coniferous forests. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	Low	The project site lacks appropriate roosting habitat for this species.
Dulzura California pocket mouse <i>Chaetodipus californicus femoralis</i>	Group 2	CSC		Occupies coastal sage scrub, mixed chaparral, oak woodland, chamise chaparral, and mixed conifer habitats; 0 to over 3000ft.	Low	The project site lacks appropriate habitat for this species.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
Greater western mastiff bat <i>Eumops perotis californicus</i>	Group 2	CSC		Open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting; 500-3000ft.	Low	The project site lacks appropriate roosting habitat for this species.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Group 2	CSC		Nocturnal. Found in coastal sage scrub and mixed and chamise chaparral. Seeks cover in rocky/gravelly areas with a yucca overstory; 500-3000ft	Low	The project site lacks appropriate habitat for this species.
Pallid bat <i>Antrozous pallidus</i>	Group 2	CSC	SOC	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, desert wash and desert scrub. Prefers snags (especially oak), rocky outcrops, cliffs and crevices with access to open habitats for foraging; 0-6000ft.	Low	The project site lacks appropriate roosting habitat for this species.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Group 2	CSC		This species is found in a variety of plant associations including desert scrub, coastal scrub and pine oak woodlands. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	Low	The project site lacks appropriate roosting habitat for this species.
San Diego black-tailed jackrabbit <i>Lepus californicus bennetti</i>	Group 2	CSC		Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, mixed conifer, and closed cone forest and open areas. Common in irrigated pastures and row crops; 0 to over 3000ft.	Moderate	Appropriate habitat occurs onsite.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	Group 2	CSC		Nocturnal in coastal sage scrub, mixed chaparral, grassland, and chamise chaparral. Low to moderate shrub cover is preferred; 500-3000ft.	Low	The project site lacks appropriate habitat and shrub cover for this species.
Southern mule deer <i>Odocoileus hemionus fuliginata</i>	Group 2			The mule deer is extremely adaptable occupying all but two or three of the major vegetation types in the western United States.	Low	The project site lacks appropriate habitat and cover for this species.
Stephen's Kangaroo Rat <i>Dipodomys stephensi</i>	Group 1	ST	FE	Occurs primarily in annual and perennial grassland habitats, but may occur in coastal sage scrub with sparse canopy cover, or in disturbed areas. Sparse perennial vegetation with sandy or gravelly soil.	Low	A habitat assessment was performed and no sign of this species was found onsite. The nearest location of this species is approximately 1.3 miles to the north.
Townsend's western big-eared bat <i>Corynorhinus townsendii</i>	Group 2	CSC	SOC	Found in all but subalpine and alpine habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for night, day, hibernation or maternity roosts; 500-10,000ft.	Low	The project site lacks appropriate roosting habitat for this species.
Yuma myotis <i>Myotis yumanensis</i>	Group 2			Mixed chaparral, riparian, oak woodland and pinon juniper. Optimal habitats are open forests and woodlands with sources of water over which to feed; roosts in buildings, mines, caves, bridges, crevices, and abandoned swallow nests. Sea level to 11,000 feet, but uncommon above 8000 feet.	Low	The project site lacks appropriate habitat for this species.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
<b>BIRDS</b>						
White-tailed kite <i>Elanus caeruleus</i>	Group 1	CSC Fully protected		Yearlong coastal & valley lowlands, usually near ag. areas. Forage: open grasslands, meadows, farmlands, wetlands, freeway divides. Nests in tops of tall trees near open areas.	Observed	The project site contains appropriate foraging habitat and this species is known from the project area.
Burrowing owl <i>Athene cunicularia hypugea</i>	Group 1	CSC		Open, dry grasslands agricultural and range lands, and desert habitats of low growing vegetation (associated with burrowing animals); 0-1000ft.	Low	No burrows were detected during surveys.
California gull <i>Larus californicus</i>	Group 2	CSC		Non-breeding colonies in lakes and bays; In breeding season on interior lakes and marshes and in winter mostly on the seacoast; 0 to over 3000ft.	Low	This species is not known to winter or migrate through or near the project area.
Canadian goose <i>Branta canadensis</i>	Group 2			Lakes, bays, rivers, mudflats, marshes, and fields. Often feeds in open grasslands and fields. Usually nests on the ground near water.	Low	The project site contains appropriate foraging habitat, however there are no fresh or brackish water sources nearby.
Cooper's Hawk <i>Accipiter cooperi</i>	Group 1	CSC (nesting)		Uncommon migrant and winter visitor, rare summer resident, during migration and winter found throughout SD County. Found in oak woodlands or edges of woods, nests in tall trees.	High	The project site contains appropriate foraging habitat and this species is known from the project area.
Ferruginous hawk <i>Buteo regalis</i>	Group 1	CSC		Winters in grasslands and desert scrub. Prefers to nest in trees, but will nest in a bush or on the ground on a ledge, riverbank or hillside; 0-3000ft.	High	The project site contains appropriate foraging habitat and this species is known to migrate and winter in the project area.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			
Golden eagle <i>Aquila chrysaetos canadensis</i>	Group 1	CSC Fully protected		Mountains, foothills, and adjacent grassland, open areas and canyons; 0-11,500 ft. (nesting/wintering)	Moderate	The project site contains appropriate foraging habitat.
Grasshopper sparrow <i>Ammodramus savannarum</i>	Group 1			Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches; 0 to over 3000ft.	Low	The project site lacks the appropriate shrub component preferred by this species.
Horned lark <i>Eremophila alpestris actia</i>	Group 2	CSC		Open patches of bare land alternating with low vegetation in grasslands, montaine meadows, and sagebrush plains; 0 to over 3000ft.	High	The project site contains appropriate foraging habitat and this species is known from the project area.
Loggerhead shrike <i>Lanius ludovicianus</i>	Group 1	CSC		Roadside vegetation, thickets, savanna, coastal sage scrub, grasslands, riparian, oak woodlands and desert scrub and wash or any open country with high perches as lookouts; 0-3000ft.	Low	The project site lacks the appropriate shrub and tree component necessary for this species.
Northern harrier <i>Circus cyaneus hudsonius</i>	Group 1	CSC		Grasslands and salt, alkali and freshwater marshes; 0-1000ft. Nests on ground in shrubby vegetation, usually emergent wetlands or along rivers or lakes. May also nest in grasslands, grain fields, or on sagebrush flats several miles from water.	Moderate	The project site contain appropriate foraging habitat.
Tricolored blackbird <i>Agelaius tricolor</i>	Group 1	CSC		Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs.	Low	The project site lacks appropriate habitat for this species.
Turkey Vulture <i>Cathartes aura</i>	Group 1, County Sensitive			Spring and fall migrant, uncommon to locally common winter visitor and rare to uncommon summer resident of San Diego County (Unitt 2004)	Moderate	Appropriate foraging habitat occurs onsite.

**APPENDIX D**

**SENSITIVE ANIMAL SPECIES WITH THE OBSERVED AND WITH POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE SPIRIT OF JOY  
PROPERTY (USGS SAN PASQUAL QUAD)**

Common Name and Scientific Name	Sensitivity Code and Status			Habitat Preference/Requirements	Potential On-Site	Factual Basis for Determination of Occurrence Potential
	County	State	Federal			

**SENSITIVITY CODES**

**FEDERAL SPECIES DESIGNATIONS (USFWS 2001)**

Category

- FE-** Federal Endangered Species
- FT-** Federal Threatened Species
- FPE-** Taxa proposed to be listed as Endangered
- FPT-** Taxa proposed to be listed as Threatened
- SOC-** Species of Concern (former Candidate Species)

**STATE SPECIES DESIGNATIONS (CDFG 2000)**

Category

- SE-** State listed as Endangered
- ST-** State listed as Threatened
- SR-** State listed as Rare
- SCE-** State Candidate for listing as Endangered
- SCT-** State Candidate for listed as Threatened
- CSC-** CDFG "Species of Special Concern"

**COUNTY OF SAN DIEGO DESIGNATIONS (COUNTY 2006)**

The County Groups

- Group 1-** Species that have a very high level of sensitivity, either because they are listed as threatened or endangered or because they have a very specific natural history requirements that must be met
- Group 2-** Species that are becoming less common, but are not yet so rare that extirpation of extinction is imminent without immediate action. These species tend to be prolific within their suitable habitat types

**APPENDIX E**  
**WETLAND DELINEATION**

WETLAND DETERMINATION DATA FORM – Arid West Region (DRAFT)

Project/Site: Spirit of Joy City/County: Ramona CA Sampling Date: 1/16/08  
 Applicant/Owner: \_\_\_\_\_ State: \_\_\_\_\_ Sampling Point: W1  
 Investigator(s): ANDREW DEWAMOND Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, fan, etc.): FLAT GRASSLAND Local relief (concave, convex, none): NONE Slope (%): FLAT  
 Subregion (LRR): \_\_\_\_\_ E:6359361.31 N:1949764.75 Datum: WGS84 IIN  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation X, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes X No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? .	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: <u>1 - 2' wide swale drainage meandering through grassland w/raised slopes on each side. Hydric soils present. Not a wetland but jurisdictional</u>		

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0/2</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Total Cover: _____				
<b>Sapling/Shrub Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover: _____				
<b>Herb Stratum</b>				
1. <u>NON NATIVE GRASSES</u>	<u>90%</u>	_____	_____	
2. <u>MUSTARD SP.</u>	<u>10%</u>	_____	_____	
3. <u>OTHER</u>	<u>&lt; 1%</u>	_____	_____	
4. _____	_____	_____	_____	
5. <u>S</u>	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
Total Cover: <u>100%</u>				
<b>Woody Vine Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		

**Hydrophytic Vegetation Indicators:**  
 \_\_\_ Dominance Test is >50%  
 \_\_\_ Prevalence Index is ≤3.0<sup>1</sup>  
 \_\_\_ Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 \_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes \_\_\_\_\_ No X

Remarks: SITE IS REGULARLY DISCED

SOIL

Sampling Point: 125

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-3	ORGANIC MATTER		(GRASS, LITTER, ROOT MASS)			loamy sand	
3-18	3/3 (7.5M)		5/6 (10.4M)			loamy sand	
		85%		15%			

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: Reducing conditions present

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (any one indicator is sufficient)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Drainage Patterns (B9)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry Season Water Table (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Salt Deposits (C5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Mud Casts (C9)
<input type="checkbox"/> Inundation on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D7)
<input type="checkbox"/> Water-stained Leaves (B8)	
<input type="checkbox"/> Biotic Crust (B10)	
<input type="checkbox"/> Aquatic Invertebrates (B11)	
<input type="checkbox"/> Crayfish Burrows (B12)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C2)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Plowed Soil (C6)	
<input type="checkbox"/> Muck Surface (C7)	
<input type="checkbox"/> Saturation on Aerial Imagery (C8)	
<input type="checkbox"/> Shallow Aquitard (D4)	
<input checked="" type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes  No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes  No  Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches): \_\_\_\_\_

Wetland Hydrology Present? Yes  No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: swale present, appears to conduct water flow during rain events, and likely holds water after rain event. Soils as indicated by the reducing conditions observed in soil. Not a wetland but

1/16/08

Spirit of Joy - Sampling pits 2-4:

Pit 2: Easting: 6359414.39 Northing: 194723.58  
Pit 3: Easting: 6359432.38 Northing: 1949688.76  
Pit 4: Easting: 6359460.27 Northing: 1949656.80

Remarks:

both pits showed same vegetation,  
soils, and hydrology as soil pit 1.

**WETLAND DETERMINATION DATA FORM – Arid West Region (DRAFT)**

Project/Site: Spirit of Joy City/County: Ramona, CA Sampling Date: 1/16/08  
 Applicant/Owner: \_\_\_\_\_ State: \_\_\_\_\_ Sampling Point: 5 W  
 Investigator(s): Andrew Drummond Section, Township, Range: \_\_\_\_\_  
 Landform (hillside, terrace, fan, etc.): FLAT GRASSLAND Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): 0  
 Subregion (LRR): \_\_\_\_\_ E 659507.91 N 1949646.07 Datum: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: <u>Area sampled does not have any wetland characteristics, sample location delineates the beginning of the drainage as pits 4 + 3.</u>	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)																
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)																
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0/3</u> (AVB)																
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species <u>100%</u></td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species <u>100%</u>	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species <u>100%</u>	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
Total Cover: _____																				
<b>Sapling/Shrub Stratum</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
Total Cover: _____																				
<b>Herb Stratum</b>																				
1. <u>Erodium sp.</u>	<u>25%</u>																			
2. <u>Black mustard</u>	<u>30%</u>																			
3. <u>non-native grasses</u>	<u>20%</u>																			
4. <u>other non-native weed species (upland)</u>	<u>25%</u>																			
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
Total Cover: _____																				
<b>Woody Vine Stratum</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
Total Cover: _____																				
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____																		

Remarks: Upland Non-Native Grassland Species Dominant. No hydrophytic vegetation observed.

SOIL

Sampling Point 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	7.5YR	(3/3)	NONE					

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: No hydric soils/indicators present.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
<u>Primary Indicators (any one indicator is sufficient)</u>	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1)(Nonriverine)	<input type="checkbox"/> Drainage Patterns (B9)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Dry Season Water Table (C3)
<input type="checkbox"/> Drift Deposits (B3)(Nonriverine)	<input type="checkbox"/> Salt Deposits (C5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Mud Casts (C9)
<input type="checkbox"/> Inundation on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D7)
<input type="checkbox"/> Water-stained Leaves (B8)	
<input type="checkbox"/> Biotic Crust (B10)	
<input type="checkbox"/> Aquatic Invertebrates (B11)	
<input type="checkbox"/> Crayfish Burrows (B12)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C2)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Plowed Soil (C6)	
<input type="checkbox"/> Muck Surface (C7)	
<input type="checkbox"/> Saturation on Aerial Imagery (C8)	
<input type="checkbox"/> Shallow Aquitard (D4)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_

Saturation Present? Yes \_\_\_\_\_ No  Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No hydrology indicators present.

**WETLAND DETERMINATION DATA FORM – Arid West Region**

Project/Site: Spirit of Joy City/County: Ramona Sampling Date: 1/16/08  
 Applicant/Owner: \_\_\_\_\_ State: CA Sampling Point: 6  
 Investigator(s): ANDREW DEJUMENOS Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): \_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_ Slope (%): \_\_\_\_\_  
 Subregion (LRR): \_\_\_\_\_ Lat: E6360044.80 Long: W1949473.84 Datum: WGS 84  
 Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present?	Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes _____ No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No _____		

Remarks: Sample one is likely supported by an artificial water source resulting in the observed hydrology. The lack of soils + vegetation reflect this observation.

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>33%</u> (A/B)
4. _____	_____	_____	_____	Prevalence Index worksheet:	
Total Cover: _____				Total % Cover of:	Multiply by:
Sapling/Shrub Stratum				OBL species _____	x 1 = _____
1. <u>Ragweed</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	FACW species <u>20</u>	x 2 = <u>40</u>
2. <u>Rumex crispus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	FAC species _____	x 3 = _____
3. <u>NON NATIVE GRASSES</u>	<u>60</u>	<input checked="" type="checkbox"/>	<u>UPL</u>	FACU species _____	x 4 = _____
4. _____	_____	_____	_____	UPL species <u>30</u>	x 5 = <u>150</u>
5. _____	_____	_____	_____	Column Totals: <u>100</u> (A)	<u>440</u> (B)
Total Cover: _____				Prevalence Index = B/A = <u>4.4</u>	
Herb Stratum				Hydrophytic Vegetation Indicators:	
1. _____	_____	_____	_____	___ Dominance Test is >50%	
2. _____	_____	_____	_____	___ Prevalence Index is ≤3.0 <sup>1</sup>	
3. _____	_____	_____	_____	___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
4. _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
5. _____	_____	_____	_____	___	
6. _____	_____	_____	_____	___	
7. _____	_____	_____	_____	___	
8. _____	_____	_____	_____	___	
Total Cover: _____				___	
Woody Vine Stratum				___	
1. _____	_____	_____	_____	___	
2. _____	_____	_____	_____	___	
Total Cover: _____				___	
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	

Remarks: A small willow wattle 3 was starting to grow but only 2 in height. Dominance of non-hydrophytic vegetation confirms likelihood of a transient artificial water source.

**SOIL**

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8"	7.5yr	3/3	100					
8-16"	WATER							

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix. <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)		<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
--	--	---	--

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No

Remarks: Soils inundated @ 8", no hydric indicators present

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <b>Primary Indicators (any one indicator is sufficient)</b> <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (2 or more required)</b> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
--	--	---	--

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

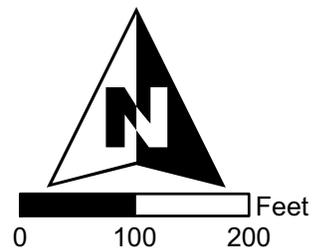
Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: surface water present nearby, likely from urban/stormwater runoff from the southwest



**Soil Pit Locations  
Spirit of Joy  
APN 283-054-03, 07, 08 & 11**





*View of Swale Sampled (Pits 1 – 5)*



*Reduction Features observed in Pits 1-4*



*Pit 6 Location*

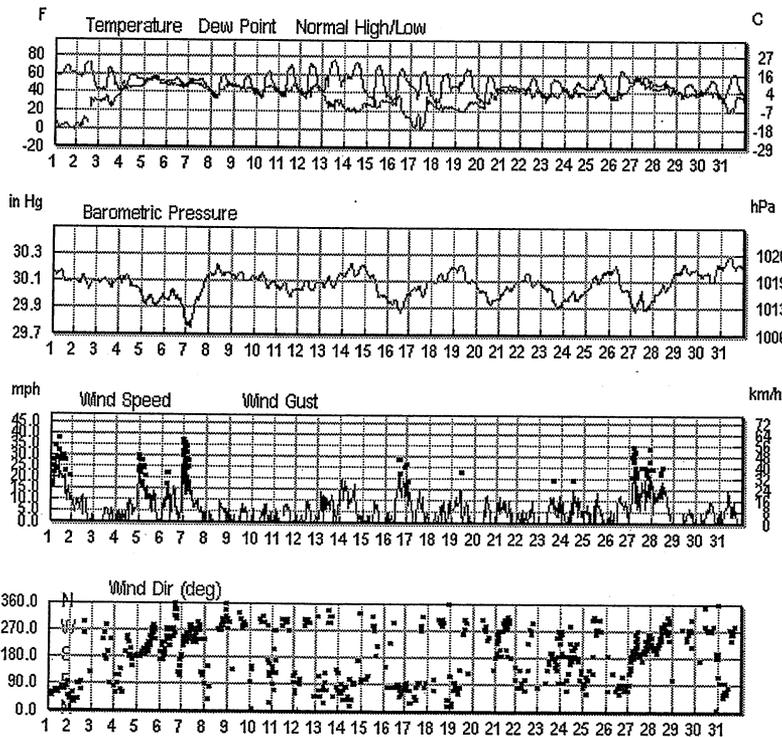
**APPENDIX F**  
**WEATHER DATA**

### History for Ramona, CA

Month of January, 2008

#### Monthly Summary

	Max:	Avg:	Min:	Sum:
<b>Temperature:</b>				
Max Temperature	75 °F / 23 °C	61 °F / 16 °C	49 °F / 9 °C	
Mean Temperature	62 °F / 16 °C	49 °F / 9 °C	43 °F / 6 °C	
Min Temperature	56 °F / 13 °C	36 °F / 2 °C	26 °F / -3 °C	
<b>Degree Days:</b>				
Heating Degree Days (base 65)	22	16	3	492
Cooling Degree Days (base 65)	0	0	0	0
Growing Degree Days (base 50)	12	1	0	44
<b>Dew Point:</b>				
Dew Point	55 °F / 12 °C	33 °F / 1 °C	-3 °F / -19 °C	
<b>Precipitation:</b>				
Precipitation	1.85 in / 4.7 cm	0.19 in / 0.5 cm	0.00 in / 0.0 cm	5.77 in / 14.66 cm
Snowdepth	0.0 in / 0 cm	0.0 in / 0 cm	0.0 in / 0 cm	-
<b>Wind:</b>				
Wind	31 mph / 50 km/h	6 mph / 9 km/h	0 mph / 0 km/h	
Gust Wind	41 mph / 66 km/h	24 mph / 39 km/h	17 mph / 27 km/h	
<b>Sea Level Pressure:</b>				
Sea Level Pressure	30.30 in / 1026 hPa	30.06 in / 1018 hPa	29.75 in / 1007 hPa	



#### Monthly Calendar Overview

<a href="#">« Previous Month</a>	<a href="#">« 2007</a>	January 2008	<a href="#">2009 »</a>	<a href="#">Next Month »</a>		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday





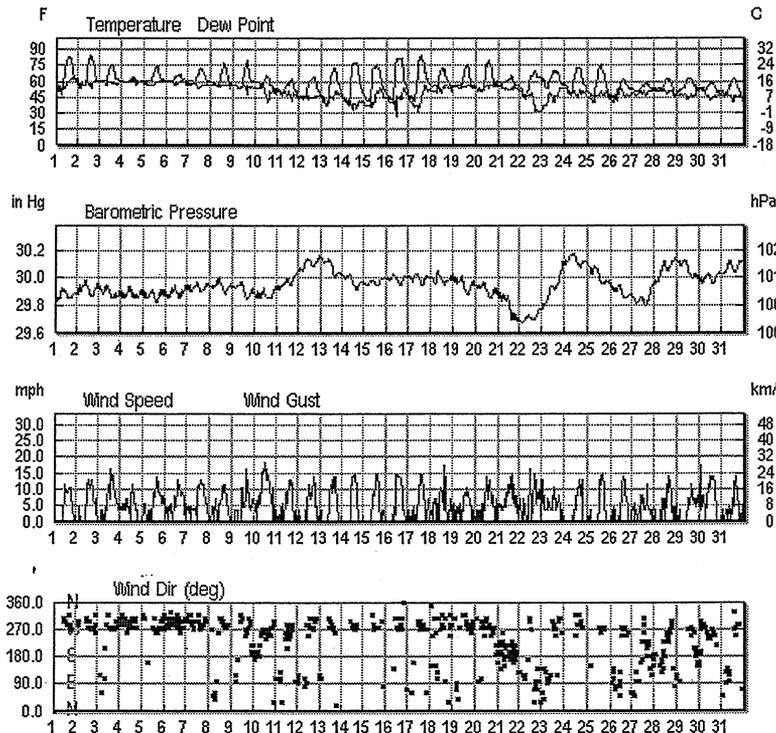


### History for Ramona, CA

Month of October, 2000

#### Monthly Summary

	Max:	Avg:	Min:	Sum:
<b>Temperature:</b>				
Max Temperature	84 °F / 28 °C	72 °F / 22 °C	60 °F / 15 °C	
Mean Temperature	70 °F / 21 °C	60 °F / 15 °C	52 °F / 11 °C	
Min Temperature	61 °F / 16 °C	49 °F / 9 °C	37 °F / 2 °C	
<b>Degree Days:</b>				
Heating Degree Days (base 65)	13	5	0	160
Cooling Degree Days (base 65)	4	0	0	15
Growing Degree Days (base 50)	20	10	2	323
<b>Dew Point:</b>				
Dew Point	64 °F / 17 °C	50 °F / 10 °C	27 °F / -2 °C	
<b>Precipitation:</b>				
Precipitation	0.24 in / 0.6 cm	0.03 in / 0.1 cm	0.00 in / 0.0 cm	0.63 in / 1.61 cm
Snowdepth	-	-	-	-
<b>Wind:</b>				
Wind	18 mph / 29 km/h	2 mph / 4 km/h	0 mph / 0 km/h	
Gust Wind	23 mph / 37 km/h	20 mph / 32 km/h	16 mph / 26 km/h	
<b>Sea Level Pressure:</b>				
Sea Level Pressure	30.17 in / 1022 hPa	29.93 in / 1014 hPa	29.67 in / 1005 hPa	



#### Monthly Calendar Overview



12	64	54	44	47	45	43	100	80	50	30.16	30.06	30.05	-	10	7	14	2	21	0.00	
13	73	56	37	50	42	37	96	73	35	30.14	30.09	30.00	-	9	5	14	2	16	0.00	
14	78	58	39	44	39	33	93	58	20	30.02	29.98	29.91	-	9	7	15	2	-	0.00	
15	75	57	39	53	43	36	86	65	30	30.00	29.96	29.94	-	10	10	15	1	-	0.00	
16	82	62	39	54	43	27	90	62	14	30.02	29.99	29.95	-	9	6	15	2	-	0.00	
17	84	63	42	56	43	31	90	61	17	30.02	29.99	29.95	-	8	4	15	2	-	0.00	
18	73	64	52	57	51	49	100	81	42	30.05	30.00	29.95	-	3	0	17	3	-	0.00	Fog
19	75	65	54	57	56	54	100	86	51	30.01	29.98	29.88	-	3	0	10	1	-	0.00	Fog
20	82	65	48	58	52	50	100	84	40	29.97	29.94	29.86	-	3	0	14	1	-	0.01	Fog
21	66	60	53	57	56	51	94	79	63	29.90	29.84	29.69	-	8	2	15	2	22	0.00	Rain
22	72	58	45	50	41	31	97	60	25	29.78	29.69	29.67	-	9	7	16	4	-	0.00	
23	70	61	53	54	44	35	88	59	35	30.11	29.95	29.78	-	10	10	13	8	-	0.01	Rain
24	73	60	48	54	50	44	92	71	38	30.17	30.12	30.07	-	9	6	13	0	-	0.00	
25	75	60	43	50	43	40	89	72	38	30.09	30.03	29.95	-	10	9	15	1	-	0.00	
26	63	54	42	54	43	41	94	82	57	29.94	29.92	29.85	-	8	2	14	1	-	0.04	Rain
27	60	54	48	52	48	47	94	81	67	29.95	29.83	29.80	-	10	9	12	4	-	0.04	Rain
28	64	54	46	52	52	45	94	82	60	30.14	30.00	29.96	-	9	3	14	3	-	0.01	Rain
29	64	56	48	52	47	43	94	77	50	30.13	30.10	29.98	-	8	2	12	0	-	0.10	Rain
30	60	54	48	52	52	42	100	84	51	30.04	29.98	29.96	-	9	3	17	9	-	0.12	Rain
31	63	52	41	47	46	39	100	80	46	30.14	30.06	30.02	-	8	1	14	1	-	0.00	

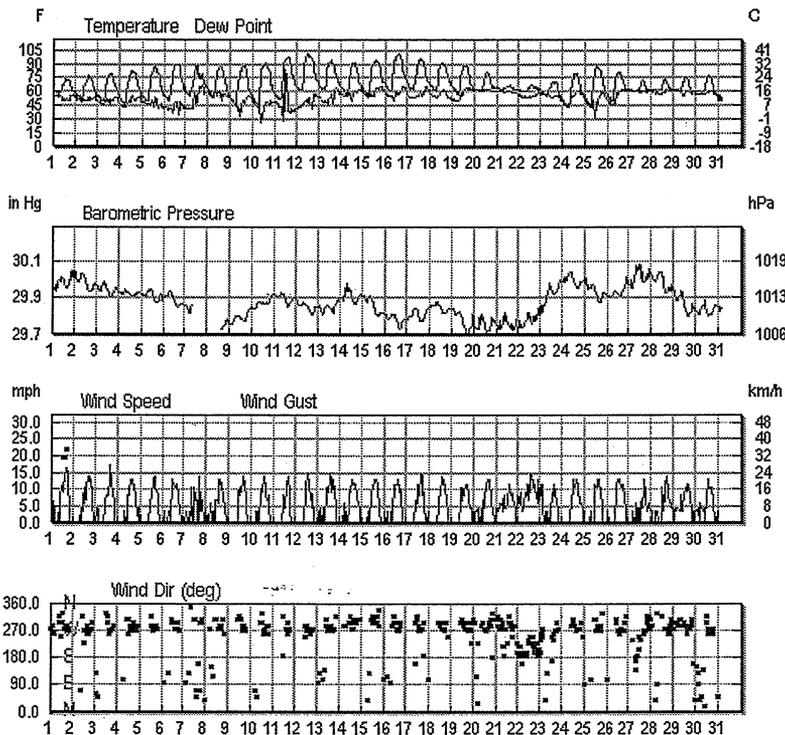


## History for Ramona, CA

Month of September, 2000

### Monthly Summary

	Max:	Avg:	Min:	Sum:
<b>Temperature:</b>				
Max Temperature	102 °F / 38 °C	85 °F / 29 °C	68 °F / 20 °C	
Mean Temperature	81 °F / 27 °C	69 °F / 20 °C	62 °F / 16 °C	
Min Temperature	62 °F / 16 °C	53 °F / 11 °C	42 °F / 5 °C	
<b>Degree Days:</b>				
Heating Degree Days (base 65)	3	0	0	11
Cooling Degree Days (base 65)	16	5	0	145
Growing Degree Days (base 50)	31	19	12	584
<b>Dew Point:</b>				
Dew Point	85 °F / 29 °C	53 °F / 11 °C	27 °F / -2 °C	
<b>Precipitation:</b>				
Precipitation	0.29 in / 0.7 cm	0.04 in / 0.1 cm	0.00 in / 0.0 cm	0.38 in / 0.97 cm
Snowdepth	-	-	-	-
<b>Wind:</b>				
Wind	17 mph / 27 km/h	2 mph / 3 km/h	0 mph / 0 km/h	
Gust Wind	22 mph / 35 km/h	17 mph / 28 km/h	16 mph / 26 km/h	
<b>Sea Level Pressure:</b>				
Sea Level Pressure	30.09 in / 1019 hPa	29.88 in / 1012 hPa	29.70 in / 1006 hPa	



### Monthly Calendar Overview



12	102	81	61	57	48	42	61	39	15	29.88	29.87	29.81	-	10	10	15	2	-	0.00	
13	95	78	60	64	54	46	81	48	22	29.90	29.84	29.81	-	10	10	15	2	-	0.00	
14	91	73	55	64	56	51	100	76	25	29.98	29.92	29.87	-	6	0	13	1	-	0.00	Fog
15	95	74	54	66	57	53	93	65	30	29.91	29.88	29.80	-	10	9	13	0	-	0.00	
16	102	80	59	65	56	51	83	53	22	29.81	29.80	29.73	-	10	8	13	2	-	0.00	
17	97	79	62	66	56	53	76	55	27	29.85	29.80	29.77	-	10	9	15	1	-	0.00	
18	93	76	59	62	56	50	78	53	34	29.88	29.86	29.82	-	10	9	14	1	-	0.00	
19	90	72	55	64	56	50	100	67	37	29.84	29.78	29.70	-	9	3	12	0	-	0.00	
20	81	72	62	62	62	60	100	82	52	29.81	29.76	29.71	-	5	2	13	1	-	0.00	
21	68	64	62	61	60	55	94	88	78	29.82	29.75	29.72	-	8	4	12	4	-	0.00	
22	68	64	60	61	56	53	94	78	61	29.85	29.76	29.74	-	10	9	15	7	16	0.00	Rain
23	73	62	48	59	58	51	100	81	55	30.00	29.89	29.82	-	9	2	12	8	-	0.09	Rain
24	81	62	44	61	49	44	100	83	43	30.04	30.00	29.96	-	8	1	13	0	-	0.00	
25	87	66	44	60	48	32	100	73	17	30.02	29.99	29.88	-	8	0	13	0	-	0.00	Fog
26	82	66	48	62	54	45	100	71	38	30.02	29.91	29.90	-	10	6	13	2	-	0.00	
27	73	66	61	61	60	59	100	88	66	30.09	30.02	29.96	-	6	2	13	0	-	0.00	
28	75	67	61	63	60	58	100	86	59	30.04	30.00	29.93	-	7	3	14	2	-	0.00	
29	77	67	59	61	61	55	97	84	51	29.96	29.89	29.80	-	7	3	12	2	-	0.00	
30	78	67	53	60	58	53	96	82	54	29.89	29.83	29.80	-	6	4	13	4	-	0.00	



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**APPENDIX G**  
**WETLAND REGULATIONS**

**County of San Diego Resource Protection Ordinance (Ordinance 9842, New Series)**

The County of San Diego Resource Protection Ordinance defines wetlands in Chapter 6, Section 86.602 (q) as:

- (1) Lands having one or more of the following attributes are “wetlands”:
- (aa). At least periodically, the land supports a predominance of hydrophytes (plants whose habitat is water or very wet places);
  - (bb). The substratum is predominantly undrained hydric soil; or
  - (cc). An ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.”
- (2) Notwithstanding paragraph (1) above, the following shall not be considered “Wetlands”:

- (aa) Lands which have attribute(s) specified in paragraph (1) solely due to man-made structures (e.g., culverts, ditches, road crossings, or agricultural ponds), provided that the Director of Planning and Land Use determines that they:
  - (i) Have negligible biological function or value as wetlands;
  - (ii) Are small and geographically isolated from other wetland systems;
  - (iii) Are not Vernal Pools; and,
  - (iv) Do not have substantial or locally important populations of wetland dependent sensitive species.
- (bb) Lands that have been degraded by past legal land disturbance activities, to the point that they meet the following criteria as determined by the Director of Planning and Land Use:
  - (i) Have negligible biological function or value as wetlands even if restored to the extent feasible; and,
  - (ii) Do not have substantial or locally important populations of wetland dependent sensitive species.

(Note: Activities on lands not constituting "Wetlands" because of this paragraph (2) may still be subject to mitigation, avoidance and permitting requirements pursuant to the California Environmental Quality Act or other applicable County, state and federal regulations.)

The County of San Diego Resource Protection Ordinance defines wetland buffers in Chapter 6, Section 86.602 (r) as:

Lands that provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community. Buffer widths shall be 50 to 200 feet from the edge of the wetland as appropriate based on the above

factors. Where oak woodland occurs adjacent to the wetland, the wetland buffer shall include the entirety of the oak habitat (not to exceed 200 feet in width).

### **Army Corps of Engineers (ACOE) – Clean Water Act**

Pursuant to Section 404 of the Clean Water Act, any on-site wetlands and waters of the U.S., would be subject to permit provisions regulating activities within their boundaries. These provisions are enforced by the ACOE, as well as the EPA, with technical input from the USFWS. Three factors are considered in the designation of wetlands: the presence of hydrophytic vegetation, hydric soils, and site hydrology. According to the latest ACOE methodology, all three wetland indicators must be present to make a jurisdictional ruling (Environmental Laboratory 1987). Areas indicated as wetlands by all three factors during the rainy season may lack the indicators of hydrology and/or vegetation during the dry season, or the vegetation may have been altered or removed through human disturbance. Such areas may still be regarded as wetlands by resource agencies.

In addition, the ACOE has jurisdiction over “waters of the United States”. Waters of the United States are defined in 33 CFR part 328 (referred to as “waters”). The lateral limits of the jurisdiction of waters maybe divided into three categories, territorial seas, tidal waters and non-tidal waters. 33 CFR part 328.3 provides the definition of waters of the United States as follows:

- (a) The term *waters of the United States* means
  - (1) all waters which are currently used, or were used in the past, or maybe susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
  - (2) All interstate waters including interstate wetlands;
  - (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters:
    - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    - (iii) Which are or could be used for industrial purpose by industries in interstate commerce;
  - (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
  - (5) Tributaries of waters identified in (a) (1) through (4) of this section;

- (6) The territorial seas
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

Waste treatment systems, including treatments of ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

- (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA remains with the Environmental Protection Agency (EPA).

- (b) The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
- (c) The term *adjacent* means bordering, contiguous or neighboring. Wetlands separated from other waters of the United States by man made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."
- (d) The term *high tide line* means the line of intersection of the land with the water's surface to the maximum height reached by a rising tide.....
- (e) The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- (f) The term *tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun....

The limits of jurisdiction in non-tidal waters is defined in 30 CFR part 328.4 (c). When non-tidal waters occur in the absence of adjacent wetlands, the jurisdiction extends to ordinary high water mark.

### **California Department of Fish and Game – Streambed Alteration Program**

The CDFG regulates wetlands under Section 1601/1603 of the California Fish and Game Code through their Streambed Alteration Agreement Program. Any alteration of any stream course within the State of California requires a Streambed Alteration Agreement from the CDFG. Section 1601 pertains to public projects where section 1603 applies to private projects and specifically states: "It is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of

any river, stream or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity...”

A stream is defined by the California Code of Regulations (14 CCR 1.72) as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic wildlife. This includes watercourses having a surface or subsurface flow that supports or has supported riparian habitat.

The limits of CDFG jurisdiction are defined in the code (Section 1601/1603) as the bed, channel, or bank of any river, stream or lake designated by the department in which there is at any time existing fish or wildlife resource or from which these resources derive benefit ....

### **Regional Water Quality Control Board**

The state Regional Water Quality Control Board (RWQCB) issues 401 certifications for projects having impacts pursuant to Section 404 of the Clean Water Act and the Porter Cologne Act. The State protects and regulates isolated waters through the California Water Code. California Water Code section 13260 requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the *waters of the state* to file a report of discharge (an application for waste discharge requirements)” (Water Code § 13260(a)(1)).

The term “waters of the state” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code § 13050(e)). While all waters of the United States that are within the borders of California are also waters of the state, the converse is not true—waters of the United States is a subset of waters of the state. Thus, since Porter-Cologne was enacted, California always had and retains authority to regulate discharges of waste into any waters of the state, regardless of whether the ACOE has concurrent jurisdiction under section 404. The fact that often Regional Boards opted to regulate discharges to, e.g., vernal pools, through the 401 program in lieu of or in addition to issuing waste discharge requirements (or waivers thereof) does not preclude the regions from issuing WDRs (or waivers of WDRs) in the absence of a request for 401 certification. Under state law, the duty to file a report of waste discharge is mandatory; if a project proposes to impact surface water that is “isolated”, the project must apply for and obtain waste discharge requirements prior to impacting that waterbody.