4.4.1 INTRODUCTION

The purpose of this Section is to identify existing biological resources within the Project area, analyze potential biological impacts associated with the development of the proposed Project, and identify mitigation measures that would avoid or reduce the significance of any identified impacts. The mitigations are designed to be consistent with the requirements of the MSHCP, including survey requirements for sensitive species potentially occurring on site and mitigations for anticipated impacts to riparian and riverine habitats. The data presented in this Section is based on information contained in the *Biological Resources Assessment of the 1,543-Acre Butterfield Specific Plan Area* (Natural Resources Consultants, September 9, 2010) included as Appendix C1, the *Burrowing Owl Survey* (Natural Resources Consultants, March 2007) and the *Jurisdictional Delineation of the 1,543-Acre Butterfield Specific Plan Development Project* included as Appendix C2 (Glen Lukos Associates, August 31, 2010). Additional information was obtained from the *Banning General Plan Updated Biological Report* (AMEC 2004), the *City of Banning Comprehensive General Plan Update* (2006) and *General Plan Update EIR* (2005) and the *Western Riverside Multi-Species Habitat Conservation Plan* (2003). Thresholds of significance for the impact analysis are derived from Appendix G of the 2010 *California Environmental Quality Act Guidelines* (the "Guidelines").

Definitions

- A ***federally endangered species*** is a species of invertebrate, plant, or wildlife formally listed by the United States Fish and Wildlife Services (USFWS) under the federal *Endangered Species Act* (ESA) as facing extinction throughout all or a significant portion of its geographic range.

- A ***federally threatened species*** is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

- The term "***take***" under the federal ESA means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct.

- ***"Harm"*** is defined by the USFWS to encompass "an act which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering."

- A ***federally proposed, threatened, or endangered species*** is a species officially proposed by the USFAWS for addition to the federal threatened or endangered species list.

- A ***California endangered species*** is one whose prospects of survival and reproduction are in immediate jeopardy.

- A ***California threatened species*** is one present in such small numbers throughout its range that it is considered to likely to become endangered in the near future in the absence of special protections or management.

- A ***California rare species*** is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation "rare species" applies only to California native plants.

- ***Species of Special Concern*** is an informal designation used by the California Department of Fish and Game (CDFG) for declining wildlife species that are not officially listed as endangered, threatened or rare. Species that are ***California fully protected*** include those protected by special legislation as vulnerable by the CDFG.

- The term "***Waters of the United States***" is defined in USACE regulations as (1) all waters which are currently used, or were used in the past, or may be 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, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which would affect foreign commerce.

- In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ***ordinary high water mark*** (OHWM), which is defined as "that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank…."

- The term ***"wetlands"*** defines a subset of waters of the US and consists of those "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support…a prevalence of vegetation typically adapted for life in saturated soil conditions.

- The term "***waters of the state***" is defined in the State Water Code as "any surface water or groundwater, including saline waters, within the boundaries of the state.

4.4.2 EXISTING CONDITIONS

4.4.2.1 ENVIRONMENTAL SETTING

Project Site

Location

The Butterfield Project site is located within the City of Banning, in Riverside County, at the northwest edge of the City in Section 1 of Township 3 South, Sections 25 and 36 of Township 2 South, Range 1 West and Section 31 of Township 2 South, Range 1 East as shown on the USGS 7.5' *Beaumont* quadrangle. The Project site also includes a 21-acre parcel that is located in an adjacent unincorporated portion of the County of Riverside, California (refer to Exhibit 3.0-2, *Local Vicinity Map*), which is however within the Banning General Plan Sphere of Influence and addressed in the General Plan. The Project site lies north of Interstate 10 at the northwestern development edge of the City, and is bordered by Highland Springs Avenue to the west, unincorporated communities to the north, mostly undeveloped land adjacent to the San Bernardino Mountains foothills to the distant north, Highland Home Road and urban areas to the east, undeveloped land to the northeast, and Wilson Street to the south.

Natural Resources Consultants conducted general biological surveys of the Butterfield site during May 2005 and September 2006 and this information was updated in March through August 2010 and included off-site improvement areas. The surveys were conducted on foot and covered all slope aspects, soil types, and drainages. The purpose of these surveys was to gather general information about the site's topography and biological resources, including the extent and location of vegetation communities and the presence of conditions sufficient to support any sensitive special status plant and wildlife species.

Site Characteristics

The majority of the Project site is sparsely vegetated with primarily non-native grasses. It currently supports cattle grazing and has been historically used for agriculture; refer to Section 4.2, *Agricultural Resources* for a detailed discussion of these historic uses. Site topography is predominately flat in the central and southern portions of the site with low rolling hills and steeper sloped hills in the most northern portions of the site. Elevation ranges from approximately 3,400 feet above mean sea level (amsl) in the north to 2,560 feet amsl in the south.

The site supports three drainages as depicted on the USGS topographic map and includes Smith Creek, its tributaries, and several other minor drainage features that were identified during site surveys. The primary blueline drainage is Smith Creek, an ephemeral and braided drainage system that traverses the site from north to south. The creek is sparsely vegetated and supports an alluvial sandy cobble substrate. This creek system occupies approximately 27.9 acres on site.

Portions of the creek's sandy wash habitat are identified as being within the jurisdictional purview of the United States Army Corps of Engineers (USACE or "Corps") and California Department of Fish and Game (CDFG); these jurisdictional features are described in detail later in this section.

On-Site Vegetative Communities

Seven vegetation communities occur on the Butterfield site and include: non-native grassland in agricultural use for cattle grazing (1,220.2 acres), annual grasslands not used for grazing (50.8 acres), mixed chaparral (11.7 acres), disturbed coastal sage scrub (1.4 acres), southern willow scrub (<0.4 acre), sandy wash (27.9 acres), landscaping (5.1 acres). The site also includes approximately 225.9 acres of disturbed/developed land. Refer to Exhibit 4.4-1, *Biological Resources Map.*

Grasslands used for cattle grazing are vegetated with non-native grasses that include brome grasses (*Bromus diandrus, B. madritensis, B.hordeaceus*), Mediterranean barley (*Hordeum murinum*), oats (*Avena* sp.), and short-podded mustard (*Hirschfeldia incana*). Dense stands of non-native and taller growing winter vetch (*Vicia villosa*) and/or wild radish (*Raphanus sativus*) are distributed across large areas of the site, but primarily occur in the central and southern portions of the site. Other common species occur in localized areas. The area is subject to disturbances associated with grazing including soil compaction and waste deposition.

Approximately 50.8 acres of the site supports annual grasslands that are not subject to cattle grazing. These annual grasslands are dominated by non-native grasses including brome grasses (*Bromus diandus, B. madritensis, B. hardeaceus*), Mediterranean barley (*Hordeum murinum),* oats (*Avena sp.),* and short-podded mustard (*Hirschfeldia incana).* This vegetation community primarily occurs on the steeper slopes in the northern area of the site with the height and the density of the vegetation increasing and species diversity decreasing relative to that found on the open grazed areas to the south.

Scrub vegetation along the edges and banks of Smith Creek include disturbed coastal sage scrub and southern willow scrub. Southern willow scrub is found in a small area at the southern end of Smith Creek and in a narrow band of riparian habitat in a tributary in the southeast corner of the site. Southern willow scrub covers less than 0.4 acres of the site. Vegetation along the edges, and above the banks, within the upper reaches of Smith Creek consists of California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), smooth yerba santa (*Eriodictyon californicum*), red-stemmed filaree (*Erodium cicutarium*), red brome (*Bromus madritensis* ssp. *rubens*), hairy vetch (*Vicia villosa*), common cryptantha (*Cryptantha intermedia*), morning glory (*Calystegia* sp.), horseweed (*Conyza canadensis*), chia (*Salvia columbariae*), smilo grass (*Piptatherum miliaceum*), four-spot Clarkia (*Clarkia purpurea*), and mugwort (*Artemisia douglasiana*). Vegetation along, or above, the banks of the lower reaches of Smith Creek consists of walnut (*Juglans hindsii*) and limited stands of mulefat (*Baccharis salicifolia*), and arroyo willows (*Salix lasiolepis*).

A tributary drainage to Smith Creek, identified as Tributary A-1 in the GLA Jurisdictional Delineation (Appendix C2) contains approximately 0.02 acre of USACE jurisdictional area. The drip line and/or boundaries of existing vegetated riparian habitat within this tributary ranges in width from two to 40 feet. Vegetation within the upper reaches of Tributary A-1 consists of southern cattail (*Typha domingensis*), willow herb (*Epilobium ciliatum*), tall umbrella sedge (*Cyperus eragrastis*), and curly dock (*Rumex crispus*). The lower segment of Tributary A-1 contained a small patch of arroyo willows and black willows (*Salix gooddingii*). The uplands adjacent to Tributary A-1 were dominated by non-native species, such as red brome (*Bromus madritensis*, ssp. *rubens*) and summer mustard (*Brassica geniculata*).

Table 4.4-1
On-Site Vegetation Community Summary

Vegetation Community	Acreage
Non-native Grasslands used for cattle grazing (i.e., "agricultural use")	1,220.2
Annual Grasslands (not used for cattle grazing)	50.8
Mixed Chaparral	11.7
Disturbed Coastal Sage Scrub	1.4
Southern Willow Scrub	0.4
Sandy Wash	27.9
Landscaping	5.1
Disturbed/Developed	**225.9**
TOTAL	**1,543.4**

Source: Natural Resources Consultants, *Biological Resources Assessment of the 1,543-Acre Butterfield Specific Plan Area Located in the City of Banning and County of Riverside, CA*, September 9, 2010, pp 8

Special Status Species

Data current as of June 2010 reveal that approximately 31 species of special status plants, 9 sensitive vegetation communities and 36 species of special status wildlife have been recorded by the California Natural Diversity Database (CNDDB) within the nine-quad regional study area since 1980. In general the Project site provides only marginally suitable habitat for special status plant species because of its disturbed condition, the result of historic agricultural and grazing uses. No sensitive plant species have been detected on the Project site or within proposed off-site improvement areas; refer to the complete list of special status species and community occurrences in the regional study area, located in Table II of Appendix C1, *Biological Resources Assessment*, of this EIR. Table II of the Biological Resources Assessment also provides information regarding sensitive wildlife species in the region.

The site contains marginally suitable habitat for the burrowing owl (*Athene cunicularia*) and many-stemmed dudleya (*Dudleya multicaulis*). The *Biological Resources Assessment* conducted by Natural Resource Consultants (Appendix C1) noted that a pair of Burrowing owls (*Athene*

cunicularia) was detected on site during focused surveys in 2007 and 2010, but not during surveys in 2005 and 2008. A total of six other special status wildlife species were also observed on the site.

- **Burrowing Owl:** Species present. The western burrowing owl is listed by the California Department of Fish and Game (CDFG) as a California Bird Species of Special Concern. Surveys to determine the presence/absence of burrowing owl on the site and on off-site improvement areas were conducted in 2005, 2007, 2008, and 2010. NRC biologists conducted focused surveys for burrowing owls using the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* protocols recommended by the MSHCP and based upon the California Department of Fish and Game (CDFG) and California Burrowing Owl Consortium recommendations. All rodent and squirrel burrows observed on the site were assessed for the suitability for use by burrowing owls and were inspected for evidence of use by the presence of burrowing owl indicative sign (white wash, pellets, scat, feathers and bone fragments). Linear transects were walked approximately 30 meters (100 feet) apart to provide 100 percent coverage of suitable habitat on the site and a 150 meter buffer around the site in accessible areas. All burrows observed on site were assessed for burrowing owl use and, if any evidence of use by burrowing owls was observed, the burrow was, for the purposes of this study, recorded as an "active burrow." NRC biologists conducted surveys in May 2005 and 2008. No burrowing owls or indicative sign were detected on site. In March of 2007, a single pair of burrowing owls and six active owl burrows were observed by NCR biologists during a survey near Smith Creek. In June of 2010, a single pair of burrowing owls and five active burrows were again observed on-site in and around Smith Creek. No burrowing owls or sign was observed in or around the proposed off-site improvement areas.

- **Sensitive Plant Species:** A habitat suitability assessment for MSHCP narrow endemic plants and other special status plants was conducted during the biological surveys performed in May 2005, September 2006, and June 2010 by NCR biologists. No suitable habitat for Yucaipa onion and many-stemmed dudleya was found on- or off-site. The site does not contain suitable clay soil substrates for either species and the site is outside the elevation range of the many stemmed dudleya. No special status plant species have been detected on the site during the field surveys.

- **California Gnatcatcher**: Habitat suitability for the California gnatcatcher (*Polioptila californica*) was assessed during the general biological survey. Based on the small extent of chaparral vegetation, and the size and condition of the disturbed coastal sage scrub vegetation, NCR biologists determined that no suitable habitat for this species occurs on-site nor in off-site areas that would potentially be affected by infrastructure improvements.

- **Other Sensitive Wildlife Species:** Six sensitive wildlife species, including the double-crested cormorant (*Phalacrocorax auritus*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia, SC*), loggerhead shrike (*Lanius ludovicianus*), coyote (*canis latrans*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), have been observed on or flying over the site in the course of protocol surveys.

Plant and Wildlife Diversity

Frequent site disturbance associated with agricultural operations has resulted in low plant and wildlife diversity relative to nearby undisturbed land. In addition to disturbance from cattle grazing, the site has been subject to periodic fire disturbance.

Wildlife Movement

The project site is bounded by residential, commercial and highway development to the north, west and south. On-site biological surveys have found no evidence of wildlife corridors or habitat linkages. Regionally, wildlife movement occurs in the San Bernardino Mountain foothills to the north and east of the site. Residential and commercial development west and south of the site prevents wildlife movement from those directions. The site's proximity to natural open space to the north and east does, however, provide a point of access to the movement corridors for on-site live-in species.

Jurisdictional Waters, Riparian/Riverine Habitat and Vernal Pools.

Potential USACE jurisdiction on site totals 9.67 acres, of which less than 0.01 acre consists of jurisdictional wetlands. All potential USACE jurisdictional waters with the Project area are ephemeral and considered to be Non-Relatively Permanent Waters (non-RPWs). CDFG jurisdiction on site totals 11.53 acres, of which 0.43 acre is vegetated riparian habitat. These areas include the less than 0.4 acre of southern willow scrub mapped by NRC in 2010. Detailed descriptions and mapping for these "jurisdictional areas" is provided in Appendix C2, and are summarized in Exhibits 4.4-2 and 4.4-3.

USACE jurisdiction off-site totals 0.15 acre within Drainage A. None of this jurisdictional area includes wetlands. Drainage A is an ephemeral, concrete-lined drainage also known as Pershing Channel, which is located on the west side of Highland Home Avenue along the southeastern Project boundary. Drainage A accepts nuisance water and storm water from a portion of the Project area and the adjacent residential neighborhood and flows in a general north to south direction for 1,651 linear feet within the site before being conveyed under the Wilson Street via a culvert.

Smith Creek is an ephemeral drainage, which flows in a general north to south direction from the adjacent foothills north of the Project site. Approximately 330 linear feet of Smith Creek off-

site at the northern project boundary would be impacted by improvements associated with the development of the proposed project. The Creek enters the site at its northern boundary near the proposed extension of Brookside Avenue. Smith Creek flows through the Project area for 11,429 linear feet before its natural alignment is interrupted by Wilson Street and its flows are conveyed through a culvert beneath Wilson Street to a point of discharge, at which point the Creek continues to flow south/southeast until it converges with the Whitewater River. Off-site drainage improvements to the south of the Project site will impact approximately 200 linear feet of Smith Creek south of Wilson Street. CDFG jurisdiction extends to this off-site portion of Smith Creek and totals 0.23 acre, of which 0.08 acre is vegetated riparian habitat. Potential CDFG jurisdiction on-site totals 11.57 acres, of which 0.35 acre consists of vegetated riparian habitat. A total of 33,890 linear feet of streambed is present. Potential CDFG jurisdiction associated with the off-site portions of Smith Creek totals 0.23 acres, of which 0.08 acres consist of vegetated riparian habitat[1]. A total of 530 linear feet of streambed is present within the off-site portions of Smith Creek.

Colorado River Basin Regional Water Quality Control Board (Regional Board) jurisdiction at the site totals 10.14 acres, of which less than 0.01 acre is jurisdictional wetlands. Regional Board jurisdiction also extends off-site immediately south of the Wilson Street culvert, where Smith Creek flows exit the site, and immediately north of PA 71, where Smith Creek flows enter the site, covering a total of 0.15 acre, none of which is jurisdictional wetlands.

The Colorado River Basin Regional Water Quality Control Board (Regional Board) regulates potential impacts to beneficial uses described in the Regional Board's Basin Plan. The following beneficial uses are listed for Ephemeral Streams and Washes within the Banning Hydrologic Sub-Unit (719.31): (1) Groundwater Recharge, (2) Non-Water Contact Recreation, (3) Wildlife Habitat; and (4) Freshwater Replenishment. Each beneficial use is described below:

1. Groundwater Recharge: Groundwater recharge waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality, or halting saltwater intrusion into freshwater aquifers.

2. Non-Water Contact Recreation: Non-contact water recreation waters are used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.

[1] Under the MSHCP, riparian/riverine habitat is defined as lands which contain habitat dominated by trees, shrubs, ersistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.

3. Wildlife Habitat: Wildlife habitat waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.

4. Freshwater Replenishment: Freshwater replenishment waters are used for natural or artificial maintenance of surface water quantity or quality.

Based upon the beneficial uses noted for the Project area in the Basin Plan, Regional Board staff would regulate potential disturbance to wildlife habitat beneficial uses (biological resources) within the on site and off site streambeds pursuant to Section 13260 of the California Water Code, which would be incorporated into the Project's Section 401 Water Quality Certification for drainages regulated under Section 404 of the Clean Water Act and incorporated into a Waste Discharge Order for isolated waters that would not be regulated by USACE pursuant to Section 404 of the Clean Water Act, but would be regulated pursuant to Section 13260 of the California Water Code.

The Project site also supports several ephemeral drainage features, which are a natural feature of many watersheds in the arid Southwest characterized by seasonal flowing water or flow only during rainfall events. These drainage features total approximately 0.47 acre, and are considered isolated pursuant to the January 9, 2001 U.S. Supreme Court decision titled *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, et al.* (SWANCC)[2] and do not support a surficial connection to another USACE jurisdictional water. Further, these isolated drainage features would be considered non-RPWs, which do not support a significant biological, chemical, or physical nexus to the closest Traditionally Navigable Water (TNW), the Salton Sea, and would not be subject to USACE jurisdiction pursuant to the U.S. Supreme Court decision in *Rapanos v. United States* and *Carabell v. United States*[3] (Rapanos). None of these isolated waters exhibit wetland characteristics.

No vernal pools are present on the site and there is, therefore, no suitable habitat for fairy shrimp.

[2] The SWANCC decision indicated that drainages not supporting a surficial connection to Corps jurisdictional waters are isolated and not subject to Corps jurisdiction pursuant to Section 404 of the CWA.

[3] *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers*, 547 U.S. – (2006). In the guidance, the agencies offer three categories: (1) certain types of waters over which they "will assert jurisdiction" (traditional navigable waters, wetlands adjacent to such waters, relatively permanent non-navigable tributaries of such waters, and wetlands directly abutting such tributaries), (2) other types of waters for which they will consider on case-by-case whether they have a "significant nexus" with a traditional navigable water, and (3) isolated waters, which may have an interstate commerce connection other than migratory birds. The Corps also noted that other "features" over which they "generally will not assert jurisdiction," include areas such as gullies, erosional features, and ditches excavated in and draining uplands.

Off-Site Biology

As shown on Exhibit 4.4-1, the proposed off-site improvement areas include the 21-acre parcel at the northwest boundary of the site and off-site segments of Smith Creek both north and south of the Specific Plan boundary. They contain non-native grasslands supporting agricultural (cattle grazing) uses, other annual grassland, disturbed coastal sage scrub, mule fat scrub, sandy wash, and disturbed/developed vegetation communities. Off-site agricultural use consists solely of cattle grazing and, accordingly, most off-site areas affected by proposed drainage infrastructure contain non-native grass species similar to those found on-site mulefat, California buckwheat *(Eriogonum fasciculatum)* and Palmer's goldenbush (*Ericameria palmeri*) with openings of non-native grasses.

4.4.2.2 REGULATORY FRAMEWORK

As part of the proposed Project's review and approval process, the Project must demonstrate compliance with all of the terms, provisions, and requirements of applicable laws and regulations enforced by Federal, State, and local regulating agencies for any impacts to sensitive habitats, sensitive plant and wildlife species, wetlands, riparian habitats, and stream courses. These existing regulatory programs are summarized below.

Migratory Bird Treaty Act (MBTA)

The *Migratory Bird Treaty Act (MBTA)* (16 USC Sections 703-711) includes provisions for the protection of migratory birds, including non-permitted take of migratory birds, under the authority of the USFWS. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many common species. This treaty with Canada, Mexico, and Japan makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season.

Federal Endangered Species Act of 1973 (ESA)

The *Endangered Species Act* (ESA) protects plants and animals that are listed by the federal government as "endangered" or "threatened." Two sections, §7 and §9 are central. Section 9 makes it unlawful for anyone to "take" a listed animal, and this includes significantly modifying its habitat and applies to private parties and private land. Section 7 does not apply to private parties but to federal agencies; however, it covers the issuing of permits for private activities, such as Section 404 permits issued by USACE to entities that want to do construction work in waters or wetlands. Specifically, Section 7 imposes an affirmative duty on federal agencies to ensure that their actions, including permitting, are not likely to jeopardize the continued existence of a listed species (both plant and animal) or result in the destruction or

modification of critical habitat. The ESA is enforced by the U.S. Fish and Wildlife Service (USFWS).

USFWS produced an updated list of candidate species for listing in June 2002 (Federal Register: Volume 67, Number 114, 50 CFR Part 17). Candidate species are regarded by USFWAS as candidates for addition to the "List of Endangered and Threatened Wildlife and Plants." Although candidate species are not afforded legal protection under the ESA, they typically receive special attention from federal and state agencies during the environmental review process.

Section 404 of the Federal Clean Water Act (33 U.S.C. 1344)

Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or filled material into waters of the United States; refer to Definitions above. Section 404 of the CWA establishes a program to regulate the discharge of dredged and fill materials into waters of the United States, including wetlands. Activities regulated under this program include fills for development, infrastructure development, and conversion of wetlands to uplands for farming or other development activity. Section 404 prohibits the discharge of dredged or fill material if that discharge jeopardizes the continued existence of species listed as endangered or threatened under the ESA, or results in likelihood of the destruction or adverse modification of a habitat which is determined by the Secretary of Interior or Commerce, to be a critical habitat under the ESA except as provided under section 404(b) (2). USACE issues a 404 permit to authorize and condition activity that could impact jurisdictional waters and associated habitat.

Clean Water Act, Section 401 Certification – California 401 and Wetlands Program

The State Porter-Cologne Act grants jurisdiction over waters of the State (refer to Definitions above) to the Regional Water Quality Control Board (RWQCB) through its Section 401 Water Quality Certification Program. Section 401 of the CWA requires that:

> "…any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act."

In addition to issuing waste discharge permits, which are addressed in Section 4.9 (*Hydrology and Water Quality*) of this EIR, Regional Boards retain jurisdiction over vernal pools and other "isolated wetlands" that are not covered by USACE jurisdictional limitations. This program regulates discharges of fill and dredged material under Clear Water Act Section 401 and the Porter-Cologne Water Quality Control Act. While the 401 Permit program protects all waters in its regulatory scope, it gives the RWQCB special responsibility for wetlands, riparian areas, and

headwaters because these water bodies have high resource value, are vulnerable to filling and are not systematically protected by other programs. The Regional Board, through the 401 permit process, is involved with the protection of special-status species and regulation of hydromodification to natural creeks, streams, rivers and other water bodies impacts.

California Fish and Game Code

Pursuant to Division 2, Chapter 6, Section 1600-1616 of the *California Fish and Game Code*, the California Department of Fish and Game (CDFG) regulates all diversions, obstructions, or changes in the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. The CDFG jurisdictional limits closely mirror those of the USACE. Exceptions are CDFG's exclusion of isolated wetlands, the addition of artificial stock ponds and irrigation ditches and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

Section 1602 of the Code requires an entity to notify CDFG of any proposed activity that could substantially modify a river, stream, or lake. Notification is required for any activity that will (1) substantially divert or obstruct the natural flow of any river, stream or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream or lake; or (3) deposit or dispose of debris, waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If CDGF determines that the proposed activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement is required, which contains reasonable conditions necessary to protect these resources.

CDFG and USFWS Species of Concern

State-listed threatened and endangered species are protected under provisions of the *California Endangered Species Act* (CESA). Activities that may result in "take" of individuals are regulated by the California Department of Fish and Game (CDFG). Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFG has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The CDFG has produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection.

At the federal level, USFWS also uses the label "species of concern" as an informal term that refers to species which might be in need of concentrated conservations actions.

CDFG Code Section 3503.5

Birds of prey are protected under the *California Fish and Game Code.* Section 3505.5 of the Code states that it is "unlawful to take, possess, or destroy any birds in the order of Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered a "take" by the CDFG.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

In 2003, the County of Riverside adopted the *Western Riverside Multiple Species Habitat Conservation Plan (MSHCP).* The MSHCP is a regional plan, implemented by the Riverside Conservation Agency (RCA), that is intended to provide protection to plants and animals listed as threatened or endangered by the federal or State government, as well as many other species thought to be declining and that may become listed in the future. The MSHCP Implementing Agreement (IA) sets forth the implementation requirements for the MSHCP, as well as procedures and minimization measures related to take of habitats and species considered for conservation. Implementation of the MSHCP authorizes participating jurisdictions to "take" specified plant and wildlife species within the MSHCP Conservation area. In addition, the wildlife agencies, namely CDFG and USFWS, allow take of habitat or individual species outside of the MSHCP Conservation area in exchange for the assembly and management of a coordinated MSHCP Conservation area. The assembly and long-term management of the MSHCP Conservation area is the responsibility of the RCA, as well as private and public entities that conduct activities that would potentially impact the habitats and species considered for conservation under the MSHCP.

The City of Banning executed the Implementing Agreement with the County on November 23, 2003 and adopted Ordinance 1304 on November 12, 2003, which amended its Municipal Code to establish procedures and requirements for the implementation of the MSHCP. *Article I of MC Chapter 12.52* contains policy and procedural requirements, while Article II establishes an MSHCP mitigation fee, which is imposed on all development within the City, and which will be assessed for projects undertaken pursuant to the Butterfield Specific Plan as individual development projects are approved for construction permits. In addition to specifying "*criteria areas*," 90 acres of which are located within the City, the MSHCP includes requirements for the protection of *Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) and *Narrow Endemic Species* (MSHCP Section 6.1.3). In addition, the MSCHP includes *Urban/Wildlands Interface Guidelines* (MSCHP Section 6.1.4). An MSHCP Consistency Analysis is required for all

discretionary projects within jurisdictions of MSHCP co-permittees such as the City of Banning. Special provisions apply to projects located within designated criteria cells.

City of Banning General Plan and General Plan EIR

The City of Banning General Plan addresses biological resources in its Open Space and Conservation Element and its Biological Resources Element, both of which are a part of the General Plan's Chapter on Environmental Resources.

Open Space and Conservation Policies related to biological resources include the following:

- **OS&C Goal 1:** Open space and conservation lands that are preserved and managed in perpetuity for the protection of environmental resources or hazards, and the provision of enhanced recreational opportunities and scenic qualities in the City.

- **OS&C Goal 2:** A balance between the City's built and open space environment and local and regional protection and preservation of its unique environment.

- **OS&C Policy 1:** Identify and assess lands in the City, its sphere-of-influence and planning area, that are suitable for preservation as public or private, passive or active open space.

- **OS&C Policy 2:** The City shall protect natural hillsides above the toe of slope in perpetuity as undeveloped open space, and shall provide specific parameters under which development can occur within the Rural Residential – Hillside and Ranch/Agriculture Residential – Hillside land use designations. For purposes of this General Plan, the toe of slope is defined as the dividing line between rock formations where there is a noticeable break in the angle of slope from steep to shallow.

- **OS&C Policy 4:** The City shall preserve all watercourses and washes necessary for regional flood control, ground water recharge areas and drainage for open space and recreational purposes.

Goals and policies contained in the Biological Resources Element include the following

- **Bio Goal:** A pattern of community development that supports a functional, productive, harmonious and balanced relationship between the built and natural environment.

- **Bio Policy 1:** The City shall continue to participate in the preservation of habitat for endangered, threatened and sensitive species.

- **Bio Policy 2:** As part of the development review process, the City shall evaluate projects based on their impact on existing habitat and wildlife, and for the land's value as viable open space.

- **Bio Policy 3:** The City shall encourage and cooperate with other agencies in establishing multiple use corridors that take advantage of drainage channels and utility easements as wildlife corridors, public access and links between open space areas and the built environment.

- **Bio Policy 4:** Drainage channels, utility corridors and pipeline easements shall be preserved in natural open space to the greatest extent possible.

- **Bio Policy 5:** The City shall promote the protection of biodiversity and encourage an appreciation of the natural environment and biological resources.

The General Plan EIR identifies mitigation measures to protect and preserve the City's biological resources. These include the following Project-relevant mitigation measures:

Biological Resources Mitigation Measure A

The City shall comply with the requirements of the Western Riverside MSHCP.

Biological Resources Mitigation Measure C

Biological surveys for burrowing owls should be performed wherever sufficient open space and suitable habitat is present within the City, as mapped for the MSHCP and shown in the biological report for the General Plan.

Biological Resources Mitigation Measure D

Biological surveys should be performed for Yucaipa Onion, Many-stemmed Dudleya and Los Angeles Pocket Mouse in areas specified by the MSHCP, as mapped for the MSHCP and shown in the biological report for the General Plan.

Biological Resources Mitigation Measure E

The City shall retain land use designations that provide Open Space Resources and Water Conservation to protect the most important open spaces within the City.

Biological Resources Mitigation Measure I

Development projects proposing to alter riparian community in major drainages blueline streams) should be required to consult with appropriate state and/or federal agencies regulating development impacting those drainages. Such alteration may

require permits from the USACE and/or the CDFG. Mitigation as required by those permitting agencies may be in addition to those requirements referenced in the MSHCP.

Biological Resources Mitigation Measure K

The City shall prepare and maintain a comprehensive list of plant materials, which shall include native and non-native, drought tolerant trees, shrubs and groundcover that complement the local environment. A list of prohibited plant materials shall also be prepared. The Butterfield Specific Plan Landscape Plan shall be consistent with the City's list of plant materials.

City of Banning Municipal Code – Chapters 12.52 (Western Riverside County MSHCP; 17.20 (Open Space Districts); 17.24.070 (Development Standards – Environmental Resources and Constraints).

The City requires the evaluation of potential biological resources impacts on a project-by-project basis through the CEQA Initial Study process. Prior to issuance of building permits the Planning and Building Departments must ensure that all required biological resource mitigation actions, including off-site mitigation and/or payment of appropriate impact fees, have been satisfied. Chapter 12.52 incorporates compliance with the provisions of the MSHCP into the City Code; Chapter 17.20 establishes Open Space Districts, including those for resource conservation; and Chapter 17.24.070 requires review of all development proposals pursuant to CEQA prior to approval.

4.4.3 SIGNIFICANCE THRESHOLD CRITERIA

The criteria used to determine the significance of potential impacts related to biological resources are from the Initial Study checklist in Appendix G of the State CEQA Guidelines. The project would result in significant impact related to biological resources if it would:

a) *Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service, and meets the definition of Section 15380(b),(c), or (d) of the CEQA Guidelines*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.*

c) *Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means.*

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites; refer to Section 7.0, Effects Found Not to be Significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; refer to Section 7.0, Effects Found Not to be Significant..

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan.

4.4.4 IMPACT ANALYSIS AND MITIGATION MEASURES

ANALYTIC METHOD

Section 15065(a), *Mandatory Findings of Significance*, of the CEQA Guidelines states that a project may have a significant effect on the environment if, " . . . the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an Endangered, Rare or Threatened species." An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or ecological context. The definition of "significant," as applied for this assessment, considered both the local and regional status of each resource. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations.

Generalized Natural Communities of Western Riverside County consist of urban and disturbed areas, agriculture, areas of water, coastal sage scrub, sonoran desert scrub, sagebrush scrub, chaparral, grassland, playa and vernal pool areas, meadow and marsh areas, riparian and bottomland areas, oak woodland/forest, and coniferous woodland/forest. For more detail regarding the descriptions of these Natural Communities, refer to Table 4.6.A, *Generalized Natural Communities of Western Riverside County and Associated Listed, Proposed, and Candidate Species* located in the Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume I.[4] The City of Banning is also located entirely within The Pass Area Plan per the MSHCP.I Impacts may be locally important but not significant if they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis, although they may result in an adverse alteration of existing conditions.

[4] http://www.rctlma.org/genplan/content/eir/volume1.html#4.6.

Section 15380 of CEQA indicates that a lead agency can consider a non-listed species to be Rare or Endangered for the purposes of CEQA if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered according to the definitions for Rare and Endangered listed in Section 15380 of CEQA, and mitigation measures are recommended where appropriate.

Project-related impacts to biological resources take two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability. Indirect impacts are considered to be those that involve the effects of increase in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals).

Indirect impacts may be associated with the construction and/or eventual habitation/operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

The determination of impacts in this analysis is based on both the features of the proposed Project and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Relevant project features (e.g., limits of grading and fuel modification) were supplied by the applicant. Project design features that avoid or preserve biological resources are taken into consideration and specifically described below prior to the assessment of potential adverse impacts. The Project design features and proposed mitigation measures are consistent with the MSHCP.

Based on an evaluation of the MSHCP survey requirements and mitigation measures, the mitigation measures proposed in this document are in compliance with Section 6.0 of the MSHCP and are intended to provide full mitigation under CEQA for impacts to species and habitats covered by the MSHCP.

PROJECT DESIGN FEATURES AND EXISTING REGULATIONS, RULES, AND REQUIREMENTS

Existing local, state and federal regulations noted below will avoid or mitigate potential biological resource impacts. The following Project Design Features will also reduce, avoid or off-set potentially adverse biological resource impacts:

1) The Project is proposed to be phased, with the initial Phase IA grading limited to the area necessary to achieve mass balancing and proper drainage of the overall property, leaving approximately 40 percent (over 500 acres) of the site in its current native condition until such time the remaining phases begin to develop. This phased development will create an interim condition of reduced biological resource impact.

2) The proposed Project has been planned to avoid all significant indirect impacts associated with drainage, toxics, lighting, noise, barriers, invasive species and brush management that could potentially occur on the Project site. Mitigation measures and best management practices will be implemented in compliance with MSHCP Wildlands/Urban Interface policies, thus reducing all indirect impacts on the Project site to a level that is less than significant; refer to Section 3.0, *Development Plan*, and 4.0, *Design Guidelines* of the *Butterfield Specific Plan*, and the analysis and mitigation measures contained in 4.1 (*Aesthetics, Light, and Glare*), 4.8 (*Hazards and Hazardous Materials*), Sections 4.9 (*Hydrology and Water Quality*), and 4.11 (*Noise*) and this Section of the EIR.

3) The Project includes approximately 428.8 acres of open space, including 253.9-acre golf course through which Smith Creek flows in addition to 66.5 acres of active recreation, 70.1 acres of natural open space (56.3 acres in the northeast corner of the Project), and 38.3 acres of drainage channel and basin areas as described in the Project Description. The golf course will incorporate native plant materials into its plant palette, particularly in those areas occupied by the Smith Creek alignment, for mitigation of biological impacts occasioned by the realignment of Smith Creek. The plant palette and re-vegetation associated with Smith Creek is designed to replicate natural conditions and to preserve and enhance biological values. Basin areas will be vegetated and the landscaping of active recreational areas will increase the availability of plant cover and trees on the site, providing habitat for birds and forage for birds of prey.

4) The Project incorporates drainage and water quality features that would maintain water quality within the Smith Creek and Pershing Channel drainages and preserve/enhance downstream water quality within the Smith Creek drainage, indirectly protecting the biological resources and functions of the drainage.

5) Project implementation would result in enhanced vegetative cover on the site, including trees and shrubs that could enhance the availability of nesting sites for migratory birds in the Project area as compared to the current nearly treeless condition of the Project site.

6) Following the initial Phase I mass grading of the Project site, the site will be reseeded and cattle grazing activities will be allowed to continue in areas prior to future development, which will preserve in an interim condition of the grassland areas that provide foraging habitat for birds of prey and vegetative cover for native species currently using the site.

IMPACT ANALYSIS AND MITIGATION MEASURES

Impact 4.4-1: Sensitive Species and Habitats

Threshold: *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS)?*

Determination: Less than Significant with Mitigation Incorporated

Sensitive biological resources are defined as species under study for classification as threatened or endangered, or have low population densities or a highly restricted range. According to data current as of June 2010, thirty-one species of special status plants, nine sensitive vegetation communities and thirty-six species of special status wildlife have been recorded by the California Natural Diversity Data Base (CNDDB) within the nine-quad, approximately 500 square mile regional study area since 1980[5]. One additional special status plant species and four additional special status wildlife species have been called out in the MSCHP for the Project area, or were observed in the course of biological surveys on the site.

There may be other sensitive, but not federally- or state-listed, amphibian, reptile, bird and mammal species that potentially occur on site (i.e., the site occurs within the documented species' range and/or the existing habitat components are similar to those where this species has been detected elsewhere) but none were detected during the course of the Project's biological studies. Refer to Appendices C1 and C2 for a more detailed discussion.

In the build out condition, the Project will result in the development of the entire site, except for the natural open space areas designated for portions of PA 69, PA 73, PA74 and PA75, representing approximately 70.1 acres. In addition, the Project proposes to realign and reconstruct Smith Creek corridor; however, the realignment will not interfere in the natural

[5] The 9-quadrange includes the Yucaipa, Forest Falls, San Gorgonio Mountain, El Casco, Beaumont, Cabazon, Lakeview, San Jacinto, Lake Fulmar quadrangles. The best known USGS maps are those of the 7.5-minute, 1:24,000-scale quadrangle series. A scale of 1:25,000 is used for maps based on metric units (1 centimeter = 0.25 kilometer). The area portrayed on each sheet ranges from 64 square miles at latitude 30 degrees north to 49 square miles at latitude 49 degrees north.

functions of the creek and revegetation will result in an increased diversity and amount of native plants and other landscape vegetation along the creek banks and within the ultimate flow line. As noted in the Project Design Features, the retention of natural areas in the site's upper elevations and the revegetation of Smith Creek improve upon the provisions of the originally approved Deutsch Specific Plan, which proposed the channelization of Smith Creek without preservation or enhancement of existing habitat and did not provide for the retention of any natural open space.

Burrowing Owl. As burrowing owl habitat exists on-site and burrowing owls have been detected on-site in the past, pre-construction surveys for burrowing owl will be required prior to mass grading and subsequent rough grading for subdivision development pursuant to standard CDFG protocols as provided for in Mitigation Measure BIO-2.

Sensitive Plant Species. As no suitable habitat was found and no sensitive plant species were identified on site during protocol surveys conducted between March and August 2010, no significant impacts are anticipated, and no mitigation is required. While mixed chaparral was identified in the steeper elevations of the site, the vegetation mix did not include Riversidian sage scrub.

California Gnatcatcher (*Polioptila californica).* Although the site includes mixed chaparral in the higher elevations the vegetation mix does not included in the vegetation mix. Accordingly, there is no suitable habitat for California gnatcatcher on-site or within the off-site areas potentially impacted by infrastructure improvements covered by the habitat assessment survey. No California gnatcatchers were observed during any of the assessment and protocol surveys.

Nesting Birds. The Project contains primarily open grasslands. Trees of sufficient size to support nesting are located primarily along the site boundaries and include remnants of windrows. Transmission towers that traverse the interior of the site may provide nesting and roosting opportunities for birds, but no nests were observed during protocol surveys of the site. Undisked grasslands may provide vegetative cover sufficient to support ground nesting species, but none were identified during site surveys. Since disturbance to bird species during the nesting season (approximately mid-February to mid-August) would be a violation of the *Migratory Bird Treaty Act of 1918*. Nests and eggs of these species are also protected under *Fish and Game Code Section 3503,* preconstruction surveys for nesting birds will be required prior to the start of grading activities on the site pursuant to the requirements of Mitigation Measure BIO-1. Surveys would be required prior to any mass grading activity and prior to subsequent rough grading for individual subdivisions.

Other Sensitive Wildlife

Six sensitive wildlife species, including the double-crested cormorant (*Phalacrocorax auritus*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia, SC*),

loggerhead shrike (*Lanius ludovicianus*), coyote (*canis latrans*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), have been observed on or flying over the site in the course of protocol surveys. The existing grasslands that characterize the site provide both potential live-in and/or foraging habitat for these species. The gradual development of the site will, over time, eliminate these open grasslands and thus reduce available live-in and foraging habitat for these species within the City of Banning. However, alternative habitat is available in the general area of the site for these species and the gradual development of the site will allow species to relocate over time to more appropriate, less disturbed areas. The site's proximity to undisturbed natural open space to the north and east, and the maintenance of the Smith Creek channel provide opportunities for live-in wildlife to relocate or adapt, while habitat suitable for foraging exists throughout the Banning, Beaumont and adjacent unincorporated County areas. Accordingly, project development is not expected to result in a significant reduction of the populations of the species in the regional and projected long-term habitat impacts are therefore not considered significant and short term impact would be addressed through Mitigation Measures BIO-1 and BIO-2. and by requirements for the installation of landscape and re-seeding of mass graded areas of the site which would restore grassland habitat after mass grading and allow for gradual development and gradual displacement to new live-in and/or foraging sites. There is no nesting habitat for the double-crested cormorant on site.

Off-Site Infrastructure Impacts

Most off-site Project infrastructure will be located within the right of way of existing public streets or within developed or developing commercial and residential neighborhoods and would have no direct or indirect impact on biological resources. Off-site infrastructure improvements with potential to impact biological resources are limited to those associated with the upstream and downstream improvements associated with the Smith Creek drainage. These drainage improvements will require modification of the existing drainage channel upstream of Brookfield and downstream of Wilson. Impacts to the Smith Creek drainage temporary in nature and will be mitigated through re-vegetation and habitat enhancement once improvements are completed. Since the Smith Creek drainage does not host sensitive species, no impacts would be anticipated.

Mitigation Measures

The following mitigation measure will reduce potentially significant impacts to nesting migratory birds or burrowing owls during the construction phase of the project to less than significant levels. Potential adverse Project effects are also "mitigated" through the various existing regulations and ordinances noted above. In addition, the Project has reduced, avoided or offset potentially adverse impacts to biological resources through Project Design Features noted above (all of which are summarized in Section 3.8, *Project Design Features*):

BIO-1 Prior to the commencement of grading during the nesting season (approximately mid-February through mid-August), all suitable habitat shall be surveyed for the presence of nesting birds by a qualified biologist prior to site disturbance. Should any active nests be located, construction must comply with Migratory Bird Treaty Act requirements, including an adequate construction buffer around active nests or avoiding construction during the nesting season if an adequate buffer is infeasible.

BIO-2 A preconstruction clearance survey for burrowing owl will be performed within 30 days prior to ground disturbance in potentially suitable habitat within the site, pursuant to CDFG protocols. The preconstruction survey will include a 300-foot buffer if between February 1 and August 31 (nesting season) and a 100-foot buffer if outside of this period. If owls are found within the survey area during the nesting season, construction activities will not occur within 300 feet of the occupied burrows until nesting is completed. A qualified biologist must confirm that the nesting effort has been completed prior to the removal of the work buffer restriction. If owls are found within the disturbance footprint outside of the February 1 through August 31 period, passive relocation (e.g. use of one way doors and collapse of burrows) will occur. These surveys and mitigation for burrowing owl are consistent with Section 6.3.2, *Additional Survey Needs and Procedures* of the MSHCP.

Impact 4.4-2: Sensitive Natural Communities

Threshold: *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS?*

and

Threshold: *Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Determination: Less than Significant with Mitigation Incorporated

The Project site contains approximately 0.41 acre of riparian/riverine habitat associated with Smith Creek and Smith Creek Tributary A-1 and approximately 0.02 acre of jurisdictional wetlands. It is not located within an MSHCP Criteria Cell or Conservation Area. The primary vegetative community consists of non-native grasslands, most of which is used for or has been used for cattle grazing. Habitat diversity is limited and the grasslands do not contain sensitive plant species or sensitive natural communities identified in either the MSHCP or by the CDFG or USFWS.

The Project would have permanently impact the approximately 0.01 acre of jurisdictional wetland identified on the site in connections with Smith Creek Tributary A-1 and approximately 0.42 acre of riverine/riparian habitat. Permanent impacts to riverine/riparian habitat will be mitigated through the re-vegetation of Smith Creek channel upon completion of its realignment and the construction of detention facilities and an upstream reservoir needed to control storm flows through the area. The impacted wetland is not of sufficient size to require mitigation pursuant to existing State, federal, or regional regulations. Habitat and non-wetland waters subject to the jurisdiction of the USACE CDFG, and/or Colorado River Basin Regional Water Quality Control Board are detailed below in Tables 4.4-1, -2, -3, -4, -5, -6 and -7. The jurisdictional areas detailed in these tables overlap over most of their extent. Detailed descriptions of the hydrologic features and biological resources of each of the drainage features identified below can be found in either Section 4.4.2.1, *Existing Condition*s or in Appendix C-2, *Jurisdictional Delineation*, of this EIR. Also, refer to Exhibits 4.4-2 & 4.4-3 for a Jurisdictional Delineation Map, and Exhibit 4.1-B, photo #7 & Exhibit 4.1-1D, photo #4 for portions of Smith Creek on and off-site views.

Because site development will result in permanent impacts to wetlands and riparian/riverine habitat, compliance with the MSCHP will require preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report. The Project will also be required to obtain 404 and 401 permits pursuant to the provisions of the Clean Water Act, and a 1602 Agreement pursuant to the California Fish and Game Code. Mitigation measures required by the County RCA and/or by the USACE, CDFG, or RWQCB will be integrated into the DBESP and included in the conditions of approval for the various jurisdictional permits.

USACE Jurisdictional Impacts

Potential ***permanent*** impacts to USACE jurisdiction total 1.17 acres, of which 0.01 acres consist of wetlands. Potential ***temporary*** impacts total 8.65 acres, none of which consist of jurisdictional wetlands. Table 4.4-2 summarizes both the USACE jurisdictional areas and the potential permanent impacts to USACE jurisdiction while Table 4.4-3 summarized the potential temporary impacts to the on-site Smith Creek channel area identified in line 1 of Table 4.4.2.

Table 4.4-2
Summary of Potential Permanent Impacts to USACE Jurisdictional Waters

Drainage Features	USACE Non-Wetland Waters (acres)	USACE Wetlands (acres	Total USACE Juris. (acres)	Permanent Impacts to Non-Wetland Waters (acres)	Perm. Impacts to USACE Wetlands (acres)	Total Perm. Impacts to USACE Juris. (acres)
Smith Creek On-Site	9.25	0	9.25	0.6	0	0.6
Smith Creek Off-Site	0.15	0	0.15	0.15	0	0.15
Drainage A	0.15	0	0.15	0.15	0	0.15
Tributary A-1	0.01	0.01	0.02	0.01	0.01	0.02
Drainage B	0.03	0	0.03	0.03	0	0.03
Drainage C	0.04	0	0.04	0.04	0	0.04
Drainage D	0.06	0	0.06	0.06	0	0.06
Tributary D-1	0.01	0	0.01	0.01	0	0.01
Drainage E	0.05	0	0.05	0.05	0	0.05
Drainage N	0.06	0	0.06	0.06	0	0.06
Totals	**9.81**	**0.01**	**9.82**	**1.16**	**0.01**	**1.17**

Table 4.4-3
Summary of Temporary Impacts to USACE Jurisdictional Areas of Smith Creek On-Site

Drainage Features	USACE Non-Wetland Waters (acres)	USACE Wetlands (acres	Total USACE Juris. (acres)	Temporary Impacts to Non-Wetland Waters (acres)	Temp. Impacts to USACE Wetlands (acres)	Total Temp. Impacts to USACE Jurisdiction (acres)
Smith Creek On-Site	9.25	0	9.25	8.65	0	8.65
Total	**9.25**	**0**	**9.25**	**8.65**	**0**	**8.65**

Source: Glen Lukos Associates, Jurisdictional Delineation of the 1,543 Acre Butterfield Specific Plan Development Project, located in the City of Banning and County of Riverside and the 21.08-Acre Off-Site Improvement Area, August 31, 2010 (see Appendix C2) Separate GA memo dated 9-9-10 also potential impact analysis.

CDFG Jurisdictional Impacts

Potential ***permanent*** impacts to CDFG jurisdiction total 2.47 acres, of which 0.41 acre consists of vegetated riparian habitat. Table 4.4-4 summarizes potential permanent impacts to CDFG jurisdiction. Table 4.4-5 summarizes potential ***temporary*** impacts to CDFG jurisdiction, which includes 0.02 acre of jurisdictional riparian area that will subsequently be restored. Impacts to

CDFG jurisdictional areas will be addressed in the DBESP and regulatory compliance process noted below.

Table 4.4- 4
Summary of Potential Permanent Impacts to CDFG Jurisdiction

Drainage Features	CDFG Unveg. Streambed (acres)	CDFG Vegetated Riparian Habitat (acres)	Total CDFG Jurisd.	Perm. Impacts to CDFG Unveg. Streambed (acres)	Perm. Impacts to CDFG Vegetated Riparian Habitat (acres	Total Perm. Impacts to CDFG Jurisd. (acres)
Smith Creek On-Site	10.03	0.02	10.05	0.84	0	0.84
Smith Creek Off-Site	0.15	0.08	0.23	0.15	0.08	0.23
Drainage A	0.15	0	0.15	0.15	0	0.15
Tributary A-1	0.03	0.33	0.36	0.03	0.33	0.36
Drainage B	0.03	0	0.03	0.03	0	0.03
Drainage C	0.05	0	0.05	0.05	0	0.05
Drainage D	0.06	0	0.06	0.06	0	0.06
Tributary D-1	0.01	0	0.01	0.01	0	0.01
Drainage E	0.05	0	0.05	0.05	0	0.05
Feature F	0.13	0	0.13	0.13	0	0.13
Feature G	0.06	0	0.06	0	0	0
Feature H	0.01	0	0.01	0.01	0	0.01
Feature I	0.08	0	0.08	0.08	0	0.08
Tributary Feature I-1	0.02	0	0..02	0.02	0	0.02
Feature J	0.06	0	0.06	0.06	0	0.06
Tributary Feature J-1	0.02	0	0.02	0.01	0	0.01
Feature K	0.08	0	0.08	0.08	0	0.08
Feature L	0.13	0	0.13	0.13	0	0.13
Feature M	0.01	0	0.01	0.01	0	0.01
Drainage N	0.06	0	0.06	0.06	0	0.06
Feature O	0.05	0	0.05	0.05	0	0.05
Feature P	0.06	0	0.06	0.05	0	0.05
Totals	**11.33**	**0.43**	**11.76**	**2.06**	**0.41**	**2.47**

Table 4.4-5
Summary of Potential Temporary Impacts to CDFG Jurisdiction

Drainage Features	CDFG Unveg. Streambed (acres)	CDFG Vegetated Riparian Habitat (acres)	Total CDFG Jurisd.	Temporary Impacts to CDFG Unveg. Streambed (acres)	Temporary Impacts to CDFG Vegetated Riparian Habitat (acres	Total Temporary Impacts to CDFG Jurisdiction (acres)
Smith Creek On-Site	10.03	0.02	10.05	9.19	0.02	9.21
Tributary Feature J-1	0.02	0	0.02	0.01	0	0.01
Totals	**10.05**	**0.02**	**10.07**	**9.2**	**0.02**	**9.22**

Regional Board Jurisdictional Impacts

The Colorado River Basin Regional Board jurisdiction at the site totals 10.14 acres, of which less than 0.01 acre consists of jurisdictional wetlands. Potential Regional Board jurisdiction associated with the off site portions of Smith Creek totals 0.15 acres, none of which consist of jurisdictional wetlands. A total of 530 linear feet of Regional Board-regulated streambed is present within the off site portions of Smith Creek. Table 4.4-6 summarizes potential permanent impacts to Regional Board Jurisdiction.

Table 4.4-6
Summary of Potential Permanent Impacts to Regional Board Jurisdiction

Drainage Features	Non-Wetland Waters (acres)	Wetlands (acres)	Total Regional Board Jurisd. (acres)	Perm. Impacts to Non-Wetland Waters (acres)	Perm. Impacts to Wetlands (acres)	Total Permanent Impacts to Regional Board Jurisdiction (acres)
Smith Creek On-Site	9.25	0	9.25	0.6	0	0.6
Smith Creek Off-Site	0.15	0	0.15	0.15	0	0.15
Drainage A	0.15	0	0.15	0.15	0	0.15
Tributary A-1	0.01	0.01	0.02	0.01	0.01	0.02
Drainage B	0.03	0	0.03	0.03	0	0.03
Drainage C	0.04	0	0.04	0.04	0	0.04
Drainage D	0.06	0	0.06	0.06	0	0.06
Tributary D-1	0.01	0	0.01	0.01	0	0.01
Drainage E	0.05	0	0.05	0.05	0	0.05

Table 4.4-6
Summary of Potential Permanent Impacts to Regional Board Jurisdiction *(continued)*

Drainage Features	Non-Wetland Waters (acres)	Wetlands (acres)	Total Regional Board Jurisd. (acres)	Perm. Impacts to Non-Wetland Waters (acres)	Perm. Impacts to Wetlands (acres)	Total Permanent Impacts to Regional Board Jurisdiction (acres)
Feature F	0.13	0	0.13	0.13	0	0.13
Feature G	0.06	0	0.06	0	0	0
Feature H	0.01	0	0.01	0.01	0	0.01
Feature I	0.08	0	0.08	0.08	0	0.08
Tributary I-1	0.02	0	0.02	0.02	0	0.02
Feature J	0.06	0	0.06	0.06	0	0.06
Tributary Feature J-1	0.02	0	0.02	0.01	0	0.01
Feature K	0.08	0	0.08	0.08	0	0.08
Feature M	0.01	0	0.01	0.01	0	0.01
Drainage N	0.06	0	0.06	0.06	0	0.06
Totals	**10.28**	**0.01**	**10.29**	**1.56**	**0.01**	**1.57**

Table 4.4-7 defines potential temporary impacts to Regional Board jurisdiction.

Table 4.4-7
Summary of Potential Temporary Impacts to Regional Board Jurisdiction

Drainage Features	Non-Wetland Waters (acres)	Wetlands (acres)	Total Regional Board Jurisdiction (acres)	Temporary Impacts to Non-Wetland Waters (acres)	Temporary Impacts to Wetlands (acres)	Total Temporary Impacts to Regional Board Jurisdiction (acres)
Smith Creek On-Site	9.25	0	9.25	8.65	0	8.65
Totals	**9.25**	**0**	**9.25**	**8.65**	**0**	**8.65**

Isolated Waters

Isolated waters within the Project area total 0.47 acres, none of which exhibit wetland characteristics. A total of 9,405 linear feet of isolated streambed are present. Potential

permanent impacts to isolated waters total 0.40 acres, none of which exhibits wetland characteristics. Table 4.4-8 summarizes permanent impacts to isolated waters. Also, refer to Impact 4.4-1: *Sensitive Species and Habitats* and Section 4.4-6, *Level of Significance after Mitigation*.

Impact Summary

Implementation of the proposed Project may result in disturbances to drainages under the jurisdiction of the USACE, CDFG, and/or Regional Board. The site supports approximately 0.43 acres of riparian habitat as defined by the MSHCP, which would also fall under the jurisdiction of the CDFG and approximately 0.01 acre of jurisdictional wetland.

- Potential permanent impacts to USACE jurisdiction on site total 1.17 acres, of which 0.01 acres are jurisdictional wetlands. Of that total, potential permanent impacts to USACE jurisdiction off-site total 0.15 acre, none of which consists jurisdictional wetlands.

- Potential temporary impacts to USACE jurisdiction on site total 8.65 acres, none of which consist of jurisdictional wetlands.

- Potential permanent impacts to isolated waters on site total 0.40 acre, none of which consist of wetlands.

Table 4.4-8
Summary of Permanent Impacts to Isolated Waters

Drainage Features	Non-Wetland Isolated Waters (acres)	Isolated Wetlands (acres)	Total Isolated Waters (acres)	Permanent Impacts to Non-Wetland Isolated Waters (acres)	Permanent Impacts to Isolated Wetlands (acres)	Total Permanent Impacts to Isolated Waters (acres)
Feature F	0.13	0	0.13	0.13	0	0.13
Feature G	0.06	0	0.06	0	0	0
Feature H	0.01	0	0.01	0.01	0	0.01
Feature I	0.08	0	0.08	0.08	0	0.08
Tributary Feature I-1	0.02	0	0.02	0.02	0	0.02
Feature J	0.06	0	0.06	0.06	0	0.06
Tributary Feature J-1	0.02	0	0.02	0.01	0	0.01
Feature K	0.08	0	0.08	0.08	0	0.08
Feature M	0.01	0	0.01	0.01	0	0.01
Totals	**0.47**	**0**	**0.47**	**0.4**	**0**	**0.4**

Source: Glen Lukos Associates, Jurisdictional Delineation of the 1,522 Acre Banning Butterfield Residential Development Project and the 21.08-Acre Off-Site Improvement Area, August 9, 2010 (see Appendix C2).

- Potential permanent impacts to Regional Board jurisdiction totals 1.57 acres, of which 0.01 acres are jurisdictional wetlands. Of that total, potential permanent impacts to Regional Board jurisdiction off-site total 0.15 acre, none of which consists jurisdictional wetlands.

- Potential temporary impacts to Regional Board jurisdiction on site total 8.65 acres, none of which consist of jurisdictional wetlands.

- Potential permanent impacts to CDFG jurisdiction on site total 2.47 acres, of which 0.41 acre consists of vegetated riparian habitat. Of that total, potential permanent impacts to CDGF off-site jurisdictional area total 0.23 acre, of which 0.08 acre is vegetated riparian habitat.

- Potential temporary impacts to CDFG jurisdiction total 9.22 acres, of which 0.02 acre consists of vegetated riparian habitat.

With the implementation of mitigation measure BIO-3, which requires compensatory mitigation of project impacts to jurisdictional riparian/riverine and wetland habitat pursuant to the requirements and regulations of the USACE, CDFG and RWQCB. This Mitigation Measure, together with Project compliance with any permit/agreement conditions and mitigation measures imposed by the permitting agencies, would reduce Project impacts to sensitive natural communities to a less than significant level.

Protocol surveys and a habitat assessment have not identified any riparian, chaparral, or wetland habitat on the site that is suitable or provides value for any sensitive species discussed in Section 6.1.2 of the MSHCP. Based on a review of soils and supplemented by site surveys, no vernal pools, vernal pool plant indicator species, and no suitable habitat for fairy shrimp occur on the site. The Project would not have any effect on those sensitive habitats or species and is consistent with the MSHCP as it relates to riparian and riverine habitats.

Mitigation Measures

BIO-3 The applicant shall provide compensatory mitigation for the temporary disturbance to CDFG jurisdictional waters, which includes approximately 0.41 acre of vegetated riparian habitat, and the temporary disturbance to Regional Board and USACE jurisdiction, none of which consists of jurisdictional wetlands:

The mitigation requirements will be determined through applicable regulatory permitting programs of CDFG, RWQCB, and USACE, and shall consist of minimum 1:1 mitigation primarily through onsite restoration within the Smith Creek drainage and other onsite areas, which will be performed concurrently with development of the golf course (PAs 35 and 39) or alternative uses within these PAs (the golf

course/open space PAs include various combinations of parks, trails, native habitat, drainage facilities, water quality improvements, groundwater recharge areas, and wetland mitigation areas).

The applicant shall provide compensatory mitigation for the permanent disturbance to no more than 2.47 acres of CDFG jurisdiction, of which 0.41 acre consists of vegetated riparian habitat and the permanent disturbance to no more than 1.17 acres of USACE jurisdiction, of which 0.01 acre consists of jurisdictional wetlands, which will consist of the creation, enhancement, or restoration of up to 2.47 acres of CDFG jurisdiction, of which 0.41 acre will consist of vegetated riparian habitat, within, or adjacent to, Smith Creek.

With the implementation of mitigation measure BIO-3, which requires formal consultation with the County of Riverside, the USACE, the RWQCB, CDFG and the RCA and compliance with any permit/agreement conditions and mitigations, Project impacts to sensitive natural communities would be reduced to a less than significant level. This riparian/riverine mitigation measure would result in restoration with native plants at a ratio of 1:1 and would provide equivalent or superior habitat as compared to existing conditions on site, and is consistent with Section 6.1.2 of the MSHCP.

Impact 4.4-3: Habitat Conservation Plans

Threshold: *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Determination: Less than Significant with Mitigation Incorporated

As previously noted, the Project site is located within an MSHCP survey area for burrowing owl. Suitable habitat for burrowing owl was found on site. Accordingly, protocol surveys were conducted in 2007 and 2010 during which two individuals were identified on the site. Impacts resulting from Project development to this species would be considered significant and would require mitigation pursuant to the requirements of the MSHCP. Accordingly, Mitigation Measure BIO-2, which requires pre-construction surveys for this species within 30 days prior to grading activities on the site and passive relocation of any burrowing owls found in the course of those surveys, has been imposed to mitigate potential adverse affects.

Implementation of the Project would result in permanent impacts to 0.41 acre of riparian/riverine habitat and 0.01 acre of wetland. Mitigation Measure BIO-3 would ensure mitigation of these impacts pursuant to the regulations administered by the USACE, CDFG and RWQCB. In addition, Mitigation Measure BIO-4 will require consultation with the RCA and preparation of a DBESP report and implementation of its conditions and mitigation measures.

Construction activities have potential to result in direct and indirect impacts to biological resources. These potential impacts include: (1) increased airborne dust, which can coat vegetation and adversely impact air quality to the detriment of wildlife; (2) diversion of stream flows that can adversely impact wildlife access to water and result in temporary disturbances to habitat; (3) staging and storage of equipment and supplies within sensitive habitat; (4) disruption or accidental destruction of sensitive habitat during clearing, grubbing, grading, and other site disturbing activities; (5) introduction of invasive plant materials; (6) disposition of trash and debris in unmarked sensitive habitat. To avoid these adverse impacts, Mitigation Measure BIO-5 is required.

The proposed Project has been planned to avoid all significant indirect impacts associated with drainage, toxics, lighting, noise, barriers, invasive species and brush management. The following mitigation measures and best management practices will be implemented in compliance with MSHCP Urban/Wildlands Interface policies, thus reducing all indirect impacts to a level that is less than significant.

BIO-4 Prior to the issuance of the grading permits the developer shall complete and submit all required protocol and habitat assessment studies required to demonstrate compliance with the MSHCP. Specifically, a DBESP (Determination of Biologically Equivalent or Superior Preservation), following approval of all required permits from the CDFG and USACE, shall be prepared, which shall be reviewed by the CDFG and USFWS, and approved by City staff, in compliance with Section 6.1.2 of the MSHCP. The applicant shall implement the approved DBESP as a condition of the issuance of a grading permit and comply with all biological mitigation measures contained within the DBESP.

BIO-5 The following mitigations shall be incorporated into the construction plans and specifications to minimize any potentially adverse construction impacts:

- Construction areas will be watered regularly to control dust and minimize impacts to adjacent vegetation and wildlife habitat.

- Short-term stream diversions will be accomplished by use of gravel bags or other methods that will result in minimal in-stream impacts. Short-term diversions will be evaluated through the riparian/riverine component of the MSHCP Consistency analysis (Section 6.1.2) (refer to Mitigation Measure BIO-4), which will require a DBESP analysis to be prepared. In addition, the 401, 404, and 1602 permitting processes will evaluate short-term impacts relative to stream diversions. All biological mitigation measures contained within the 401, 404 and 1602 approval conditions and DBESP shall be implemented pursuant to BIO-3 and BIO-4, respectively, which typically require 1:1 onsite restoration. Any mitigation beyond the 1:1 restoration of

the original stream will be mitigated onsite through negotiations with CDFG, RWQCB, and USACE.

- Equipment storage, fueling and staging areas will be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.

- The limits of jurisdictional disturbance, including the upstream, downstream along Smith Creek and lateral extents that are tributaries to Smith Creek, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.

- During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by Covered Species that are outside of the Project footprint will be avoided.

- Exotic, weedy plant species removed during construction will be properly handled to prevent sprouting or regrowth.

- Waste, dirt, rubble, or trash shall not be deposited in a conservation area or on native habitat.

With implementation of mitigation measures BIO-1 through BIO-5, Project impacts related to Habitat Conservation Plans would be reduced to a less than significant level. These mitigation measures for impacts to sensitive species, riparian/riverine habitats, and urban/wildlands interface are consistent with the MSHCP.

4.4.5 CUMULATIVE IMPACTS

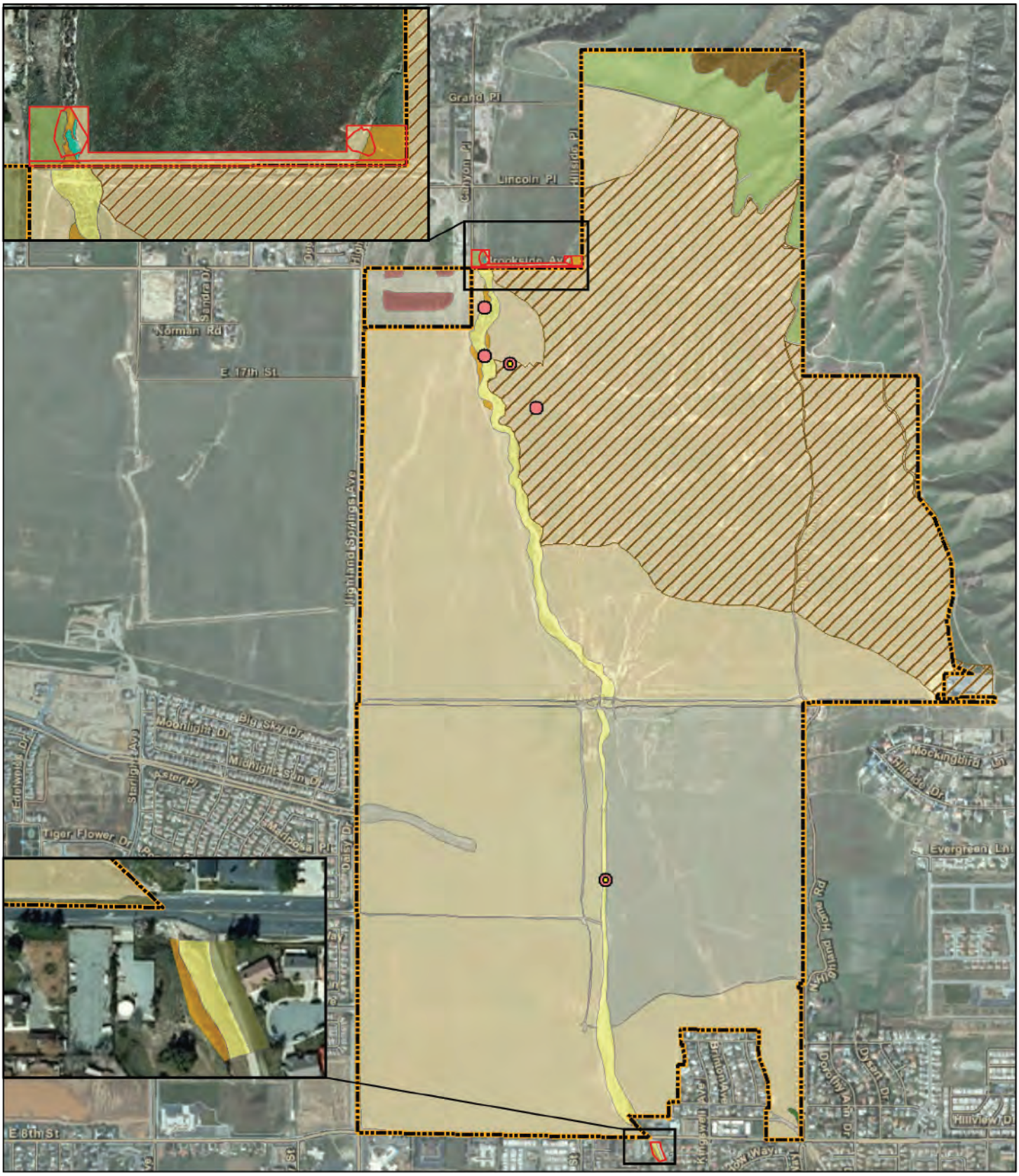
Determination: Less than Significant with Mitigation Incorporated

The proposed project will result in the permanent removal of approximately 1,500 acres of existing vegetation. Development will contribute to the overall reduction of open grassland available in the region, which habitat is used, or can be used, as live-in and/or foraging areas for several sensitive species including burrowing owl. However, this habitat is not consider "sensitive" and is widely available throughout the region. The Project will also result in the removal of a small amount of riparian/riverine and wetland habitat. Compensatory mitigation for project specific impacts to riparian/riverine and wetland habitat will be required by agencies with jurisdiction over these resources and implemented in the course of project development. Compliance with existing regulations, permit conditions, and mitigation measures BIO-1 through BIO-5 will reduce Project impacts to biological resources to a less than significant level.

Accordingly, the project will not make a cumulatively considerable contribution to any potentially significant cumulative impact on biological resources in the Banning area.

4.4.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The impact of the proposed Project on Biological Resources would be less than significant with the incorporation of mitigation measures BIO-1 through BIO-5 and compliance with all existing laws and regulations.



Source: Natural Resources Consultants Biological Resources Assessment, Sept 9, 2010
(Refer to Appendix C-1, Exhibit 9)

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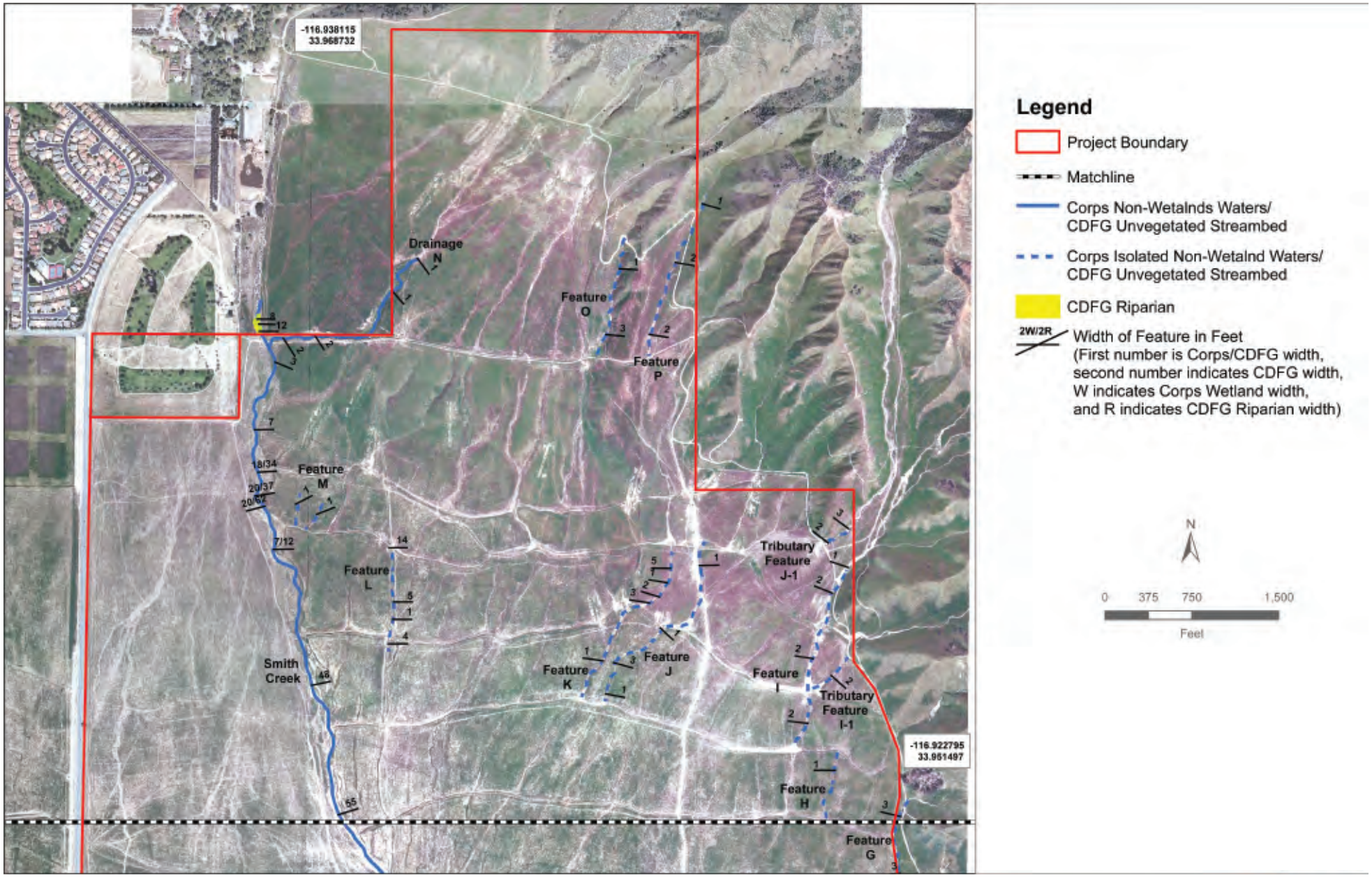
PARDEE HOMES • BUTTERFIELD SPECIFIC PLAN EIR

Biological Resources Map

EXHIBIT 4.4-1



SOURCE: Glenn Lukos Associates, Jurisdictional Delineation August 31, 2010
(Refer to Appendix C-2, Exhibit 3)

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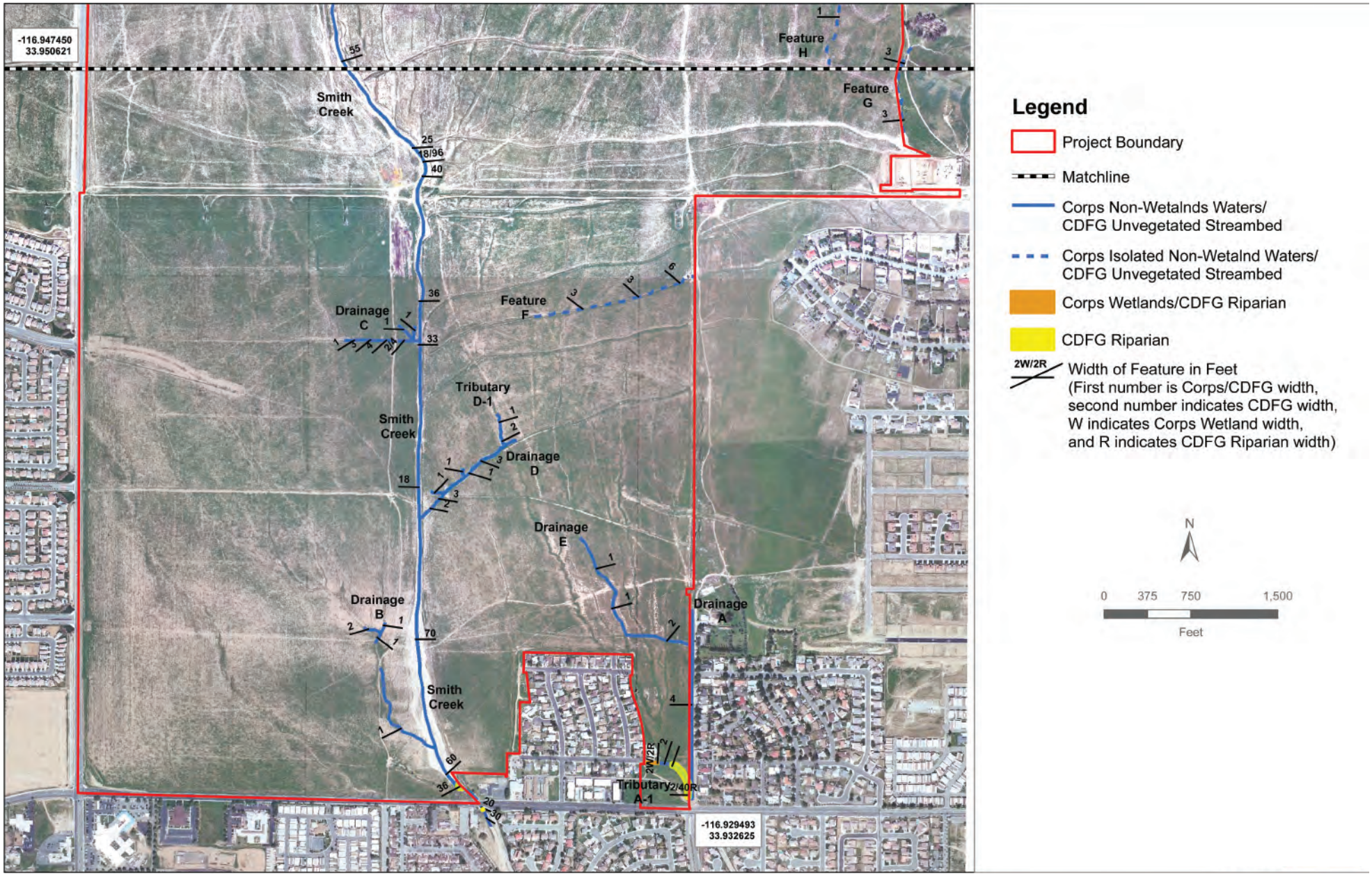
PARDEE HOMES • BUTTERFIELD SPECIFIC PLAN EIR

Jurisdictional Delineation Map North

EXHIBIT 4.4-2



SOURCE: Glenn Lukos Associates, Jurisdictional Delineation August 31, 2010
(Refer to Appendix C-2, Exhibit 3)

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PARDEE HOMES • BUTTERFIELD SPECIFIC PLAN EIR

Jurisdictional Delineation Map South

EXHIBIT 4.4-3